



Identification

GHS Product Identifier

Product Form: Aerosol
Trade Name: Blow Off™ Dusters
Product Numbers: 2226, 2232, 8226, 2240, 1056, 2270
CAS No.: 75-37-6
EC No.: 200-866-1
Formula: C2H2F4

Other means of identification

Synonyms: 1,1-difluoroethane / 1,1-difluoroethane (refrigerant gas R 152a)

Recommended use of the chemical and restriction on use

Use of Substance/Mixture Aerosol Duster; Canned Air

Supplier's details

Max Pro
P.O. Box 9962
Ft. Lauderdale, FL 33310 USA

Tel.: 954-972-3338

Emergency phone number

CHEMTREC 24 Hour Emergency Response
USA & Canada 800-424-9300

2 Hazard(s) identification

Classification of the substance or mixture

GHS Categories

Table with 4 columns: Criteria, Category, Signal Word, Pictograms. Row 1: Gas Under Pressure, Liquefied Gas, 3, Warning, Gas Cylinder

Note: Non-flammable Aerosol. Not defined as flammable aerosol because heat of combustion is <20 kJ/g and ignition distance <15 cm according to 16 CFR 1500.3(c)(6) for the U.S. Federal Hazard Substance Act of the Consumer Product Safety Commission regulations. Not defined as a flammable aerosol under the Canadian Controlled Product Regulation SOR/88-66, 40 Division 5 criteria.

GHS label elements

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements above. The labeling above applies to industrial/professional products.



Contains gas under pressure; may explode if heated

Do not pierce or burn, even after use.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Other hazards which do not result in classification

HCS2012 Criteria	Hazard Statements / Precautionary Statement	Signal Word	Pictograms
Simple Asphyxiant	May displace oxygen and cause rapid suffocation.	Warning	Not applicable

3 Composition/information on ingredients

Description	CAS Number	EC Number	%	Classification (GHS-US)
1,1-Difluoroethane, liquefied, under pressure <i>Note: Commonly referred to as HFC-152a</i>	75-37-6	200-866-1	>99	Liquefied gas, H280

4 First-aid measures

Description of necessary first-aid measures

First-aid measures general:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.

First-aid measures after inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact:

Rinse with water. In case of frostbites: Wash immediately with lots of water (15 minutes)/shower. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service.

First-aid measures after eye contact:

Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion:

Not applicable.

Most important symptoms/effects, acute and delayed

Symptoms/injuries:

Contains refrigerated gas; may cause cryogenic burns or injury. Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after inhalation:

Exposure to high concentrations: Dizziness. Slight irritation. Headache. Nausea. Vomiting.

Symptoms/injuries after skin contact:

Frostbites.

Symptoms/injuries after eye contact :

No data available.

Symptoms/injuries after ingestion:

Not applicable.

Chronic symptoms:

No effects known.

5 Fire-fighting measures

Auto-ignition Temperature >454 °C [849 °F] Flash Point -50 °C [-58 °F] LFL [LEL]^{a)} 3.5% UFL [UEL] 16.9%

Suitable extinguishing media

Response:

Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish. Use water spray to cool containers.

Specific hazards arising from the chemical

Combustion: Produces CO, CO₂, halogenated compounds, and hydrogen fluorides.

General: Vapors may accumulate in low-lying areas. Aerosol container may erupt with force at temperatures above 50 °C [122 °F]. Produces irritating and toxic fumes in fires or in contact with hot surfaces.

Special protective actions for fire-fighters

Fire-Fighter: Wear self-contained breathing apparatus for fire fighting

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing the mist/vapors. For very large spills, wear self-contained breathing apparatus before approaching the spill. Wear cold-insulating clothing and gloves.

Environmental precautions

Prevent spreading in sewers.

Methods and materials for containment and cleaning up

For aerosol can size spill, leave the immediate spill area to avoid contact with the liquid. No containment required under normal circumstances. If it can safely be done, extinguish open flames or remove high temperature sources to avoid producing toxic decomposition products. Cleaning Ensure adequate ventilation, especially in low or enclosed areas. The product will turn gaseous and be dispersed.

7 Handling and storage

Precautions for safe handling

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not get in eye, on skin, or on clothing. Do not breathe mist/vapors/spray. In cases of inadequate ventilation wear respiratory protection. Do not pierce or burn, even after use.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Handling: Keep upright when in use. Do NOT spray when container is more than 45 degrees off vertical or inverted. Wear cold-insulating gloves if exposure to liquid or aerosol jet is likely. Wear protective gloves/eye protection.
Recommendation: Wear cold-insulating gloves if exposure to liquid or aerosol jet is likely.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F].
Recommendation: Keep in well ventilated room.

8 Exposure controls/personal protection

Control parameters

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
1,1-difluoroethane	ACGIH	Not established	Not established
	U.S.A. OSHA PEL	Not established	Not established
	Canada	Not established	Not established

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH2, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database1 of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

Appropriate engineering controls

Local exhaust ventilation, vent hoods.

Individual protection measures

Avoid all unnecessary exposure. Gloves. Safety glasses.



Materials for protective clothing:

GIVE GOOD RESISTANCE: butyl rubber, leather, neoprene, polyethylene, PVC.

Hand protection:

Insulated gloves.

Eye protection:

Safety glasses.

Skin and body protection:

Protective clothing.

Respiratory protection:

High vapor/gas concentration: self-contained respirator. Maintain oxygen levels above 19.5% in the workplace. Use supplied air respiratory protection if oxygen levels are below 19.5% or during emergency response to a release of this product. Wear appropriate mask.

Other information:

Do not eat, drink or smoke during use.

9 Physical and chemical properties

Physical and chemical properties

Physical State:

Gas

Appearance:

Liquefied gas

Molecular Mass:

66.05 g/mol

Color:

Colorless

Odor:

Mild odor. Slight Ether-like odor.

Odor threshold:

No data available

pH:

No data available

Relative evaporation rate
(butyl acetate = 1):

No data available

Melting point:

-117 °C

Freezing point:	No data available
Boiling point:	-25 °C
Flash point:	< -50 °C
Critical temperature:	114 °C
Auto-ignition temperature:	455 °C
Decomposition temperature:	No data available
Flammability (solid, gas):	No data available
Vapor pressure:	5100 hPa
Vapor pressure at 50 °C:	11700 hPa
Critical pressure:	44960 hPa
Relative vapor density at 20 °C:	2.3
Relative density:	1.0 (-25 °C)
Specific gravity / density:	1004 kg/m ³ (-25 °C)
Solubility:	Poorly soluble in water. Soluble in organic solvents. Water: 0.54 g/100ml (0 °C)
Log Pow:	0.75 (Experimental value)
Log Kow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	0.37 Pa.s (-31°C)
Explosive properties:	No data available
Oxidizing properties:	No data available
Explosive limits:	4 - 19 vol % 112 - 518 g/m ³

10 Stability and reactivity

Reactivity

On heating/burning: release of toxic and corrosive gases/vapor e.g.: hydrofluoric acid, carbonyl fluoride. Reacts violently with (strong) oxidizers.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Not established.

Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

Incompatible materials

Strong acids. Strong bases.

Hazardous decomposition products

Toxic fume. Carbon monoxide. Carbon dioxide.

11 Toxicological information

Information on the likely routes of exposure

Eyes, inhalation, and skin

Symptoms related to the physical, chemical and toxicological characteristics

Eyes: See skin summary.

Skin: Contact with the liquid may cause frostbite due to heat lost caused by rapid evaporation. Aerosol jet can reach sub-zero temperatures; exposure to jet can lead to frostbites.

Inhalation: Extreme exposure due to misuse and inhalation abuse may cause central nervous system depression and irregular heart beat.

Ingestion: Highly unlikely under normal use and conditions. See inhalation and skin summaries.

Chronic: Not applicable

Numerical measures of toxicity (such as acute toxicity estimates)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation	TCLo inhalation
1,1-difluoroethane	Not available	Not available	1,500 g/m ³ 4 h Rat	Not available

Skin corrosion/irritation None known or expected.

Serious eye damage/irritation None known or expected.

Sensitization
(allergic reactions) None known or expected.

Carcinogenicity
(risk of cancer) Not classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP

Mutagenicity
(risk of heritable genetic effects) No data available

Reproductive Toxicity
(risk to sex functions) No data available

Teratogenicity No data available

(risk of fetus malformation)

STOT-single exposure

Data does not give rise to classification. At extreme doses, can affect the central nervous system and cardiovascular systems by inhalation. CNS anesthetic effects are based on rat studies with TCl₀ of 25 pph. Cardiac effects are based on exposure of ≥150,000 ppm in study on dogs. Misuse and inhalation abuse can lead to dizziness, confusion, drowsiness, unconsciousness, irregular heartbeat, heart thumping, apprehension, and weakness.

STOT-repeated exposure

No data available

Aspiration hazard

Not applicable

12 Ecological information

Toxicity

Ecology - air:

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Included in the list of substances which may contribute to the greenhouse effect (Regulation (EC) No 842/2006). TA-LuftKlasse 5.2.5.

Ecology - water:

Mild water pollutant (surface water). No data available on ecotoxicity.

Persistence and degradability

R152A (75-37-6)

Persistence and degradability

Biodegradability in water: no data available.

Bioaccumulative potential

R152A (75-37-6)

Log Pow

0.75 (Experimental value)

Bioaccumulative potential

Low potential for bioaccumulation (Log K_{ow} < 4).

Mobility in soil

No additional information available

Other adverse effects

Other information:

Avoid release to the environment.

13 Disposal considerations

Disposal methods

Dispose of contents in accordance with all local, regional, national, and international regulations.

14 Transport information

UN Number

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground):

UN1030, 1,1-Difluoroethane, 2.1, Level 1 Aerosol, Limited Quantity

ICAO/IATA (air):

UN1950, Aerosols, Flammable, 2.1, Limited Quantity

IMO/IMDG (water):

UN1950, Aerosols, Flammable, 2.1, Limited Quantity

Special Provisions: DOT-SP 11516: In accordance with this special permit, this product is not subject to labeling requirements unless offered for transportation by air. This product is not subject to placarding requirements. Outside packaging must be marked with proper shipping description and 'DOT-SP 11516'

UN Proper Shipping Name

DOT Proper Shipping Name: 1,1-Difluoroethane

DOT Special Provisions (49 CFR 172.102): DOT-SP 11516: In accordance with this special permit, this product is not subject to labeling requirements unless offered for transportation by air. This product is not subject to placarding requirements. Outside packaging must be marked with proper shipping description and 'DOT-SP 11516'

DOT Packaging Exceptions (49 CFR 173.xxx): 306

DOT Packaging Non Bulk (49 CFR 173.xxx): 304

DOT Packaging Bulk (49 CFR 173.xxx): 314;315

Transport hazard class(es)

Other information: No supplementary information available.

Special transport precautions: DOT-SP 11516: In accordance with this special permit, this product is not subject to labeling requirements unless offered for transportation by air. This product is not subject to placarding requirements. Outside packaging must be marked with proper shipping description and 'DOT-SP 11516'.

Overland transport

Class (ADR) 2 - Gases
Hazard identification number (Kemler No.): 23
Classification code (ADR): 2F

Additional Information: Certificate No. SU 12300 allows this product to be shipped in accordance with DOT-SP 11516.

Air transport

DOT Quantity Limitations Passenger aircraft/rail: Forbidden
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only: 150 kg
(49 CFR 175.75)

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

US Federal Regulations

R152A (75-37-6)

SARA Section 311/312 Hazard Classes: Fire hazard
Sudden release of pressure hazard
Immediate (acute) health hazard

International Regulations

Canada

R152A (75-37-6)

Products conform to the Canadian Consumer Labeling Regulations.

Europe

R152A (200-866-1)

Classification and labelling have been determined according to EU Aerosol Directives 94/1/EC and 2008/47/EC and take into account the intended use of the product.

16 Other information

Other information

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.



Specialized Fire Products

BLOWout Air Duster SAFETY DATA SHEET

SDS0093US
ACCORDING TO US CFR 1910.1200

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier	Product Name	BLOWout 10 oz.
	Trade Name	BLOW OUT-024
	Synonym(s)	1,1-difluoroethane.
	Chemical Formula	C ₂ H ₄ F ₂
	CAS No.	75-37-8
	EINECS No.	200-866-1
1.2 Relevant identified uses of the substance or mixture and uses advised against	Identified use(s)	Aerosol Duster.
	Uses advised against	None known.
1.3 Details of the supplier of the Safety Data Sheet	Company Identification	SDI 1345 Campus Parkway, Suite A18 Wall Township, NJ 07753 USA. (732) 751 9266 (732) 751 924 sales@sdifire.com
	Telephone	
	Fax	
	E-mail	
1.4 Emergency telephone number	Info Trac	1-800-535-5053 (24 hour(s))

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	US CFR 1910.1200	Gases under pressure; Liquefied gas; Contains gas under pressure; may explode if heated.
2.2 Label elements	Product Name	BLOWout 10 oz.
	Hazard pictogram(s)	
	Signal word(s)	GHS04 Warning.
	Hazard statement(s)	H280: Contains gas under pressure; may explode if heated.
	Precautionary statement(s)	P410+P403: Protect from sunlight. Store in a well-ventilated place.
	Additional Information	Pressurized container: Do not pierce or burn, even after use. Do not expose to temperatures exceeding 122°F.
2.3 Other hazards		Contact with liquid may cause cold burns/frostbite. High concentrations may cause asphyxiant.
2.4 Additional Information		None.



3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Substances

Hazardous ingredient(s)	CAS No.	%W/W
1,1-difluoroethane	75-37-6	> 99

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Keep patient warm. Apply artificial respiration if necessary. Obtain medical attention.

Skin Contact

Wash with plenty of soap and water. If frostbite, call a physician. Do not remove clothing if it sticks to the skin.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, obtain medical attention. Unlikely route of exposure.

Ingestion

4.2 Most important symptoms and effects, both acute and delayed

Skin Contact: Frostbite.

4.3 Indication of any immediate medical attention and special treatment needed

Inhalation: High concentrations: Asphyxiation, Headache, dizziness, nausea and vomiting.
Treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

Pressurized container: May burst if heated.

5.1 Extinguishing Media

Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable Extinguishing Media

None known.

5.2 Special hazards arising from the substance or mixture

Heating may cause pressure rise with risk of bursting. Decomposes in a fire giving off toxic fumes: Hydrogen fluoride, Carbon monoxide, Carbon dioxide.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep fire exposed containers cool by spraying with water. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.



6. SECTION 6: ACCIDENTAL RELEASE MEASURES

The product is an aerosol. It is unlikely to present spillage or leakage hazard. In case of rupture, released content should be contained as any other solvent spill.

- 6.1 Personal precautions, protective equipment and emergency procedures
6.2 Environmental precautions
6.3 Methods and material for containment and cleaning up
6.4 Reference to other sections

7. SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling
7.2 Conditions for safe storage, including any incompatibilities
Storage Temperature
Storage Life
Incompatible materials

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
8.1.1 Occupational Exposure Limits

Table with 7 columns: SUBSTANCE, CAS No., LTEL (8 hr TWA ppm), LTEL (8 hr TWA mg/m³), STEL (ppm), STEL (mg/m³), Note. Row 1: 1,1-difluoroethane, 75-37-6, None assigned.

- 8.2 Appropriate engineering controls
8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection



Skin protection (Hand protection/ Other)



Respiratory protection



Thermal hazards

Provide adequate ventilation. Local exhaust recommended. Do not use in confined spaces.

If eye contact is likely: Wear protective eyewear (goggles, face shield, or safety glasses).

Wear suitable gloves if prolonged skin contact is likely. Gloves: Neoprene, Leather.

No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

Not applicable.

**9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance	Liquefied gas.
Color	Colorless.
Odor	Mild, Slight Ethereal.
Odor Threshold	Not determined.
pH	Not determined.
Melting Point/Freezing Point	-178.6 °F
Initial boiling point and boiling range	-13 °F
Flash Point	< 58 °F
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	4-19 Vol-%, 0.112-0.518 kg/m ³
Vapor pressure	5100 hPa, 11700 hPa @ 122 °F
Density	1004 kg/m ³ @ -13 °F
Vapor density	2.3 @ 68 °F
Relative density	1.0 @ -13 °F
Solubility(ies)	Poorly water soluble product. (0.54 g/100 ml). Soluble in most organic solvents.
Partition coefficient: n-octanol/water	0.75 log P (Experimental value).
Ignition temperature	Not determined.
Auto-ignition temperature	851 °F
Decomposition Temperature	Not determined.
Dynamic Viscosity	0.37 Pa·s @ -23.8 °F
Kinematic Viscosity	Not determined.
Explosive properties	Not explosive. Contains gas under pressure; may explode if heated.
Oxidizing properties	Not oxidizing.
9.2 Other information	
Critical pressure	44960 hPa
Molecular weight	66.05 g/mol

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions known if used for its intended purpose.
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	Acids, Alkalis and Strong oxidizing agents.
10.6 Hazardous Decomposition Product(s)	No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****11.1.1 Substances**

Acute toxicity	Low acute toxicity.
Inhalation	LC50 (rat) = 383000 ppm Effects and Symptoms: Asphyxiation, Headache, dizziness, nausea and vomiting.
Skin corrosion/irritation	Non-irritant.
Serious eye damage/irritation	Not classified.
Respiratory or skin sensitization	It is not a skin sensitizer.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	None anticipated.



Specialized Fire Products

BLOWout Air Duster

	STOT-single exposure	None anticipated.
	STOT-repeated exposure	None anticipated.
	Aspiration hazard	Not classified.
11.2	Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Low toxicity to aquatic organisms.
12.2	Persistence and degradability	Readily biodegradable, non-persistent.
12.3	Bioaccumulative potential	The product has low potential for bioaccumulation.
12.4	Mobility in soil	Poorly water soluble product. The product is predicted to have low mobility in soil.
12.5	Other adverse effects	None.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Non-emptied aerosol: Dispose of wastes in an approved waste disposal facility. Do NOT dispose of via domestic waste.
13.2	Additional Information	Disposal should be in accordance with local, state or national legislation. Refer to manufacturer/supplier for information on recovery/recycling.

14. SECTION 14: TRANSPORT INFORMATION

D.O.T. Classification / TDG Regulations

14.1	UN number	UN 1030
14.2	UN Proper Shipping Name	
	US DOT	1,1-Difluoroethane, R152A Flammable.
	Canada TDG	1,1-Difluoroethane.
	IATA	1,1-Difluoroethane.
14.3	Transport hazard class(es)	2.1
14.4	Packing Group	None.
14.5	Environmental hazards	Not classified as a Marine Pollutant.
14.6	Special precautions for user	None.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
14.8	Additional Information	
	DOT Special Provisions (49 CFR 172.102)	DOT-SP 11516: In accordance with this special permit, this product is not subject to labelling requirements unless offered for transportation by air. This product is not subject to placarding requirements. Outside packaging must be marked with proper shipping description and 'DOT-SP 11516'.
	DOT Packaging Exceptions	306
	DOT Packaging Non Bulk	304
	DOT Packaging Bulk	314; 315



15. SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - 15.1.1 OSHA
 - Toxic and hazardous substances (29 CFR 1910; Subpart Z) Not listed.
 - National emission standards for hazardous air pollutants (40 CFR 61.01) Not listed.
 - 15.1.2 Title III Consolidated List of Lists
 - CAA 112(r) TO = 10000 Listed: 1,1-difluoroethane (CAS No.: 75-37-6)
 - 15.1.3 OSPAR List of Chemicals for Priority Action Not listed.
 - 15.1.4 State Right to Know Lists
 - Listed: 1,1-difluoroethane (CAS No.: 75-37-6)
New Jersey, Pennsylvania, Massachusetts
 - 15.1.5 TSCA (Toxic Substance Control Act) Listed: 1,1-difluoroethane (CAS No.: 75-37-6)
 - 15.1.6 Proposition 65 (California) Not listed.
 - 15.1.7 CAA 602 - Ozone Depleting Substances (ODS) Not listed.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-15.

NFPA		HMIS	
Health	1	Health	1
Fire	4	Flammability	4
Instability	1	Physical hazards	1

LEGEND

- LTEL Long Term Exposure Limit
- STEL Short Term Exposure Limit
- DOT Department of Transportation
- TDG Transportation of Dangerous Goods
- IATA International Air Transport Association
- OSPAR Oslo and Paris Convention
- CAA Clean Air Act
- NFPA National Fire Protection Association
- HMIS Hazardous Material Identification System

Disclaimers

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Safety Data Sheet

Dust-Off Compressed Gas Duster

Section 1. Identification

Product Identifier	Dust-Off Compressed Gas Duster		
Synonyms	Professional 12 oz.; Jumbo 17 oz.; Classic and Plus; Dust-Off Compressed Gas Duster		
Manufacturer Stock Numbers	N/A		
Recommended use	Dust Removal		
Uses advised against	Use Only as Directed - Read label instructions carefully		
Manufacturer Contact Address	Falcon Safety Products, Inc. 25 ImClone Drive Branchburg, NJ, 08876 USA		
	Phone	Emergency Phone	Fax
	(908) 707-4900	(800) 498-7192	N/A

Section 2. Hazards Identification

Classification	FLAMMABLE GASES - Category 2 GASES UNDER PRESSURE - Compressed gas
Signal Word	Warning
Pictogram	
Hazard Statements	Contains gas under pressure; may explode if heated Flammable gas
Precautionary Statements	
Response	Eliminate all ignition sources if safe to do so. Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
Prevention	Do not spray on an open flame or other ignition source. Keep away from heat.

Storage	Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Store in a well-ventilated place. Store at temperatures not exceeding 120 degrees F/49 degrees C
Disposal	N/A
General	Keep out of reach of children
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	N/A
	No Data Available

Section 3. Ingredients

CAS	Ingredient Name	Weight %
75-37-6	Ethane, 1,1-difluoro-	100 %

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

General Advice	Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt, seek medical advice.
Inhalation	Remove from exposure, lie down. Move to fresh air. Keep patient warm and at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.
Skin	Take off all contaminated clothing immediately. Flush area with lukewarm water. Do not use hot water. If frostbite has occurred, call a physician.
Eye	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion	Is not considered a potential route of exposure.
Most important symptoms/effects, acute and delayed	Anaesthetic effects: light-headedness, irregular heartbeat with a strange sensation in the chest, heart thumping, apprehension, feeling of fainting, dizziness or weakness.
Protection of First-aiders	If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to Physician	Because of possible disturbances of cardiac rhythm catecholamine drugs, such as epinephrine, which may be used in situations of emergency life support, should be used with special caution.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Water spray, water fog, dry chemical, alcohol resistant foam, carbon dioxide (CO ₂)
Unsuitable Extinguishing Media	No applicable data available.
Specific Hazards	Flammable. This substance's fire decomposition by-products will include hydrofluoric acid and possibly carbonyl fluoride. Avoid contact with these materials, which are toxic and irritating. Evacuate personnel immediately in the event of a fire involving this substance. Vapors may form explosive mixtures with air. Vapors are heavier than air and may spread along floors. Vapors or gases may travel considerable distances to ignition source and flash back.
Special protective equipment for firefighters	Use personal protective equipment. Wear neoprene gloves during cleaning up work after a fire. Exposure to decomposition products may be a hazard to health.
Further Information	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool containers/tanks with water spray.

Section 6. Accidental Release Measures

NOTE:	Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.
Safeguards (Personnel)	Evacuate personnel to safe areas. Ventilate the area. Refer to protective measures listed in sections 7 and 8.
Spill Clean-up	If this product is spilled and not recovered, or is recovered as a waste for treatment and disposal, the CERCLA Reportable Quantity is 100 lbs. (release of an Unlisted Hazardous Waste with the Characteristic of Ignitability). Evaporates. Ventilate area using forced ventilation, especially low or enclosed places where heavy vapors might collect.
Accidental Release Measures	Wear self-contained breathing apparatus (SCBA).

Section 7. Handling and Storage

Handling (Personnel)	Avoid breathing vapors or mist. Avoid contact with skin, eyes and clothing. Provide sufficient air exchange and/or exhaust in work rooms. For personal protection see section 8. Handle in accordance with good industrial hygiene and safety practice.
Handling (Physical Aspects)	Vapors are heavier than air and may spread along floors. Vapors may form flammable mixture with air. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. No sparking tools should be used. Take measures to prevent the build up of electrostatic charge. Keep away from open flames, hot surfaces and sources of ignition. When using DO NOT SMOKE. Do not use in areas where vapors may accumulate such as paper shredders.
Dust Explosion class	Not applicable
Storage	Keep container tightly closed and in a dry, well-ventilated location. Store in original container. The product has an indefinite shelf life when stored properly.
Storage Period	Recommended shelf life - 10 years provided product is stored in a dry location as directed.
Storage Temperature	Do not expose to temperatures above 120 degrees F (49 degrees C) as overheating could cause can to burst. DO NOT leave in direct sunlight or enclosed vehicle.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Ethane, 1,1-difluoro-	N/A	N/A	N/A
Personal Protective Equipment	N/A			
Engineering controls	Ensure adequate ventilation, especially in confined areas. Use respiratory protection if needed.			
Eye/Face Protection	Wear safety glasses with side shields. Direct contact with liquid may cause frostbite.			
Respiratory Protection	For rescue use self-contained breathing apparatus. Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing.			
Skin and body protection	As required by employer code. If there is risk of skin contact, wear protective clothing, gloves, etc. Direct contact with liquid can cause frostbite.			
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practices. When using do not eat or drink. Wash hands and face before breaks and immediately after handling the product.			

Section 9. Physical and Chemical Properties

Physical State	Gas
Color	Clear
Odor	slight, ether-like
Odor Threshold	No applicable data available
Solubility	Water - Slightly
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	No applicable data available
Specific Gravity	0.91
Density lbs/Gal	0.9
Pounds per Cubic Foot	N/A
Flash Point	<-58 °F (<-50 °C)
FP Method	N/A
Ph	Neutral
Melting Point	No applicable data available
Boiling Point	-13 °F (-25 °C)
Boiling Range	N/A
LEL	3.9
UEL	16.9
Evaporation Rate	No applicable data available
Flammability	Flammable
Decomposition Temperature	N/A
Auto-ignition Temperature	No applicable data available
Vapor Pressure	5,960 KPa at 77F (25C)
Vapor Density	2.4 at 77F (25C) (Air=1)

Section 10. Stability and Reactivity

Reactivity	Stable under recommended storage conditions.
Chemical Stability	The product is chemically stable under recommended storage conditions.
Conditions to Avoid	Aerosol containers are unstable at temperatures above 120 degrees F/49 degrees C
Incompatible Materials	Incompatible products include Alkali metals, Alkaline earth metals, powdered metals, powdered metal salts.
Hazardous Decomposition Products	Decomposition products are hazardous. This material can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrofluoric acid and possibly carbonyl fluoride.

Section 11. Toxicological Information

Component Analysis - LC50	1,1-Difluoroethane - > 64000 ppm rat
Component analysis - Oral LD50	1,1-Difluoroethane - 1500 mg/kg rat
Effects of Acute Exposure - Eye	Contact with liquid may cause frostbite
Effects of Acute Exposure - Skin	Contact with liquid may cause frostbite
Effects of Acute Exposure - Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effect (headaches, dizziness). Vapors may cause dizziness or suffocation.
Effects of Acute Exposure - Ingestion	Not a normal route of exposure
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	Not classifiable as a human carcinogen. Animal testing did not show carcinogenic effects. None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA as a carcinogen.
Mutagenicity	Animal testing did not show any mutagenic effects. Did not cause genetic damage in cultured bacterial cells. Tests on mammalian cell cultures showed mutagenic effects.
Reproductive Toxicity	No toxicity to reproduction. Animal testing showed no reproductive toxicity.
Teratogenicity	Animal testing showed no developmental toxicity.
Further Information	Cardiac sensitization threshold limit: 405000 mg/m3

Section 12. Ecological Information

Aquatic Toxicity	1,1-Difluoroethane 96 h LC50 : Fish 295.78 mg/l 96 h EC50 : Algae 47.76 mg/l 48 h EC50 : Daphnia (water flea) 146.7 mg/l
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Section 13. Disposal

Waste Disposal Methods	Comply with applicable Federal, State/Provincial and Local Regulations. May be a RCRA Hazardous waste due to the ignitability characteristic. Do not puncture or incinerate container.
Contaminated Packaging	Not Available

Section 14. Transport Information

UN Number	1030
UN Proper Shipping Name	1,1-Difluoroethane
DOT Classification	2.1
Packing Group	N/A
Packaging Exceptions	Note: Falcon Safety Products has been granted a DOT special permit. A copy of DOT Special Permit SP-11516 can be obtained by calling Falcon Safety Products, Inc. at 908-707-4900.
Transportation of Dangerous Goods (TDG - Canada)	Proper Shipping name: 1,1-Difluoroethane Hazard Class: 2.1 UN number: 1030 Packaging Exceptions: Limited quantity (containers up to 125mL)
IATA/ICAO (Air)	Proper Shipping Name: 1,1-Difluoroethane. Hazard Class: 2.1. UN Number: 1030. Maximum Net Quantity Packaging: Cargo Aircraft only - 150 kg maximum (forbidden on passenger aircraft). Maximum Net Quantity packaging cargo only: 150 kg.
IMDG (Marine Transport)	Proper Shipping Name: 1,1-DIFLUOROETHANE. Hazard Class: 2.1. UN Number: 1030.
Additional Information	TDG Canada: Falcon Safety Products has been granted Equivalency Certificate SU 9211 (ren. 1) by the TCSS, TDGD to offer for transport by road, rail and marine.

Section 15. Regulatory Information

Canadian Federal Regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
WHMIS Status	Controlled
WHMIS Classification	Class A - Compressed Gas, Class B - Division 1 - Flammable Gas
TSCA	On the inventory, or in compliance with the inventory.
SARA 313 Regulated Chemical(s)	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US Federal Regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
NJ Right to Know Regulated Chemical(s)	Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): 1,1-Difluoroethane.
California Prop. 65	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
Canada Domestic Substances List (DSL)	This product is listed on the DSL inventory list and complies with the inventory requirements administered by the governing country.

Section 16. Other Information

Revision Date

4/28/2015

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Prepared By

Falcon Safety Products, Inc. 908-707-4900

According to 1907/2006 EC, Article 31
Data sheet No MSDS 0084UK

Issue No 1

Date: 20-05-2015

1. Identification of the substance/ preparation and of the company / undertaking

Product details – Trade name: smoke-sabre

Part number: SS01-XXX (XXX denotes product variant)

Manufacturer/Supplier: Detector testers (No Climb Products Ltd), Edison House,
163 Dixons Hill Road, Welham Green, Hertfordshire AL9 7JE

Tel: +44 (0)1707 282760 Fax: +44 (0)1707 282777 Web: www.detector testers.com



2. Hazards identification

Hazard description



F+ Extremely flammable

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

R 12 Extremely flammable.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition – No smoking.

Build-up of explosive mixtures possible without sufficient ventilation.

Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

GHS label elements



Danger

2.2/1 -Extremely flammable gas.

2.3/1 -Extremely flammable aerosol.

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Response:

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Eliminate all ignition sources if safe to do so.

Storage:

Store in a well-ventilated place.

Protect from sunlight. Do no expose to temperatures exceeding 50 °C/ 120 °F.

3. Composition/information on ingredients

Chemical characterization Description:

Active substance with propellant

Dangerous components:

CAS: 106-97-8 / EINECS: 203-448-7	butane	F+; R 12	50-100%
CAS: 74-98-6 / EINECS: 200-827-9	Propane	F+; R 12	10-<25%
CAS: 64-17-5 / EINECS: 200-578-6	ethanol	F; R 11	0-5%

4. First-aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: Do not induce vomiting; call for medical help immediately.

5. Fire-fighting measures

Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet.
Protective equipment: No Special measures required.

6. Accidental release measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
Measures for environmental protection: Do not allow to enter sewers/surface ground water.
Measures for cleaning/collecting: Ensure adequate ventilation.

7. Handling and storage

Handling:

Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.

Information about fire and explosion protection:

Keep ignition sources away. - Do not smoke.
 Protect against electrostatic charges.
 Pressurized container; protect from sunlight and do not expose to temperatures exceeding 503C, i.e. electric lights.
 Do not pierce or burn, even after use.
 Do not spray onto a naked flame or any incandescent material.

Storage:

Requirements to be met by storerooms and receptacles:

Store in a cool location.
 Observe official regulations on storing packages with pressurized containers.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.
 Do not seal receptacle gas tight.
 Store in cool, dry conditions in well sealed receptacles.
 Protect from heat and direct sunlight.

8. Exposure controls/personal protection

Ingredients with limit values that require monitoring at the workplace:

106-97-8 butane

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1,3-diene)
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64-17-5 ethanol

WEL	Long term value: 1920 mg/m ³ , 1000 ppm
-----	--

General protective and hygienic measures:

Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.

Respiratory protection:

In cases of brief exposure or low pollution respiratory filter device is not applicable when used in a well ventilated environment.

In cases of intensive or longer exposure use self-contained respiratory protective device. Use suitable respiratory protective device in case of insufficient ventilation.

Personal Protection:

Wear PPE (personal protective equipment) appropriate to the task and the environment.

9. Physical and chemical properties

General Information	
Form:	Aerosol
Colour:	Colourless
Odour:	Characteristic
Change in condition	
Melting point/ Melting range:	Undetermined
Boiling point/Boiling range:	-44°C
Flash point:	<0°C
Ignition temperature:	365.0°C
Self-igniting:	Product is not self igniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures is possible.
Explosion limits:	Lower: 1.5 Vol%
Vapour pressure at 20°C:	4.3 bar @ 20°C
Density at 20°C:	0.58 g/cm ³
Solubility in/ miscibility with water:	Not miscible or difficult to mix.
Solvent content: Organic solvents:	96.4 %

10. Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known.

Dangerous decomposition products: No dangerous decomposition products known.

11. Toxicological information

Acute toxicity: Low acute toxicity

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

12. Ecological information

General notes: generally not hazardous for water.

13. Disposal considerations

Product: Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

European waste catalogue	
20 01 99	other fractions not otherwise specified
07 01 04	other organic solvents, washing liquids and mother liquors
15 01 04	metallic packaging

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

14. Transport information

Land transport ADR/RID (cross border)
ADR/RID class: 2.5F Gases.
Danger code (Kemler): 23
UN-Number: 1950
Packaging group: -
Hazard label 2.1
Description of goods: 1950 AEROSOLS

Maritime transport IMDG:
IMDG Class: 2.1
UN Number: 1950
Label 2.1
Packaging group: -
EMS Number: F-D,S-U
Maritime pollutant: No
Proper shipping name: AEROSOLS

Air transport ICAO-TI and IATA-DGR:
ICAO/IATA Class: 2.1
UN/ID Number: 1950
Label 2.1
Packaging group:-
Proper shipping name: AEROSOLS,
flammable
UN "Model Regulation": UN1950;
AEROSOLS; 2.1; -

15. Regulatory information

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



F+ Extremely flammable

Risk phrases:

12 Extremely flammable.

Safety phrases:

2 Keep out of the reach of children
23 Do not breathe fumes/aerosol
46 If swallowed, seek medical advice immediately and show this container or label
51 Use only in well-ventilated areas.

Special labelling of certain preparations: Pressurized container; protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition. No smoking. Build-up of explosive mixtures possible without sufficient ventilation.

National regulations:

Technical instructions (air):

Class	Share in %
NK	50-100

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

VOC-CH 96.45 %

VOC-EU 559.4 g/l

16. Other information

Revision Status:

1. New Material Safety Data Sheet 20-5-2015

NOTE: As our policy is one of continuous improvement, details of products described within this publication are subject to change without notice. All information provided here is believed to be correct at the time of going to press. Every effort has been made to ensure the accuracy of information which is provided in good faith but nothing contained herein is intended to incorporate any representation or warranty, either express or implied or to form the basis of any legal relations between the parties hereto, additional to or in lieu of such as may be applicable to a contract of sale or purchase.

Material Safety Data Sheet

Smoke Detector Tester

Model No. 25 S, 2.5 oz.

Revision: 6/14/02

Manufactured for Home Safeguard Industries, LLC at : Shield Packaging of California, Inc.
5165 'G' Street
Chino, CA 91710

Information Telephone No: (909) 628-4707

Emergency Telephone No: (909) 628-4707

Section 1 - Product Information

Product Number: HOM 32000
Company Name: Home Safeguard Industries, LLC
Product Name: Smoke Detector Tester Model No. 25 S, 2.5 oz.
Product Class: Aerosol Product

Section 2 - Hazardous Ingredients

Ingredient %	Occupational Exposure Limits		Vapor Pressure mm Hg
	TLV	TWA	
Hydrocarbon Blend			70.0 psig @ 70° F
Propane, 48% (CAS 74-98-6)	1000 ppm		108 psig @ 70° F
Isobutane, 23% (CAS 75-28-5)	800 ppm est.		31 psig @ 70° F
Butane, 29% (CAS 106-97-8)	600 ppm		17 psig @ 70° F

** = Components marked with a double asterisk are present above the De minimus cut off level and subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

N/A = Not available

Section 3 - Physical Data

Appearance: Clear, colorless liquid
Odor: Sweet Petroleum
Boiling Range (Aerosol): -25.1 to +32° F
Evaporation Rate (Aerosol): Immediate @ T above -25.1° F
Vapor Density (Aerosol): Heavier than air
% Volatile by Weight (Aerosol): < 100%
Weight per Gallon (Aerosol): 4.5 # / Gal

Section 4 - Fire and Explosion Hazard Data

Flammability Rating (Aerosol): Extremely Flammable
Extinguishing Media: Foam, CO2 or Dry Chemical
Unusual Fire and Explosion Hazards: Aerosols may burst at temperatures of 120° F. Product is extremely flammable under explosive conditions.
Fire Fighting Procedures: Keep aerosols cooled with water and remove them from danger as soon as possible. If aerosols are bursting, stay clear, until bursting is completed. Aerosols can be projectiles when bursting. This product is toxic to fish. Do not allow runoff into lakes, streams, tidal marshes, or estuaries. Isolate from oxidizers, heat, sparks, electric equipment and open flame.

Section 5 - Health Hazard Data

Effects of Overexposure

Eyes: may cause stinging, tearing, redness, swelling, blurred vision and possible freeze burns.
Skin: Liquid can cause severe freeze burns similar to frostbite.
Inhalation: Inhalation of vapor may produce anesthetic effects and feeling euphoria. Prolonged over-exposure can cause rapid breathing, headache, dizziness, narcosis, unconsciousness, and death from asphyxiation, depending on concentration and time of exposure.
Ingestion: Aspiration hazard!
Primary Routes of Entry: Inhalation.

Emergency and First Aid Procedures

Eyes: Flush with plenty of water for 15 minutes, get medical attention.
Skin: Flush with plenty of water for 15 minutes. If any irritation persists, get medical attention if there is evidence of tissue damage.
Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Keep person warm and quiet. Get medical attention.
Ingestion: DO NOT induce vomiting! Get medical attention IMMEDIATELY!

Section 6 - Reactivity Data

Stability: Stable
Hazardous Polymerization: Will not occur
Hazardous Decomposition Products: Thermal decomposition may yield: Carbon Monoxide or Volatile Hydrocarbon Vapors.

Conditions to Avoid: Open flame, heat, sparks, electrical equipment or any means which can cause high temperatures at or above 120° F.

Materials to Avoid: Strong oxidizing agents or reducing agents, strong acids and bases.

Section 7 - Spills or Leaks Procedures

Steps to be Taken

Small leaks can be mopped or wiped immediately. Remove materials to out-of-doors or to a source of adequate ventilation and storage. Large leaks should be handled as follows: Evacuate area. Contain liquid; transfer to closed metal containers. Avoid open flames, sparks and heat sources. Keep out of water supplies. Do not apply directly to lakes, streams, tidal marshes, or estuaries. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal wastes.

Waste Disposal

Dispose in accordance with local, state and federal regulations.

Section 8 - Safe Handling and Use Information

Respiratory Protection: Use only with adequate ventilation. Use of protective equipment is necessary if PEL and TLV levels are exceeded. In enclosed spaces use a NIOSH approved organic vapor/mist cartridge respirator or positive-pressure self-contained breathing apparatus.

Ventilation: Large opened areas or sufficient mechanical (General and/or Local Exhaust) ventilation to maintain exposure below PEL and TLV levels.

Protective Equipment: Gloves, Safety Glasses, respiratory protection, long-sleeve shirt depending on levels and length of exposure.

Hygienic Practices: Observe normal hygienic practices. Wash hands after use. Wash clothing before reuse.

Section 9 - Special Precautions

Handling and Storage: Product should be kept at temperatures below 120° F in a dry, cool area. Product is extremely flammable. Keep away from heat, sparks, and flame. Use only with adequate ventilation. Avoid breathing of vapor or mist. Wear OSHA standard goggles or face shield. Wear gloves, apron and footwear impervious to this material.

Section 10 - Shipping Information

1. DOT: Carton marked with:

Shipping Name: Consumer Commodity
Hazard Class: ORM-D

2. IMDG (by water overseas)

Shipping Name: Aerosols

Class:	2
UN No.:	1950
Label:	None
IMDG Code:	Page 2102

3. By Air (IATA)

Shipping Name: Consumer Commodity

Class:	9
ID No.:	8000
Label:	Miscellaneous Dangerous Goods

Packaging Instruction: 910

The information contained in this Material Safety Data Sheet is furnished without warranty of any kind, expressed or implied. Information in this Data Sheet has been assembled by the manufacturer based on its own studies and on the work of others, and is believed to be correct as of the date issued. However, no warranty of any kind is expressed or implied as to the accuracy, completeness, or adequacy of the information obtained herein. The Manufacturer shall not be liable, regardless of fault, to the vendee, the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, or adequacy of the information obtained herein. It is intended to assist in the normal safe usage of product.

Safety Data Sheet Non-Flammable Duster

SECTION 1: IDENTIFICATION

Product Name: 246050 - 3.5oz Twin Pk (Non-Flammable Duster with Bitterant)

Manufacturer:

Norazza, Inc.
3938 Broadway St.
Buffalo, NY14227
www.norazza.com

Information Phone Number: (716) 716-1160

Emergency Phone Number: ChemTel Inc. (800)255-3924,

International: +1(813)248-0585

Product Use: Duster – consumer product

Restriction on Use: Use only as directed.

SDS Date of Preparation: August 1, 2016

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification (Hazcom 2012):
Gases Under Pressure – Compressed Gas

Label Elements:



DANGER!

Hazard Phrases:

Contains gas under pressure; may explode if heated.

Precautionary Phrases:

Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Pressurized container: Do not pierce or burn, even after use.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Store in a well-ventilated place.

Other Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	%
1,1,1,2 Tetrafluoroethane	811-97-2	80-100

The specific identity and/or exact percentage of composition has been withheld as a trade secret.

Safety Data Sheet

Non-Flammable Duster

SECTION 4: FIRST AID MEASURES

Eye: Flush eyes with water. Get medical attention if irritation develops and persists. For direct contact with spray, flush immediately and get medical attention.

Skin: Wash area with soap and water. Get medical attention if irritation develops and persists. Treat frostbitten or frozen skin by immersing affected area in lukewarm water. Get medical attention.

Inhalation: None needed under normal use conditions. If irritation develops, move to fresh air. Get medical attention for serious overexposure or if symptoms persist.

Ingestion: Ingestion is an unlikely route of exposure for aerosol products. If ingestion occurs rinse mouth with a small amount of water. Get medical attention. Never give anything by mouth to an unconscious or drowsy person.

Most Important symptoms and effects, both acute and delayed: May cause mild eye irritation. Spraying product directly on skin or in eyes may cause freezing of tissues. Inhalation may cause slight upper respiratory tract irritation.

Indication of any immediate medical attention and special treatment needed: Immediate medical attention is required if frostbite occurs from spraying directly in eyes or on skin.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable and Unsuitable Extinguishing Media: Use any media that is appropriate for the surrounding fire.

Special Hazards Arising from the Chemical: Contents under pressure. Container may rupture or explode in the heat of a fire. Prolonged exposure to temperatures above 120°F may cause cans to burst. Combustion may produce carbon oxides, hydrogen fluoride, and carbonyl fluoride.

Special Protective Equipment and Precautions for Fire-Fighters: Wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Use shielding to protect against bursting cans.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate personal protective equipment. Ventilate area.

Environmental Hazards: Report spills and releases as required to appropriate authorities.

Methods and Material for Containment and Cleaning Up: Place leaking can in a pail in a well-ventilated area away until pressure has dissipated. Collect liquid using inert material and place into a suitable container for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Keep product away from heat, direct sunlight and all sources of electricity. Keep out of the reach of children. Do not puncture or incinerate containers. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F. U.F.C. (NFPA 30B) Level 1 Aerosol.

Safety Data Sheet

Non-Flammable Duster

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	Exposure Limits
1,1,1,2-Tetrafluoroethane	1000 ppm TWA AIHA WEEL

Appropriate Engineering Controls: General ventilation should be adequate for normal use. For operations where the occupational exposure limit may be exceeded, mechanical ventilation such as local exhaust may be needed to maintain exposure levels below applicable limits.

Individual Protection Measures:

Respiratory Protection: None normally required. For operations where the occupational exposure limit may be exceeded, a NIOSH approved supplied air respirator is recommended. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Skin Protection: None required for normal use. For bulk handling and packaging operations, impervious gloves are recommended.

Eye Protection: None required for normal use. For bulk handling and packaging operations, safety glasses with side shields are recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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Appearance: Clear, colorless gas packaged in an aerosol container	Vapor Density (air = 1): Not available
Odor: Slight ether-like odor	Specific Gravity: Not available
Odor Threshold: Not established	Water Solubility: Not available
pH: Not applicable	Octanol/Water Partition Coefficient: Not applicable
Melting Point/Freezing Point: -149.8°F (-101°C) (1,1,1,2-Tetrafluoroethane)	Autoignition Temperature: Not available
Boiling Point: Not applicable	Decomposition Temperature: Not available
Flash Point: Not Flammable	Viscosity: Not applicable
Evaporation Rate: Not available	Explosion Properties: None
Flammable Limits: LEL: Not applicable UEL: Not applicable	Oxidizing Properties: Not oxidizing
Vapor Pressure: 4730 mmHg @ 25°C (1,1,1,2-Tetrafluoroethane)	Aerosol Fire Protection Level: Level 1 Aerosol (NFPA 30B)
Ignition Distance Test: Not available	Enclosed Space Ignition Test: No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Keep away from excessive heat, direct sunlight and open flames. Containers may rupture at temperatures above 120F (50C). Do not puncture or incinerate containers.

Incompatible Materials: Avoid alkali or alkaline earth metals, powdered metals and powdered metal

Safety Data Sheet

Non-Flammable Duster

salts.

Hazardous Decomposition Products: Decomposition may produce carbon oxides, hydrogen fluoride, and carbonyl fluoride.

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eye: May causes mild irritation. Spraying product directly in eyes may cause freezing of tissue.

Skin: Spraying product directly on skin may cause freezing of tissue.

Inhalation: Breathing vapors may cause mild irritation of the mucous membranes and upper respiratory tract. Excessive overexposure may cause headache, dizziness, drowsiness, irregular heartbeat, unconsciousness or death from asphyxiation. Presence of bitterant makes inhalation overexposure unlikely.

Ingestion: Ingestion is unlikely with this product. If liquid is swallowed, freeze injury would be expected. Presence of bitterant makes ingestion unlikely.

Chronic Hazards: None known.

Carcinogen Status: None of the components of this product are listed as carcinogens by IARC, NTP or OSHA.

Acute Toxicity Values:

1,1,1,2-Tetrafluoroethane: Inhalation rat LC50 567,000 ppm/4 hr

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

1,1,1,2-Tetrafluoroethane: 96 hr LC50 *Oncorhynchus mykiss* 450 mg/l, 48 hr EC50 *daphnia magna* 980 mg/L, 72 hr algae >118 mg/L

Persistence and Degradability: If released to the environment, 1,1,1,2-tetrafluoroethane it will rapidly volatilize to the atmosphere.

Bioaccumulative Potential: Not expected to bioaccumulate in aquatic organisms.

Mobility in Soil: The product is expected to volatilize into the air and therefore will not be found in soil.

Other Adverse Effects: None known

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, regional and national regulations. Do not puncture or incinerate containers. When contents are depleted, continue to depress button until all gas is expelled.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Description: Consumer Commodity

Safety Data Sheet

Non-Flammable Duster

DOT Technical Name: None
DOT Hazard Class: ORM-D
UN Number: None
DOT Labels Required (49CFR172.101): ORM-D
Hazardous Substance (49CFR172.101): None
Reportable Quantity: N/A
Marking: Containers must be marked "DOT-SP 15146".

IMDG Shipping Description: UN1950, Aerosols, 2.2
ID Number: UN1950
Hazard Class: 2.2
Packing Group: None
Labels Required: None
Marking Required: 2.2
Placards Required: 2.2 On Transport Containers

SECTION 15: REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Sudden Release of Pressure

SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:
None

EPA TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

SECTION 16: OTHER INFORMATION

Revision Summary: Updated formulation and all sections.

SDS Date of Preparation/Revision: August 1, 2016

MATERIAL SAFETY DATA SHEET

Revised 2/12/12

SmokeCheck™ HSI FIRE & SAFETY GROUP LLC

01. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER: HO-25SB
PRODUCT NAME: SmokeCheck™
PRODUCT DESCRIPTION: Aerosol
PRODUCT CODE: FG # 16504

COMPANY NAME:
HSI Fire & Safety Group LLC
107 Garlisch Drive
Elk Grove Village, IL 60007-1322
(847) 427-8340
Fax (847)-427-8343

MANUFACTURED FOR HSI FIRE & SAFETY GROUP LLC, AT:
Shield Packaging Co., Inc
50 Oxford Ave. Dudley, MA 01571-3262
(508) 949-0900
Fax (508)-943-1473

24 HR. EMERGENCY TELEPHONE NUMBER: CHEMTREC 800-424-9300
24 HR. EMERGENCY INTERNATIONAL TELEPHONE NUMBER: CHEMTREC 703-527-3887

2. COMPOSITION

CHEMICAL NAME	%	OCCUPATIONAL EXPOSURE LIMITS		Vapor Pressure 64.0 psig @ 70°F
		TLV	TWA	
Butane/Propane Hydrocarbon Blend	98			
63.0 % iso-Butane (CAS # 106-97-8)		600 ppm		
35.7 % Propane (CAS # 74-98-6)		1000 ppm		
1.3 % n-Butane (CAS # 106-97-8)		1000 ppm		
Proprietary	2	None		

03. HAZARD IDENTIFICATION

Do not use or store near heat, sparks, open flame or any other source of ignition.

POTENTIAL HEALTH EFFECTS

EYES:

May cause stinging, tearing, redness, swelling and blurred vision. Possible burns similar to frost bite could occur with sustained spraying on eyes.

SKIN:

May cause irritation and stinging. Possible burns similar to frost bite could occur with sustained spraying on skin.

INGESTION:

Not a likely route of exposure. May be harmful if swallowed. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe lung injury.

INHALATION:

Inhalation of vapor may produce anesthetic effects and feeling euphoria. Prolonged over-exposure can cause rapid breathing, headache, dizziness, narcosis, unconsciousness, and death from asphyxiation, depending on concentration and time of exposure. Sustained deliberate inhalation of the concentrated product may lead to brain damage or death.

CHRONIC:

None known

04. FIRST AID MEASURES

EYES:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. If irritation persists, call a poison control center or doctor for treatment advice.

SKIN:

Remove contaminated clothing. Rapid evaporation of the liquid may cause frostbite. If there is evidence of frostbite, bathe (do not rub) with lukewarm (not hot) water. If water is not available, cover with a clean, soft cloth or similar covering. Call a physician if irritation develops or persists.

INGESTION:

Not a likely route of exposure. If swallowed do not induce vomiting. Seek immediate medical attention. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe lung injury.

INHALATION:

Remove affected person to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

05. FIRE FIGHTING MEASURES

Flammability rating (Aerosol):

1,4,0 (Health = 1, Flammability = 4, Reactivity = 0). Extremely flammable.

Flashpoint (dispensed liquid):

138° F TOC; 445° F (229° C) ASTM D93, Pensky-Martens Closed Tester

Autoignition temperature:

875° F

EXTINGUISHING MEDIA:

Dry Chemical, Foam, CO₂.

HAZARDOUS COMBUSTION PRODUCTS:

Under fire conditions this product may decompose to give off toxic gasses such as carbon monoxide and carbon dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Aerosol cans may burst at temperatures above 120° F. This product is extremely flammable.

FIREFIGHTING PROCEDURES:

Evacuate personnel in the general area. Use water to cool material stored in vicinity of fire and remove aerosol cans from danger soon as possible. Aerosol cans may burst at temperatures above 120° F. If aerosol cans are bursting, stay clear until bursting is completed. Aerosols cans could act like projectiles when bursting. Isolate from oxidizers, open flames, sparks, heat, electric equipment and other sources of ignition. This product is toxic to fish. Do not allow runoff into lakes, streams, tidal marshes, or estuaries.

06. ACCIDENTAL RELEASE MEASURES**SMALL SPILL:**

Ventilate area. Small leaks can be mopped or wiped immediately. Remove materials to out-of-doors or to a source of adequate ventilation and storage.

LARGE SPILL:

Evacuate area. Contain liquid; transfer to closed metal containers. Avoid open flames, sparks and heat sources.

ENVIRONMENTAL PRECAUTIONS:

Keep out of water supplies. This product is toxic to fish. Do not apply directly to lakes, streams, tidal marshes, or estuaries. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal wastes.

07. HANDLING AND STORAGE**GENERAL PROCEDURES:****HANDLING:**

Avoid inhalation of vapor or mist. Use only with adequate ventilation. Do not get in eyes, on skin or on clothing. Product should be kept at temperatures below 120° F in a dry, cool area. Protect from sunlight. Product is extremely flammable. Keep away from heat, sparks, and flame. Do not pierce or burn containers, even after use.

STORAGE:

Store in a cool, dry area at temperatures below 120° F. Do NOT store near heat, open flame, ignition source or near strong acids, bases and oxidizers. Fire or intense heat may cause violent rupture of packages.

Level 3 Aerosol

KEEP OUT OF THE REACH OF CHILDREN

08. EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE GUIDELINES:****OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)**

<u>CHEMICAL NAME (CAS #)</u>	<u>OSHA (PEL)</u>	<u>ACGIH (TLV)</u>	<u>OTHER (LIMITS)</u>
iso-Butane (CAS # 106-97-8)		600 ppm	
Propane (CAS # 74-98-6)		1000 ppm	
n-Butane (CAS # 106-97-8)		1000 ppm	

ENGINEERING CONTROLS:

Mechanical ventilation should be used when handling this product in enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT:

Take precautions to avoid contact with eyes, face and skin.

RESPIRATORY:

Use in well ventilated areas. Take precautions to avoid breathing vapors or spray mist of this product.

**DO NOT SMOKE, EAT, OR DRINK WHILE SPRAYING THIS PRODUCT.
OBSERVE NORMAL HYGIENIC PRACTICES.**

09. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Gas in pressurized aerosol can
BOILING RANGE (Aerosol):	-25.1 to +32° F
FREEZING POINT:	Not determined for aerosol
COLOR:	Clear, Colorless Gas
SPECIFIC GRAVITY (H ₂ O = 1):	N/A
pH:	N/A
VAPOR PRESSURE (mm H):	Not determined for aerosol
VOLATILE BY VOLUME - %:	< 100
VAPOR DENSITY (AIR=1):	> 1
EVAPORATION RATE (water = 1):	> 1
APPEARANCE AND ODOR:	Clear, colorless, with sweet petroleum odor.
SOLUBILITY IN WATER:	Insoluble
VISCOSITY:	Not determined for aerosol
VOC:	None

10. STABILITY AND REACTIVITY

STABLE:

Yes

HAZARDOUS POLYMERIZATION:

Will NOT occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide and volatile hydrocarbon vapors.

CONDITIONS TO AVOID:

Open flame, heat, sparks, electrical equipment or any means which can cause high temperatures at or above 120° F.

MATERIALS TO AVOID:

Strong oxidizing agents or reducing agents, strong acids and bases.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: N/D

ORAL LD₅₀: N/D

INHALATION LC₅₀: N/D

This product should provide minimal risk to users. Do not inhale. Use only with adequate ventilation.

EYE EFFECTS:

This product should provide minimal risk to users. Do not spray directly on eyes, as frostbite could occur due to the rapid evaporation of the propellant.

SKIN EFFECTS:

This product should provide minimal risk to users. Do not spray directly on the skin, as frostbite could occur due to the rapid evaporation of the propellant.

SENSITIZATION:

Not determined.

COMMENTS:

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

12. ECOLOGICAL INFORMATION**ENVIRONMENTAL DATA:**

Not determined.

ECOTOXICOLOGICAL INFORMATION:

Not determined.

13. DISPOSAL CONSIDERATIONS**DISPOSAL METHOD:**

Wastes resulting from the use of this product must be disposed of at an approved waste disposal facility.

EMPTY CONTAINER:

Do NOT puncture or incinerate empty aerosol cans. Dispose of in accordance with procedures approved by State and Local authorities.

RCRA/EPA WASTE INFORMATION:

None of the ingredients in this product appear on the RCRA lists (40 CFR 261.24, 40 CFR 251.33) or CERCLA Hazardous Substance list (40 CFR Part 302 Table 302.4).

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)****BY LAND:****CARTON MARKED WITH PROPER SHIPPING NAME:** Consumer Commodity. Hazard Class: ORM-D**BY WATER VESSEL (IMO/IMDG):****PROPER SHIPPING NAME:** UN1950, Aerosols, 2.1, Ltd. Qty. Label: None.
(Level 3 Aerosol)**AIR (ICAO/IATA):****PROPER SHIPPING NAME:** ID8000, Consumer Commodity, 9. Label: Miscellaneous Dangerous Goods.
(Packaging instruction Y963)**PRIMARY HAZARD CLASS/DIVISION:** N/D**OTHER SHIPPING INFORMATION:** N/D**15. REGULATORY INFORMATION****U.S. FEDERAL, STATE and LOCAL REGULATORY INFORMATION:**

This product and/or its constituents listed herein are on the EPA TSCA inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other federal, state or local regulations. Consult those regulations applicable to your operation.

CLEAN WATER ACT:

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (800-424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

SARA SECTION 311/312 HAZARD CATEGORIES:

<u>ACUTE HEALTH</u>	<u>CHRONIC HEALTH</u>	<u>FIRE</u>	<u>SUDDEN RELEASE OF PRESSURE</u>	<u>REACTIVITY</u>
YES	NO	YES	YES	NO

SARA SECTION 313 REPORTABLE INGREDIENTS:

This product contains no toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 49 CFR 372.

<u>COMPONENT</u>	<u>CAS #</u>	<u>MAX %</u>
NONE	NONE	0

See **Section 03. HAZARD IDENTIFICATION**, for potential health risks.

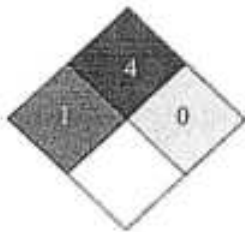
SARA SECTION 302/304 EMERGENCY PLANNING**EMERGENCY PLAN:**

There are no SARA Title III Section 302 extremely hazardous substances present in this product (40 CFR 355).

VOLATILE ORGANIC COMPOUNDS (VOC): This product contains > 95% VOC's.

16. OTHER INFORMATION**Flammability rating (Aerosol):**

1,4,0 (Health = 1, Flammability = 4, Reactivity = 0). Extremely flammable



Global Warming Potential (GWP) = 3.2

The information contained in this Material Safety Data Sheet is furnished without warranty of any kind, expressed or implied. Information in this Data Sheet has been assembled by the manufacturer based on its own studies and on the work of others and is believed to be correct as of the date issued. However, no warranty of any kind is expressed or implied as to the accuracy, completeness, or adequacy of the information obtained herein. The Manufacturer shall not be liable, regardless of fault, to the vendee, the vendee's employees, or anyone for any direct, special or consequential damages arising out of, or in connection with, the accuracy, completeness, or adequacy of the information obtained herein. It is intended to assist in the normal safe usage of the product.

Revised 2/12/12

SmokeCheck 25S (Smoke Alarm Tester)

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 11/11/2016

Revision date: April 27, 2017

SECTION 1: Identification

1.1. Product identifier

Product name : SmokeCheck 25S (Smoke Alarm Tester)
Product code : Not available

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Smoke Alarm Tester

1.3. Supplier

Supplier

HSI Fire and Safety Group, LLC
107 Garlisch Drive
Elk Grove Village, IL - U.S.A.
T +1 (847) 427-8340 - F +1 (847) 427-8343
ibaraki@hsifiresafety.com

HSI Fire and Safety Group, LLC
unit # 1252
3-1750 The Queensway
Etobicoke, ON M9C5H5

1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS-CA)

Flam. Aerosol 1 H222
Liquefied gas H280

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms (GHS-CA)



Signal word (GHS-CA)

: Danger

Hazard statements (GHS-CA)

: H222 - Extremely flammable aerosol
H280 - Contains gas under pressure; may explode if heated

Precautionary statements (GHS-CA)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211 - Do not spray on an open flame or other ignition source
P251 - Do not pierce or burn, even after use
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P403 - Store in a well-ventilated place

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-CA)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Isobutane	(CAS No) 75-28-5	61.74
Butane	(CAS No) 105-97-8	1.27

SmokeCheck 25S (Smoke Alarm Tester)

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a poison center or a doctor if you feel unwell.
- First-aid measures after skin contact : If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists. Thaw frosted parts with lukewarm water. Do not rub affected area.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention. Thaw frosted parts with lukewarm water. Do not rub affected area.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/injuries after inhalation : May cause respiratory tract irritation. Vapors may cause drowsiness and dizziness. Intentional misuse of product by inhalation can result in asphyxiation or death.
- Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite.
- Symptoms/injuries after ingestion : Not a normal route of exposure. May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Immediate medical attention and special treatment, if necessary

- Other medical advice or treatment : Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

- Suitable extinguishing media : Water spray, Foam, Dry chemical.

5.2. Unsuitable extinguishing media

- Unsuitable extinguishing media : Do not use carbon dioxide.

5.3. Specific hazards arising from the hazardous product

- Fire hazard : Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon. Oxides of nitrogen. Oxides of sulfur.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

5.4. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

6.2. Methods and materials for containment and cleaning up

- For containment : Stop leak if safe to do so. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Methods for cleaning up : Provide ventilation.

6.3. Reference to other sections

- For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Container may explode if heated. Use only non-sparking tools. When using do not eat, drink or smoke.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

SmokeCheck 25S (Smoke Alarm Tester)

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store away from direct sunlight or other heat sources. Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Isobutane (75-28-5)		
USA - ACGIH	ACGIH STEL (ppm)	1000 ppm

Butane (106-97-8)		
USA - ACGIH	ACGIH STEL (ppm)	1000 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, etc.) below recommended exposure limits.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment : Avoid all unnecessary exposure.
Hand protection : Wear suitable gloves. Viton gloves. Heat insulating gloves.
Eye protection : Safety glasses or goggles are recommended when using product.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Aerosol
Colour : Colourless
Odour : slightly ethereal
Odour threshold : No data available
pH : No data available
pH solution : No data available
Relative evaporation rate (butylacetate=1) : No data available
Relative evaporation rate (ether=1) : > 1
Melting point : < -75 °C (< -99 °F)
Freezing point : No data available
Boiling point : -32 - 0 °C (-25 - 32 °F)
Flash point : < -75 °C (< -99 °F)
Auto-ignition temperature : > 462 °C (> 863 °F)
Decomposition temperature : No data available
Flammability (solid, gas) : Extremely flammable aerosol
Vapour pressure : 4.41 bar @ 21 °C (70 °F), 64 psig; 11.8 bar @ 54 °C (129 °F), 178 psig
Vapour pressure at 50 °C : No data available
Relative vapour density at 20 °C : 1.79 @ 21 °C (70 °F)
Relative density : 0.536 @ 21 °C (70 °F)
Relative density of saturated gas/air mixture : No data available
Density : No data available
Relative gas density : No data available
Solubility : Water: 0.008 % @ 21 °C (70 °F)
Partition coefficient n-octanol/water : 1.35
log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : < 0.6 cP @ 21 °C (70 °F)

SmokeCheck 25S (Smoke Alarm Tester)

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 1.9 - 8.4 vol % @ 25 °C (77 °F)

9.2. Other information

VOC content	: < 99 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal storage conditions. Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Incompatible materials. Sources of ignition. Direct sunlight. Moisture.
Incompatible materials	: Acids. Strong oxidizing agents.
Hazardous decomposition products	: May include, and are not limited to: oxides of carbon. Oxides of nitrogen. Oxides of sulfur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

SmokeCheck 25S (Smoke Alarm Tester)	
LD50 oral rat	No data available
LD50 dermal rabbit	No data available
LC50 inhalation rat	> 5 mg/l/4h (Calculated acute toxicity estimate)

Isobutane (75-28-5)	
LC50 inhalation rat	658 mg/l/4h

Butane (106-97-8)	
LC50 inhalation rat	658 g/m ³ (Exposure time: 4 h)

Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Not classified.
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.
STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.

SmokeCheck 25S (Smoke Alarm Tester)	
Vaporizer	Aerosol

Symptoms/injuries after inhalation	: May cause respiratory tract irritation. Vapors may cause drowsiness and dizziness. Intentional misuse of product by inhalation can result in asphyxiation or death.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite.
Symptoms/injuries after ingestion	: Not a normal route of exposure. May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
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SmokeCheck 25S (Smoke Alarm Tester)

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

12.2. Persistence and degradability

SmokeCheck 25S (Smoke Alarm Tester)

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

SmokeCheck 25S (Smoke Alarm Tester)

Partition coefficient n-octanol/water	1.35
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Bioaccumulative potential	Not established.
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Isobutane (75-28-5)

BCF fish 1	1.57 - 1.97
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Partition coefficient n-octanol/water	2.88 (at 20 °C)
---------------------------------------	-----------------

Butane (106-97-8)

Partition coefficient n-octanol/water	2.89
---------------------------------------	------

12.4. Mobility in soil

SmokeCheck 25S (Smoke Alarm Tester)

Partition coefficient n-octanol/water	1.35
---------------------------------------	------

Isobutane (75-28-5)

Partition coefficient n-octanol/water	2.88 (at 20 °C)
---------------------------------------	-----------------

Butane (106-97-8)

Partition coefficient n-octanol/water	2.89
---------------------------------------	------

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

TDG

UN-No. (TDG)	: UN1950
TDG Primary Hazard Classes	: 2.1
Transport document description	: UN1950 AEROSOLS (flammable), 2.1
Proper Shipping Name (TDG)	: AEROSOLS, flammable, limited quantities

Hazard labels (TDG)



14.2. Transport information/DOT

No additional information available

14.3. Air and sea transport

IMDG

UN-No. (IMDG)	: 1950
Proper Shipping Name (IMDG)	: AEROSOLS
Class (IMDG)	: 2 - Gases

IATA

UN-No. (IATA)	: 1950
Proper Shipping Name (IATA)	: Aerosols, flammable
Class (IATA)	: 2

SmokeCheck 25S (Smoke Alarm Tester)

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

SECTION 15: Regulatory information

15.1. National regulations

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations

No additional information available

SECTION 16: Other information

Date of issue : 11/11/2016

Revision date : 11/11/2016

Indication of changes:

Other information : None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.



Specialized Fire Products

SOLO Detector Duster

SAFETY DATA SHEET

SDS0077US
ACCORDING TO US CFR 1910.1200

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier		
Product Name	SOLO Detector Duster.	
Trade Name	SOLO A7-XXX (XXX denotes customer variant).	
CAS No.	811-97-2	
EINECS No.	212-377-0	
1.2 Relevant identified uses of the substance or mixture and uses advised against		
Identified use(s)	Clearing of dust or other solid contaminants.	
Uses advised against	None known.	
1.3 Details of the supplier of the Safety Data Sheet		
Company Identification	SDI 1345 Campus Parkway, Suite A18 Wall Township, NJ 07753 6815	
Telephone	(732) 751 9286	
Fax	(732) 751 9241	
E-mail	sales@sdfire.com	
1.4 Emergency telephone number		
Info Trac	1-800-535-5053	

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture		
US CFR 1910.1200		Gases under pressure: Liquefied gas; Contains gas under pressure; may explode if heated.
2.2 Label elements		
Product Name	SOLO Detector Duster.	
Hazard pictogram(s)		
Signal word(s)	GHS04	
Hazard statement(s)	Warning.	
Precautionary statement(s)	H280: Contains gas under pressure; may explode if heated. P410+P403: Protect from sunlight. Store in a well-ventilated place.	
Additional Information	Do not pierce or burn, even after use.	
2.3 Other hazards	None.	
2.4 Additional Information	None.	



3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Substances

Hazardous ingredient(s)	CAS No.	%W/W
1,1,1,2-tetrafluoroethane	811-97-2	80 - 100

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact

Wash with plenty of soap and water.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open.

Ingestion

Unlikely route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

Contains gas under pressure; may explode if heated.

5.1 Extinguishing Media

Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable Extinguishing Media

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Heating may cause pressure rise with risk of bursting.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.



6. SECTION 6: ACCIDENTAL RELEASE MEASURES

The product is an aerosol. It is unlikely to present spillage or leakage hazard. In case of rupture, released content should be contained as any other solvent spill.

- 6.1 Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation. Wear protective gloves.
- 6.2 Environmental precautions: Do not release large quantities into the surface water or into drains.
- 6.3 Methods and material for containment and cleaning up: Collect mechanically and dispose of according to Section 13. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery. Containers must not be punctured or destroyed by burning, even when empty.
- 6.4 Reference to other sections: See Also Section: 8, 13.

7. SECTION 7: HANDLING AND STORAGE




- 7.1 Precautions for safe handling: Protect from sunlight. Store in a well-ventilated place. Do not pierce or burn, even after use.
- 7.2 Conditions for safe storage, including any incompatibilities: Observe official regulations on storing packagings with pressurized containers.
 - Storage Temperature: Ambient.
 - Storage Life: Stable under normal conditions.
 - Incompatible materials: None anticipated.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
 - 8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
1,1,1,2-tetrafluoroethane	811-97-2	-	-	-	-	NIOSH
		-	-	-	-	OSHA

NIOSH = National Institute of Occupational Safety & Health
OSHA = Occupational Safety and Health Administration

- 8.2 Appropriate engineering controls: Provide adequate ventilation.
- 8.3 Individual protection measures, such as personal protective equipment (PPE)
 - Eye/face protection: Not normally required.
 -  Skin protection (Hand protection/ Other): Wear suitable gloves if prolonged skin contact is likely. Gloves: Nitrile rubber, NBR.
 -  Respiratory protection: No personal respiratory protective equipment normally required. Handling of larger amounts: In case of insufficient ventilation, wear suitable respiratory equipment.
 -  Thermal hazards: Not applicable.

**9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance	Aerosol.
Color	Colorless.
Odor	Characteristic.
Odor Threshold	Not determined.
pH	Not determined.
Melting Point/Freezing Point	Not determined.
Initial boiling point and boiling range	-14.8°F (-26 °C)
Flash Point	Not applicable (Aerosol)
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not determined.
Vapor pressure	82.67 psi (5.7 bar) @ 68 °F
Density	76.16 lb/ft ³ (1.22 g/cm ³) @ 66°F
Vapor density	Not determined.
Relative density	Not determined.
Solubility(ies)	0.122 lb/ft ³ @ 68 °F
Partition coefficient: n-octanol/water	Not determined.
Ignition temperature	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Dynamic viscosity	Not determined.
Kinematic Viscosity	Not determined.
Explosive properties	Not explosive.
	Contains gas under pressure; may explode if heated.
Oxidizing properties	Not oxidizing.

9.2 Other information

Organic solvents - Content	0.0%
----------------------------	------

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Stable under normal conditions.
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	None anticipated.
10.6 Hazardous Decomposition Product(s)	None known.

11. SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****11.1.1 Substances**

Acute toxicity	Low acute toxicity.
Skin corrosion/irritation	Non-irritant.
Serious eye damage/irritation	Not classified.
Respiratory or skin sensitization	It is not a skin sensitizer.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	None anticipated.
STOT-single exposure	None anticipated.
STOT-repeated exposure	None anticipated.
Aspiration hazard	Not classified.

11.2 Other information

None.

**12. SECTION 12: ECOLOGICAL INFORMATION**

12.1	Toxicity	Low toxicity to aquatic organisms. Fish: LC50 (Rainbow trout) (96 hour) = 450mg/l Aquatic invertebrates: EC50 (Daphnia magna) (48 hour) = 990mg/l Algae: EC50 (96 hour) = 142mg/l
12.2	Persistence and degradability	Biodegradable.
12.3	Bioaccumulative potential	The substance has no potential for bioaccumulation.
12.4	Mobility in soil	Slightly soluble in: Water. The substance is predicted to have low mobility in soil.
12.5	Other adverse effects	None.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Non-emptied aerosol: Dispose of wastes in an approved waste disposal facility. Do NOT landfill.
13.2	Additional Information	Disposal should be in accordance with local, state or national legislation. Do not allow to enter drains, sewers or watercourses.

14. SECTION 14: TRANSPORT INFORMATION

D.O.T. Classification

14.1	UN number ADR, IMDG, IATA	UN 1950
14.2	UN Proper Shipping Name ADR IMDG, IATA	1950 AEROSOLS AEROSOLS
14.3	Transport hazard class(es) ADR Class/Classification Label	2 2A Gases 2
	IMDG/IATA Class/Division Label	2 Gases 2.2
14.4	Packing Group ADR, IMDG, IATA	None.
14.5	Environmental hazards Marine Pollutant	No.
14.6	Special precautions for user Kemler Code IMDG EMS	Warning: Gases. 20 F-D, S-U
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.



Specialized Fire Products

SOLO Detector Duster

14.8 Additional Information

ADR

Limited Quantity (LQ)

1 L



ADR Transport Category
Tunnel Restriction Code

3

Not applicable in Limited Quantities.

IMDG

Limited Quantity (LQ)

1 L



IATA

Limited Quantity (LQ)

1 L



UN "Model Regulation"
US

UN 1950, AEROSOLS, 2
ORM-D when transported in limited quantities (< 30kg or 66lb gross weight).

15. SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	OSHA Toxic and hazardous substances (29 CFR 1910; Subpart Z) National emission standards for hazardous air pollutants (40 CFR 61.01)	Not listed.
15.1.2	Title III Consolidated List of Lists	Not listed.
15.1.3	OSPAR List of Chemicals for Priority Action	Not listed.
15.1.4	State Right to Know Lists	1,1,1,2-tetrafluoroethane (CAS No.: 811-97-2) New Jersey, Pennsylvania, Massachusetts, Rhode Island
15.1.5	TSCA (Toxic Substance Control Act)	Listed: 1,1,1,2-tetrafluoroethane (CAS No.: 811-97-2)
15.1.6	Proposition 65 (California)	Not listed.
15.1.7	CAA 602 - Ozone Depleting Substances (ODS)	Not listed.



Specialized Fire Products

SOLO Detector Duster

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

NFPA		HMIS	
Health	0	Health	0
Fire	0	Flammability	0
Instability	1	Physical hazards	1

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG	International Maritime Code for Dangerous Goods
IATA	International Air Transport Association
OSPAR	Oslo and Paris Convention
CAA	Clean Air Act
NFPA	National Fire Protection Association
HMIS	Hazardous Material Identification System

Disclaimers

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Solo Smoke Detector Tester
SAFETY DATA SHEET

SDS0066US
 ACCORDING TO US CFR 1910.1200

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier	
Product Name	Solo Smoke Detector Tester,
Trade Name	Solo A4 - XXX (XXX denotes customer variant).
CAS No.	Mixture.
EINECS No.	Mixture.
1.2 Recommended use of the chemical and restrictions on use	
Identified Use(s)	Smoke simulation,
Uses Advised Against	None known.
1.3 Details of the supplier of the safety data sheet	
1.3.1 Distributor	
Company Identification	SDI 1345 Campus Parkway, Suite A18 Wall Township, NJ 07753 6815
Telephone	(732) 751 9266
Fax	(732) 751 9241
E-mail	sales@sdifire.com
1.4 Emergency telephone number	
Info Trac	1-800-535-5053

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
2.1.1 US CFR 1910.1200	Gases under pressure; Liquefied gas; Contains gas under pressure; may explode if heated. Causes serious eye irritation.
2.2 Label elements	
Product Name	Solo Smoke Detector Tester.
Hazard Pictogram(s)	 
	GHS04 GHS07
Signal Word(s)	Warning.
Hazard Statement(s)	H280: Contains gas under pressure; may explode if heated. H319: Causes serious eye irritation.
Precautionary Statement(s)	P264: Wash hands thoroughly after handling. P337+P313: If eye irritation persists: Get medical advice/attention. P410+P403: Protect from sunlight. Store in a well-ventilated place. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



Specialized Fire Products

Solo Smoke Detector Tester

Additional Information

14.5 % by mass of the contents are flammable.
Do not pierce or burn, even after use.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 122 °F (50°C).
Keep out of the reach of children. Keep away from combustible material. Keep away from sources of ignition - No smoking.

- 2.3 Other hazards High concentrations: May cause drowsiness and dizziness.
- 2.4 Additional Information None.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Mixtures

Hazardous ingredient(s)	CAS No.	%W/W
1,1,1,2-tetrafluoroethane	811-97-2	50 - 100
Propan-2-ol	67-63-0	10 - 25

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, obtain medical attention.

Skin Contact

Wash with plenty of soap and water.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Unlikely route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

Pressurized container: May burst if heated.

5.1 Extinguishing Media

Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or water spray.

Unsuitable Extinguishing Media

None known.



Specialized Fire Products

Solo Smoke Detector Tester

- 5.2 Special hazards arising from the substance or mixture Heating may cause pressure rise with risk of bursting.
- 5.3 Advice for fire-fighters Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

The product is an aerosol. It is unlikely to present spillage or leakage hazard. In case of rupture, released content should be contained as any other solvent spill.

- 6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation. Avoid inhalation of high concentrations of vapors. Wear suitable gloves and eye/face protection.
- 6.2 Environmental precautions Do not release large quantities into the surface water or into drains.
- 6.3 Methods and material for containment and cleaning up Collect mechanically and dispose of according to Section 13. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery. Containers must not be punctured or destroyed by burning, even when empty.
- 6.4 Reference to other sections See Also Section: 6, 13.

7. SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Provide adequate ventilation. Avoid inhalation of high concentrations of vapors. Avoid contact with eyes. Avoid prolonged skin contact. Wear suitable gloves if prolonged skin contact is likely. See Section: 8. Do not eat, drink or smoke during work. Wash hands thoroughly after handling. Protect from sunlight. Store in a well-ventilated place.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage temperature Ambient.
Protect from sunlight and do not expose to temperatures exceeding 122 °F (50 °C).
- Storage life Stable under normal conditions.
- Incompatible materials None anticipated.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
- 8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note:
1,1,1,2-tetrafluoroethane	811-97-2	-	-	-	-	Not established
Propan-2-ol	67-63-0	400	960	500	1225	NIOSH
		400	960	-	-	PEL (OSHA)






Specialized Fire Products

Solo Smoke Detector Tester

Source:

NIOSH – National Institute of Occupational Safety & Health

OSHA – Occupational Safety and Health Administration

8.2	Appropriate engineering controls	Provide adequate ventilation.
8.3	Individual protection measures, such as personal protective equipment (PPE)	
	Eye/face protection 	If eye contact is likely: Wear protective eyewear (goggles, face shield, or safety glasses).
	Skin protection (Hand protection/ Other) 	Wear suitable gloves if prolonged skin contact is likely. Gloves: Nitrile rubber, NBR.
	Respiratory protection 	No personal respiratory protective equipment normally required. Handling of larger amounts: In case of insufficient ventilation, wear suitable respiratory equipment.
	Thermal hazards	Not applicable.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties	
	Appearance	Aerosol.
	Color	Colorless.
	Odor	Characteristic.
	Odor Threshold	Not determined.
	pH	Not determined.
	Melting Point/Freezing Point	Not determined.
	Initial boiling point and boiling range	-14.8 °F (-26 °C)
	Flash Point	55.4 °F (13 °C)
	Evaporation Rate	Not applicable.
	Flammability (solid, gas)	Non-flammable. Tested to CFR 1910.1200 Appendix B – B.3
	Upper/lower flammability or explosive limits	Explosive Limit Ranges: 2.0 – 12.0 Vol-%
	Vapor pressure	60.7 psig (5.2 bar) @ 68 °F
	Density	70.67 lb/ft ³ (1.132 g/cm ³) @ 68 °F
	Vapor density	Not determined.
	Relative density	Not determined.
	Solubility(ies)	Immiscible with water.
	Partition coefficient: n-octanol/water	Not determined.
	Ignition temperature	797 °F (425 °C)
	Auto-ignition temperature	Product is not selfigniting.
	Decomposition Temperature	Not determined.
	Kinematic Viscosity	Not determined.
	Explosive properties	Contains gas under pressure; may explode if heated.
	Oxidizing properties	Not oxidizing.
9.2	Other information	
	Organic solvents - Content	14.8%



Specialized Fire Products

Solo Smoke Detector Tester

10. SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Stable under normal conditions.
10.2	Chemical stability	Stable under normal conditions.
10.3	Possibility of hazardous reactions	Stable under normal conditions.
10.4	Conditions to avoid	Heat and direct sunlight.
10.5	Incompatible materials	None anticipated.
10.6	Hazardous decomposition product(s)	None known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects	
	Mixtures	
	Acute toxicity	Low acute toxicity.
	Irritation	Causes serious eye irritation.
	Corrosivity	Not classified.
	Sensitization	It is not a skin sensitizer.
	Repeated dose toxicity	None anticipated.
	Carcinogenicity	No evidence of carcinogenicity.
	Mutagenicity	There is no evidence of mutagenic potential.
	Toxicity for reproduction	None anticipated.
	Aspiration hazard	None anticipated.
11.2	Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Low toxicity to aquatic organisms.
12.2	Persistence and degradability	The product is readily biodegradable. Unlikely to persist.
12.3	Bioaccumulative potential	The product has no potential for bioaccumulation.
12.4	Mobility in soil	Immiscible with water. The product is predicted to have low mobility in soil.
12.5	Other adverse effects	None.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Non-emptied aerosol: Dispose of wastes in an approved waste disposal facility. Do NOT landfill.
13.2	Additional information	Disposal should be in accordance with local, state or national legislation.





14. SECTION 14: TRANSPORT INFORMATION

14.1	UN number	
	ADR, IMDG, IATA, TDG	UN 1950
14.2	UN Proper Shipping Name	
	ADR	1950 AEROSOLS
	IMDG, TDG	AEROSOLS
	IATA	AEROSOLS, Non-flammable
14.3	Transport hazard class(es)	
	ADR	
	Class / Classification	2 5A Gases.
	Label	2.2



Specialized Fire Products

Solo Smoke Detector Tester

IMDG, IATA, TDG	
Class / Division	2.2
Label	2.2
14.4 Packing Group	
ADR, IMDG, IATA	None.
14.5 Environmental hazards	
Marine Pollutant	No.
14.6 Special precautions for user	Warning: Gases.
Kemler Code	.
IMDG EMS	F-D, S-U
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
14.8 Additional information	
ADR	
Limited Quantity (LQ)	1 L 
ADR Transport Category	3
Tunnel Restriction Code	Not applicable in Limited Quantities.
IMDG, TDG	
Limited Quantity (LQ)	1L 
IATA, TDG	
Limited Quantity (LQ)	1L  
UN Model Regulation	UN 1950, AEROSOLS, 2.2
US:	ORM-D when transported in limited quantities (< 30kg or 66lb gross weight).

15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1 OSHA	
Toxic and hazardous substances (29 CFR 1910; Subpart Z)	All chemicals are not listed.
National emission standards for hazardous air pollutants (40 CFR 61.01)	All chemicals are not listed.
15.1.2 Title III Consolidated List of Lists Sec 313	Listed: Propan-2-ol (CAS No.: 67-63-0) 313



Solo Smoke Detector Tester

- | | | |
|--------|--|---|
| 15.1.3 | OSPAR List of Chemicals for Priority Action | All chemicals are not listed. |
| 15.1.4 | State Right to Know Lists | <p>1,1,1,2-tetrafluoroethane (CAS No.: 811-97-2);
New Jersey, Pennsylvania, Massachusetts, Rhode Island.</p> <p>Propan-2-ol (CAS No.: 67-63-0);
New Jersey, Pennsylvania, Massachusetts, California,
Minnesota.</p> |
| 15.1.5 | TSCA (Toxic Substance Control Act) | All chemicals listed. |
| 15.1.6 | Proposition 65 (California) | All chemicals are not listed. |
| 15.1.7 | CAA 602 - Ozone Depleting Substances (ODS) | All chemicals are not listed. |

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1 - 16.

NFPA		HMIS	
Health	1	Health	1
Fire	0	Flammability	0
Instability	1	Physical hazards	1

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
NIOSH	National Institute of Occupational Safety & Health
PEL	Permissible Exposure Limits
CAA	Clean Air Act
OSHA	Occupational Safety and Health Administration
OSPAR	Oslo and Paris Convention
ADR	Accord européen relative au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG	International Maritime Code for Dangerous Goods
IATA	International Air Transport Association
TDG	Transportation of Dangerous Goods

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Specialized Fire Products

TRUTEST SMOKE DETECTOR SENSITIVITY TESTER

SAFETY DATA SHEET


SDS0065US

ACCORDING TO US CFR 1910.1200

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier	
Product Name	TRUTEST SMOKE DETECTOR SENSITIVITY TESTER.
Trade Name	AERO 400-XXX (XXX denotes customer variant).
CAS No.	Mixture.
EINECS No.	Mixture.
1.2 Recommended use of the chemical and restrictions on use	
Identified Use(s)	Smoke simulation (for detector sensitivity tester).
Uses Advised Against	None known.
1.3 Details of the supplier of the safety data sheet	
1.3.1 Distributor	
Company Identification	SDI 1345 Campus Parkway, Suite A18 Wall Township, NJ 07753 6815 (732) 751 9266 (732) 751 9241 sales@sdifire.com
Telephone	
Fax	
E-mail	
1.4 Emergency telephone number	
Info Trac	1-800-535-5053

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
US CFR 1910.1200	Gases under pressure; Liquefied gas; Contains gas under pressure; may explode if heated. Aquatic Chronic 3; Harmful to aquatic life with long lasting effects.
2.2 Label elements	
Product Name	TRUTEST SMOKE DETECTOR SENSITIVITY TESTER.
Hazard Pictogram(s)	
Signal Word(s)	GHS04
Hazard Statement(s)	Warning. H280: Contains gas under pressure; may explode if heated. H412: Harmful to aquatic life with long lasting effects.
Precautionary Statement(s)	P273: Avoid release to the environment. P410+P403: Protect from sunlight. Store in a well-ventilated place.
Additional Information	18.75 % by mass of the contents are flammable. Do not pierce or burn, even after use.



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Pressurized container: protect from sunlight and do not expose to temperatures exceeding 122°F.
Keep out of the reach of children. Keep away from combustible material. Keep away from sources of ignition - No smoking.

2.3 Other hazards

High concentrations: May cause drowsiness and dizziness. None.

2.4 Additional Information

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Mixtures

Hazardous Ingredient(s)	CAS No.	%W/W
1,1,1,2-tetrafluoroethane	811-97-2	90 - 100
Pentane	109-66-0	1 - 10
Propan-2-ol	67-63-0	1 - 10

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, obtain medical attention.

Skin Contact

Wash with plenty of soap and water.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open.

Ingestion

Unlikely route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

Pressurized container: May burst if heated.

5.1 Extinguishing Media

Suitable Extinguishing Media

Extinguish preferably with dry chemical or alcohol foam.

Unsuitable Extinguishing Media

None known.

5.2 Special hazards arising from the substance or mixture

Decomposes in a fire giving off toxic fumes: Hydrofluoric acid, Fluorinated compounds. Heating may cause pressure rise with risk of bursting.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus, if it is safe to



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do so, containers should be removed from fire area because they are likely to rupture under fire conditions.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

The product is an aerosol. It is unlikely to present spillage or leakage hazard.

- | | | |
|-----|--|--|
| 6.1 | Personal precautions, protective equipment and emergency procedures | Ensure adequate ventilation. Avoid inhalation of high concentrations of vapours. |
| 6.2 | Environmental precautions | Avoid release to the environment. |
| 6.3 | Methods and material for containment and cleaning up | Collect mechanically and dispose of according to Section 13. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery. Containers must not be punctured or destroyed by burning, even when empty. |
| 6.4 | Reference to other sections | See Also Section: 8, 13. |

7. SECTION 7: HANDLING AND STORAGE

- | | | |
|-----|---|---|
| 7.1 | Precautions for safe handling | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Provide adequate ventilation. Avoid inhalation of high concentrations of vapours. |
| 7.2 | Conditions for safe storage, including any incompatibilities | Observe official regulations on storing packagings with pressurized containers. |
| | Storage temperature | Protect from sunlight and do not expose to temperatures exceeding 122 °F. |
| | Storage life | Stable under normal conditions. |
| | Incompatible materials | Alkali metals, alkaline earth metals, magnesium, powdered metals. |

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note:
1,1,1,2-tetrafluoroethane	811-97-2	-	-	-	-	Not established
Pentane	109-66-0	120	350	610	1800	NIOSH
		1000	2950	-	-	PEL (OSHA)
Propan-2-ol	67-63-0	400	980	500	1225	NIOSH
		400	980	-	-	PEL (OSHA)

Source:

NIOSH = National Institute of Occupational Safety & Health

OSHA = Occupational Safety and Health Administration

- | | | |
|-----|--|-------------------------------|
| 8.2 | Appropriate engineering controls | Provide adequate ventilation. |
| 8.3 | Individual protection measures, such as personal protective equipment (PPE) | |
| | Eyeface protection | Not normally required. |



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Skin protection (Hand protection/ Other)

Not normally required.



Respiratory protection

No personal respiratory protective equipment normally required. Handling of larger amounts: In case of insufficient ventilation, wear suitable respiratory equipment. A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards

Not applicable.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Aerosol.
Color	Colorless.
Odor	Slight hydrocarbon smell.
Odor Threshold	Not determined.
pH	Not determined.
Melting Point/Freezing Point	Not determined.
Initial boiling point and boiling range	-15.7°F (-26.5 °C)
Flash Point	Not applicable.
Evaporation Rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not determined.
Vapor pressure	81.22 psig (5.6 bar) @ 77°F
Density	66.8 lb/ft ³ @ 77°F
Vapor density	3.5
Relative density	Not determined.
Solubility(ies)	Slightly soluble in: Water. Soluble in most organic solvents.
Partition coefficient: n-octanol/water	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Kinematic Viscosity	Not determined.
Explosive properties	Contains gas under pressure; may explode if heated.
Oxidizing properties	Not oxidizing.

9.2 Other information

None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None known.
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	Alkali metals, alkaline earth metals, magnesium, powdered metals.
10.6 Hazardous decomposition product(s)	None known.



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11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Mixtures

Acute toxicity

Low acute toxicity.

High concentrations: May cause drowsiness and dizziness.

Irritation

Non-irritant.

Corrosivity

Not classified.

Sensitization

It is not a skin sensitiser.

Repeated dose toxicity

None anticipated.

Carcinogenicity

No evidence of carcinogenicity.

Mutagenicity

There is no evidence of mutagenic potential.

Toxicity for reproduction

None anticipated.

11.2 Other information

None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic Chronic 3; Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

Slightly soluble in: Water. The product is predicted to have low mobility in soil.

12.5 Other adverse effects

None.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Non-emptied aerosol: Dispose of wastes in an approved waste disposal facility. Do NOT landfill.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation. Do not allow to enter drains, sewers or watercourses.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR, IMDG, IATA

UN 1950

14.2 UN Proper Shipping Name

ADR

1950 AEROSOLS

IMDG

AEROSOLS

IATA

AEROSOLS, Non-flammable

14.3 Transport hazard class(es)

ADR

Class / Classification

2.5A Gases

Label

2.2

IMDG, IATA

Class / Division

2.2

Label

2.2

14.4 Packing Group

ADR, IMDG, IATA





None.

14.5 Environmental hazards

Marine Pollutant

No.

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<p>14.6 Special precautions for user Kemler Code IMDG EMS</p> <p>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</p> <p>14.8 Additional Information ADR Limited Quantity (LQ)</p> <p>ADR Transport Category Tunnel Restriction Code IMDG Limited Quantity (LQ)</p> <p>IATA Limited Quantity (LQ)</p> <p>UN Model Regulation US</p>	<p>Warning: Gases. - F-D, S-U</p> <p>Not applicable.</p> <p>1 L </p> <p>3 Not applicable in Limited Quantities.</p> <p>1L </p> <p>1L  </p> <p>UN 1950, AEROSOLS, 2.2 ORM-D when transported in limited quantities (< 30kg or 66lb gross weight).</p>
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15. SECTION 15: REGULATORY INFORMATION

<p>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</p> <p>15.1.1 OSHA Toxic and hazardous substances (29 CFR 1910; Subpart Z) National emission standards for hazardous air pollutants (40 CFR 61.01)</p> <p>15.1.2 Title III Consolidated List of Lists Propan-2-ol (CAS No.: 67-63-0) Pentane (CAS No.: 109-66-0)</p> <p>15.1.3 OSPAR List of Chemicals for Priority Action</p> <p>15.1.4 State Right to Know Lists</p>	<p>All chemicals are not listed.</p> <p>All chemicals are not listed.</p> <p>Sec 313: 313 CAA 112(r) TQ: 10000</p> <p>All chemicals are not listed.</p> <p>1,1,1,2-tetrafluoroethane (CAS No.: 811-97-2): New Jersey, Pennsylvania, Massachusetts, Rhode Island.</p> <p>Propan-2-ol (CAS No.: 67-63-0) New Jersey, Pennsylvania, Massachusetts, California, Minnesota.</p> <p>Pentane (CAS No.: 109-66-0): New Jersey, Pennsylvania,</p>
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Massachusetts, California, Minnesota.

- 15.1.5 TSCA (Toxic Substance Control Act) All chemicals listed.
- 15.1.6 Proposition 65 (California) All chemicals are not listed.
- 15.1.7 CAA 602 - Ozone Depleting Substances (ODS) All chemicals are not listed.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

NFPA		HMIS	
Health	0	Health	0
Fire	0	Flammability	0
Instability	1	Physical hazards	1

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG	International Maritime Code for Dangerous Goods
IATA	International Air Transport Association
OSHA	Occupational Safety and Health Administration
OSPAR	Oslo and Paris Convention
CAA	Clean Air Act
NFPA	National Fire Protection Association
HMIS	Hazardous Material Identification System

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