Air Duster A
Safety Data Sheet
According to Federal Register Rules and Regulations
Revision date: 03/09/2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Aerosol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>1642</td>
</tr>
<tr>
<td>CAS No</td>
<td>75-37-6</td>
</tr>
</tbody>
</table>

Formula: C2H2F4

Synonyms: 1,1-difluoroethane / 1,1-Difluoroethane (refrigerant gas R 152a) / algofrene type 67 / difluoroethane / dyeel 152 / dyeel 152A / ethane, 1,1-difluoro- / ethylene fluoride (=1,1difluoroethane) / ethylidenedifluoride / ethylidene fluoride / FC 152A / fluorocarbon 152A / freon 152 / freon 152A / genetron 100 / genetron 152 / genetron 152A / halocarbon R 152A / HCFC-152a / HCFC-152A / HFC-152a / hydrofluorocarbon 152A / refrigerant 152A

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Aerosol Duster; Canned Air

Use of the substance/mixture: Refrigerant

1.3. Details of the supplier of the safety data sheet

Superco Specialty Products
25041 Anza Drive
Valencia, CA 91355 USA

T: 661-775-8877

1.4. Emergency telephone number

Emergency number: CHEM TEL 24 Hour 1-800-255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
Liquefied gas H280

2.2. Label elements

GHS-US labeling:

Hazard pictograms (GHS-US):

Signal word (GHS-US): Warning

Hazard statements (GHS-US):

H223 - Flammable aerosol
H280 - Contains gas under pressure; may explode if heated

Precautionary statements (GHS-US):

P410+P403 - Protect from sunlight. Store in a well-ventilated place
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 - Pressurized container: Do not pierce or burn, even after use
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
2.3. Other hazards

Other hazards not contributing to the classification: N/A

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name: 1,1-Difluoroethane, liquefied, under pressure
CAS No: 75-37-6
EC no: 200-866-1

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1-Difluoroethane, liquefied, under pressure</td>
<td>(CAS No): 75-37-6</td>
<td>&gt; 99</td>
<td>Liquefied gas, H280</td>
</tr>
</tbody>
</table>

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

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. If burned surface > 10%: take victim to hospital.

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.

4.2. Most important symptoms and effects, both 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

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.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture
Fire hazard: DIRECT FIRE HAZARD. Flammable aerosol. Gas/vapor flammable with air within explosion limits. INDIRECT FIRE HAZARD. May build up electrostatic charges: risk of ignition. May be ignited by sparks. Gas/vapor spreads at floor level: ignition hazard.

Explosion hazard: DIRECT EXPLOSION HAZARD. Gas/vapor explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. Heat may cause pressure rise in tanks/drums: explosion risk. may be ignited by sparks.

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

5.3. Advice for firefighters

Firefighting instructions: If no hazard for/from the surroundings: controlled burning. If hazardous substances are nearby: consider extinguishment. Extinguish only if gas supply/leak can be shut afterwards. Cool tanks/drums with water spray/remove them into safety. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion. Dilute toxic gases with water spray.


Other information: NFPA Aerosol Level 1.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Remove ignition sources. Use special care to avoid static electric charges. Eliminate every possible source of ignition. No naked lights. No smoking.

6.1.1. For non-emergency personnel


6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment: Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Tip the container on one side to stop the leakage. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapor with water curtain. Provide equipment/receptacles with earthing. Do not spray water on unheated tank walls. Do not use compressed air for pumping over spills.

Methods for cleaning up: Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. See "Material-handling" for suitable container materials. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Pressurized container. Do not pierce or burn, even after use.

Precautions for safe handling: Comply with the legal requirements. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not use compressed air for pumping over. Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe normal hygiene standards. Measure the concentration in the air regularly. Measure the oxygen concentration in the air. Work under local exhaust/ventilation.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Level 1 Aerosol.

Proper grounding procedures to avoid static electricity should be followed.

03/09/2016
**Storage conditions**: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep in fireproof place. Do not expose to temperatures exceeding 50 °C/ 122 °F.

**Incompatible products**: Strong bases. Strong acids.

**Incompatible materials**: Sources of ignition. Direct sunlight. Heat sources.

**Storage temperature**: < 50 °C

**Heat-ignition**: KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

**Prohibitions on mixed storage**: KEEP SUBSTANCE AWAY FROM: oxidizing agents.

**Storage area**: Ventilation at floor level. Fireproof storeroom. Provide for a tub to collect spills. Provide the tank with earthing. Keep out of direct sunlight. Meet the legal requirements.

**Special rules on packaging**: SPECIAL REQUIREMENTS: with pressure relief valve. clean. correctly labelled. meet the legal requirements.

**Packaging materials**: SUITABLE MATERIAL: steel. stainless steel. monel steel. lead. aluminium. copper. tin.

### 7.3. Specific end use(s)

Follow Label Directions.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

**Appropriate engineering controls**: Local exhaust ventilation, vent hoods.

**Personal protective equipment**: 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.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic 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**: No data available

**Freezing point**: -117 °C

**Boiling point**: -25 °C
Flash point : 
Critical temperature : < -50 °C
Auto-ignition temperature : 114 °C
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Vapor pressure at 50 °C : 5100 hPa
Critical pressure : 11700 hPa
Relative vapor density at 20 °C : 2.3
Relative density : 1.0 (-25 °C)
Specific gravity / density : 1004 kg/m³ (-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/m³

9.2. Other information
VOC content : 0 %
Gas group : Liquefied gas
Other properties : Gas/vapor heavier than air at 20°C. May generate electrostatic charges.

SECTION 10: Stability and reactivity

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

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid

10.5. Incompatible materials
Strong acids. Strong bases.
10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
- Not classified

R152A (75-37-6)

LC50 inhalation rat (mg/l)  176 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm) > 437500 ppm/4h Mortality in 2/6 at 43.75% and 1/6 at 38.3%. At ≥ 17.52% lethargy, laboured breathing, reduced responsiveness to sound were observed. At 6.64% only hyperaemia and shallow breathing were observed.

Skin corrosion/irritation
- Not classified

Serious eye damage/irritation
- Not classified

Respiratory or skin sensitization
- Not classified

Germ cell mutagenicity
- Not classified. Based on available data, the classification criteria are not met

Carcinogenicity
- Not classified

Reproductive toxicity
- Not classified. Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure)
- Not classified

Specific target organ toxicity (repeated exposure)
- Not classified. Based on available data, the classification criteria are not met

Aspiration hazard
- Not classified. Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms

Symptoms/injuries after inhalation

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.

SECTION 12: Ecological information

12.1. 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.

12.2. Persistence and degradability

R152A (75-37-6)

Persistence and degradability
- Biodegradability in water: no data available.

12.3. Bioaccumulative potential

R152A (75-37-6)

Log Pow
- 0.75 (Experimental value)

Bioaccumulative potential
- Low potential for bioaccumulation (Log Kow< 4).

12.4. Mobility in soil

No additional information available
### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Waste disposal recommendations**: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Refer to manufacturer/supplier for information on recovery/recycling.

**Additional information**: LWCA (the Netherlands): KGA category 06. Hazardous waste according to Directive 2008/98/EC.

**Ecology - waste materials**: Avoid release to the environment.

### SECTION 14: Transport information

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

- **US DOT (ground)**: UN1030, 1,1-Difluoroethane, R152A Flammable, 2.1
- **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".

**14.2. UN proper shipping name**

| DOT Proper Shipping Name | 1,1-Difluoroethane, R152A Flammable |

**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

**14.3. Additional information**

**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 |
Air transport

DOT Quantity Limitations Passenger aircraft/rail: Forbidden (49 CFR 173.27)
DOT Quantity Limitations Cargo aircraft only (49: 150 kg CFR 175.75)

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

**R152A (75-37-6)**

<table>
<thead>
<tr>
<th>SARA Section 311/312 Hazard Classes</th>
<th>Fire hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sudden release of pressure hazard</td>
</tr>
<tr>
<td></td>
<td>Immediate (acute) health hazard</td>
</tr>
</tbody>
</table>

#### 15.2. International regulations

**CANADA**

**R152A (75-37-6)**

<table>
<thead>
<tr>
<th>WHMIS Classification</th>
<th>Class A - Compressed Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Class B Division 1 - Flammable Aerosol</td>
</tr>
</tbody>
</table>

**NEW ZEALAND**

HSNO regulation: Hazard Class: 2.1.2A
UN1030, 1,1-Difluoroethane, R152A Flammable, Gases that are not otherwise hazardous

**EU-Regulations**

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Flam. Gas 1 H220 Press.
Gas

Full text of H-phrases: see section 16

R12

Full text of R-phrases: see section 16

#### 15.2.2. National regulations

No additional information available

#### 15.3. US State regulations

**R152A (75-37-6)**

<table>
<thead>
<tr>
<th>State or local regulations</th>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
</tr>
<tr>
<td></td>
<td>U.S. - Massachusetts - Right To Know List</td>
</tr>
</tbody>
</table>

### SECTION 16: Other information

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