

# 1 Identification

<b>GHS Product Identifier</b>	
Product Form: Trade Name: Product Numbers:	Aerosol Super Blast™ Air Horns 8016, 1891, 1989, 8042
Other means of identification	
Synonyms:	1,1-difluoroethane / 1,1-difluoroethane (refrigerant gas R 152a)
Recommended use of the chemical a	nd restriction on use
Use of Substance/Mixture:	Hand held signaling device; Safety Horn
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 Respor USA & Canada	nse 800-424-9300
Hazard(s) identification	

# Classification of the substance or mixture

FLAMMABLE GASES - Category 2 GASES UNDER PRESSURE - Compressed gas

#### **GHS** label elements

Warning

2



Flammable gas

Contains gas under pressure; may explode if heated

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

N/A

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.

	Description		CAS Number	EINECS Number	%
	1,1-Difluoroethane, liquefied, under pressure	2	75-37-6	200-866-1	100
4	First-aid measures				
	Description of necessary first-aid mea	sures			
	General Advice			•	an unconscious person. When symptoms ek medical advice.
	Inhalation	at rest	•	ng, give artifi	Move to fresh air. Keep patient warm and cial respiration. If breathing is difficult, give tention.
	Skin			-	immediately. Flush area with lukewarm water. nas occurred, call a physician.
	Eye		yelids apart an edical attentior	•	with plenty of water for at least 15 minutes.
	Ingestion	ls not	considered a p	otential route	e of exposure.
	Most important symptoms/effects, acute		delayed		
	Anaesthetic effects:	-		-	peat with a strange sensation in the chest, eling of fainting, dizziness or weakness
	Indication of immediate medical attention and special treatment needed, if necessary			d, if necessary	
	Protection of First-aiders	lf pote equipr		ure exists ref	er to Section 8 for specific personal protective
	Notes to Physician	epinep	•	nay be used ii	of cardiac rhythm catecholamine drugs, such as n situations of emergency life support, should be

#### 5 Fire-fighting measures

#### Suitable extinguishing media

Water spray, water fog, dry chemical, alcohol resistant foam, cabon dioxide (CO<sub>2</sub>)

#### Specific hazards arising from the chemical

Flammable. This substance's fire decomposition by-products will include hydrofluoric acid and possibly carbonyl flouride. 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 actions for fire-fighters

Use personal protective equipment. Wear neoprene gloves during cleaning up work after a fire. Exposure to decompositon products may be a hazard to health.

### 6 Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

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.
Accidental Release Measures	Wear self-contained breathing apparatus (SCBA).
Methods and materials for containm	ent and cleaning up
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.
Handling and storage	
Precautions for safe handling	

Handling (Personnel) Provide	Avoid breathing vapors or mist. Avoid contact with skin, eyes and clothing. 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 appropirate 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.
Conditions for safe storage, including	any incompatibilities
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 - 4 years provided product is stored in a dry location as directed.

Storage TemperatureDo not expose to temperatures above 120 degrees F (49 degrees C) as<br/>overheating could cause can to burst. DO NOT leave in direct sunlight or enclosed<br/>vehicle.

#### 8 Exposure controls/personal protection

#### **Control parameters**

Component Name	CAS No.	ACGIH TLV	OSHA PEL	STEL
1,1-Difluoroethane	75-37-6	N/A	N/A	N/A

#### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use respiratory protection if needed.

Individual protection measures	
Personal Protective Equipment	N/A
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 suffication 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.

# 9 Physical and chemical properties

# Physical and chemical properties

Physical State: Appearance: Molecular Mass: Color: Odor: Odor Threshold: pH: Relative evaporation rate (butyl acetate = 1): Melting point: Freezing Point: Boiling point: Flash point: Critical temperature: Auto-ignition temperature: Decomposition temperature: Flammability (solid, gas): Vapor pressure at 50 °C: Critical pressure: Relative vapor density at 20 °C: Relative density: Specific gravity / density: Solubility: Log Pow: Log Pow: Log Kow: Viscosity, kinematic: Viscosity, dynamic: Explosive properties: Oxidizing properties:	Gas Liquefied gas 66.05 g/mol Colorless Mild odor. Slight Ether-like odor. No data available. No data available. -117 °C No data available. -25 °C < -50 °C 114 °C 455 °C No data available. No data available. No data available. S100 hPa 11700 hPa 44960 hPa 2.3 1.0 (-25 °C) 1004 kg/m3 (-25 °C) Poorly soluble in water. Soluble in organic solvents. Water: 0.54 g/100ml (0 °C) 0.75 (Experimental value) No data available. No data available.
Explosive properties:	No data available.

#### **10** Stability and reactivity

#### Reactivity

On heating/burning: release of toxic and corrosive gases/vapor e.g.: hydrofluoric acid, carbonylfluoride. 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 <sup>3</sup> 4h Rat	Not available

### **Interactive effects**

Skin corrosion/irritation: Non

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 (risk of fetus malformation):	No data available.
	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 TCLo 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.
	Ecology - water: Persistence and degradability	Mild water pollutant (surface water). No data available on ecotoxicity.
		Mild water pollutant (surface water). No data available on ecotoxicity. Biodegradability in water: no data available.
	Persistence and degradability R152A (75-37-6)	
	Persistence and degradability R152A (75-37-6) Persistence and degradability	
	Persistence and degradability R152A (75-37-6) Persistence and degradability Bioaccumulative potential R152A (75-37-6) Log Pow	Biodegradability in water: no data available. 0.75 (Experimental value)
	Persistence and degradability R152A (75-37-6) Persistence and degradability Bioaccumulative potential R152A (75-37-6) Log Pow Bioaccumulative potential	Biodegradability in water: no data available. 0.75 (Experimental value)
	Persistence and degradability R152A (75-37-6) Persistence and degradability Bioaccumulative potential R152A (75-37-6) Log Pow Bioaccumulative potential Mobility in soil	Biodegradability in water: no data available. 0.75 (Experimental value)
	Persistence and degradability R152A (75-37-6) Persistence and degradability Bioaccumulative potential R152A (75-37-6) Log Pow Bioaccumulative potential Mobility in soil No additional information available.	Biodegradability in water: no data available. 0.75 (Experimental value)

# **Disposal methods**

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

UN Number	
UN1030	
UN Proper Shipping Name 1,1-Difluoroethane	
Transport hazard class(es) 2.1	
<b>Packing group, if applicable</b> N/A	
Packaging Exceptions	Note: Max Pro has been granted a DOT special permit.
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-Difuoroethane. 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: Max Pro has been granted Equivalency Certificate SU 12300 by the TCSS, TDGD to offer for transport by road, rail and marine.
Pogulatory information	

# **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.

California	
Proposition 65	WARNING: This product can expose you to chemicals including lead which are known to the state of California to cause cancer, and chemicals including lead known to the state of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

### 16 Other information

#### **Other information**

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