

SUPER DUSTER 152

402B

Safety Data Sheet

Section 1: Product and Company Identification

Product Identifier and Other Means of Identification

Product Name: Super Duster 152**SDS Code:** 402B-Aerosol**Related Part #** 402B-285G, 402B-400G

Recommended Use and Restriction on Use

Use: Aerosol duster**Uses Advised Against:** Not available

Details of Manufacturer or Importer

ManufacturerMG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADAMG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA**☎** +1-800-340-0772**☎** +1-905-331-1396**FAX** +1-800-340-0773**FAX** +1-905-331-2682**E-MAIL** support@mgchemicals.com**E-MAIL** info@mgchemicals.com**WEB** www.mgchemicals.com**E-MAIL** (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents
USA or CANADA: Call CHEMTREC ☎: **+1-800-424-9300****For emergencies involving dangerous goods;** Collect 24/7CANADA: Call CANUTEC ☎: **+1-613-996-6666** or ***666** on cellular phones

SUPER DUSTER 152

402B

Section 2: Hazard(s) Identification

Classification of Hazardous Chemical

GHS Categories

Criteria	Category	Signal Word	Pictograms
Gas Under Pressure Liquefied Gas	3	Warning	Gas Cylinder

Note 1: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity). Severity categories do not allow comparisons between classes.

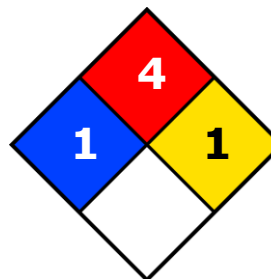
Note 2: Non-flammable Aerosol. Not defined as flammable aerosol because heat of combustion is <20 kJ/g, ignition distance <15 cm, and it passes enclosed space ignition test according to 16 CFR 1500.3(c)(6) for the U.S. Federal Hazard Substance Act of the Consumer Product Safety Commission regulations. Not defined as a flammable aerosol under the Canadian Controlled Product Regulation SOR/88-66, 40 Division 5 criteria.

Other Classifications

HMIS® RATING

HEALTH:	* 1
FLAMMABILITY:	4
PHYSICAL HAZARD:	1
PERSONAL PROTECTION:	

NFPA® 704 CODES a)




Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

a) Liquid classification; for aerosols, NFPA 30B flammability rating is 1.

Continued on the next page

SUPER DUSTER 152
402B
Label Elements

Signal Word	WARNING
Pictograms	Hazard Statements
	H280: Contains gas under pressure; may explode if heated
Prevention	Precautionary Statements
P251	Do not pierce or burn, even after use.
Storage	Precautionary Statements
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F].

Hazards Not Otherwise Classified

HCS2012 Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Simple Asphyxiant	May displace oxygen and cause rapid suffocation.	Warning	Not applicable
Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Frostbite	Skin contact with liquid or aerosol jet may lead to frostbite	Warning	Not applicable
Specific flammability	Liquid form is flammable. (Liquid form can be ejected if the aerosol can is not held upright during use.)	Warning	Not applicable
Intentional Overexposure	Intentional misuse and inhalation abuse may cause cardiac or central nervous systems effects.	Warning	Not applicable
	May form explosive gas mixture with air.	Warning	Not applicable

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	Wt%
75-37-6	1,1-difluoroethane	>99%

Note: Commonly referred to as HFC-152a

SUPER DUSTER 152

402B

Section 4: First-Aid Measures

<i>Exposure Condition</i>	<i>GHS Code: Precautionary Statement</i>
IF IN EYES	P305, P351+ P338, P337+P313, P336+P315
Immediate Symptoms	<i>frostbite, cold burns</i>
Response	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if irritation persists.
If frostbite occurs	Thaw frosted parts with lukewarm water. Do not use hot water. Do not rub affected area. Get immediate medical attention.
IF ON SKIN	P302, P352, P332+P313, P336+P315
Immediate Symptoms	<i>frostbite, cold burns</i>
Response	Wash with plenty of water. Get medical advice/attention if skin irritation occurs.
If frostbite occurs	Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical attention.
IF INHALED	P304, P340, P312
Immediate Symptoms	<i>Extreme exposure signs include dizziness, drowsiness, heart thumping, lightheadedness</i>
Response	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. If feeling unwell: Call a POISON CENTRE/doctor
IF SWALLOWED	P301, P330, P310 <i>(Not a likely route of exposure under normal use)</i>
Immediate Symptoms	<i>frostbite (mouth), irritation</i>
Response	Rinse mouth with lukewarm water. Do NOT induce vomiting. Get medical advice/attention if feeling unwell.

SUPER DUSTER 152
402B
Section 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%

In case of fire P370 + P378

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

Specific Hazards 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.

Combustion Products Produces CO, CO₂, halogenated compounds, and hydrogen fluorides

Fire-Fighter Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

a) LF[E]L = Lower Flammability [or Explosion] Limit (in volume %);
 UF[E]L = Upper Flammability [or Explosion] Limit (in volume %)

Section 6: Accidental Release Measures

Personal Protection See personal protection recommendations in Section 8.

Precautions for Response For aerosol-can spills, leave the immediate spill area to avoid contact with the liquid. Avoid breathing the mist/gas.
 If it can safely be done, extinguish open flames or remove high temperature sources to avoid producing toxic decomposition products.

Environmental Precautions Not applicable

Containment Methods No containment required under normal circumstances.

Cleaning Methods Ensure adequate ventilation, especially in low or enclosed areas. The product will turn gaseous and be dispersed.

Disposal Methods Dispose of spill waste according to Section 13.

SUPER DUSTER 152

402B

Section 7: Handling and Storage

- 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 use in confined and poorly ventilated area.
- Do not pierce or burn, even after use.
- Handling** HOLD CAN UPRIGHT to avoid ejection of liquid stream during 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 eye protection.
- Storage** Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F].

Section 8: Exposure Controls/Personal Protection

Routes of Entry

Inhalation, Skin Contact, Eye Contact

Substances with Occupational Exposure Limit Values

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: The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database² 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.

Continued on the next page

SUPER DUSTER 152**402B****Engineering Controls****Ventilation**

Normal ventilation is generally adequate, except in enclosed or low lying area.

Keep airborne concentrations below 0.4% [4,000 ppm] (10% of the lower explosive limit (See Section 4 or 9)). Make sure the oxygen content is not enriched.

Personal Protective Equipment**Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles.

RECOMMENDATION: Use safety glasses with lateral protection (side shields).

Skin Protection

Wear appropriate protective clothing to prevent skin contact.

RECOMMENDATION: Use cold insulating gloves if contact with liquid jet is likely.

Respiratory Protection

In high exposure scenarios, use a full-face respirator with multipurpose combination of (US) or type AXBEK (EN 13387) to supplement engineering control.

For extreme exposures, use full-face, self-contained breathing apparatus or supplied by air.

RECOMMENDATION: Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this SDS, and that the respirator is fitted to the employee by a professional.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

SUPER DUSTER 152
402B
Section 9: Physical and Chemical Properties

Physical State	Liquefied gas, in aerosol format	Lower Flammability Limit	3.9%
Appearance	Colorless	Upper Flammability Limit	16.9%
Odor	Slight, ether-like	Vapor Pressure @20 °C	86.4 lb/in ² [596 kPa]
Odor Threshold	Not available	Vapor Density	2.3 (Air =1)
pH	Not available	Specific Gravity @21 °C	0.91
Freezing/Melting Point	-117 °C [-179 °F]	Solubility in Water	0.27 g / 100 mL
Boiling Point	-25°C [-13 °F]	Partition Coefficient ^{a)}	0.75
Flash Point	-50 °C [-58 °F]	Auto-ignition Temperature	454 °C [849 °F]
Evaporation Rate	Not available	Decomposition Temperature	Not available
Flammability (solid, gas)	Not available	Viscosity @40 °C	Not applicable

Note: Literature values are used.

a) Octanol-water LogP value

Section 10: Stability and Reactivity

Reactivity	Not available.
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Ignition sources, excessive heat, and incompatible substances.
Incompatibilities	Alkali or alkali earth metals, powdered metals, powdered metal salts
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5

SUPER DUSTER 152

402B

Section 11: Toxicological Information

Routes of Exposure

Eyes, inhalation, and skin

Symptoms Summary

- 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 heartbeat.
- Ingestion** *Highly unlikely under normal use and conditions.*
See inhalation and skin summaries.
- Chronic** Not applicable

Acute Toxicity (Lethal Exposure Concentrations)

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

Note: Representative toxicity data from by RTECS database of the Canadian Centre for Occupational Health and Safety (CCOHS)¹ data from supplier (M)SDS were also consulted.

- 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** (risk of fetus malformation) No data available

Continued on the next page

SUPER DUSTER 152**402B**

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 TCl ₀ of 25 pph. Cardiac effects are based on exposure of $\geq 150,000$ 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

Section 12: Ecological Information

The IMDG Code criteria and the raw-material (M)SDS along with supporting data for the classification of registered substances from the European Chemical Agency database (<http://echa.europa.eu>) were used.

The 1,1-difluoroethane substance is not classifiable as an environmental toxicant (with minimal LC₅₀ 96 h of 296 mg/L for unspecified fish; 147 mg/L 24 h Daphnia magna (water flea); 48 mg/L calculated for algae).

Acute Ecotoxicity

Available toxicity data does not meet classification thresholds

Chronic Ecotoxicity

Not data available

Biodegradability

Not data available

Global Warming Potential

The 100 years global warming potential is 120.

Other Effects

VOC exempt (0% by EPA and WHIMS guidelines)

*VOC = *Regulated Volatile Organic Content*

Section 13: Disposal Information

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

SUPER DUSTER 152

402B

Section 14: Transport Information

Ground

Refer to USA DOT 49 CFR (Parts 100 to 185) Regulations.

Limited Quantity



USA only (*other jurisdictions differ*)

UN number: UN1030

Shipping Name: 1,1-DIFLUOROETHANE

Class: 2.1

Packing Group: Not applicable

Marine Pollutant: No

USA—Special Provision: Refer to DOT-SP 11516. A copy of this special permit is required.

http://www.phmsa.dot.gov/staticfiles/PHMSA/SPA_App/OfferDocuments/SP11516_2009030606.pdf

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations)

Limited Quantity



Canada and *other jurisdictions*

REFERENCE INFORMATION ONLY

UN number: UN1950

Shipping Name: Aerosols, non-flammable

Class: 2.2

Packing Group: Not applicable

Marine Pollutant: No

CANADA—Permit for Equivalent Level of Safety: Refer to TC-SU4836 (Ren. 4).

<http://wwwapps.tc.gc.ca/saf-sec-sur/3/tdgcert-tmdcert/certificate.aspx/4836>

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

USA and CARGO AIRCRAFT ONLY

UN number: UN1030

Shipping Name:

1,1-DIFLUOROETHANE

Class: 2.1

Packing Group: Not applicable

Marine Pollutant: No



USA—Special Provision: Refer to DOT-SP 111516. A copy of this special permit is required.

http://www.phmsa.dot.gov/staticfiles/PHMSA/SPA_App/OfferDocuments/SP11516_2009030606.pdf

Section continued on next page

SUPER DUSTER 152

402B

Refer to ICAO-IATA Dangerous Goods Regulations.

Limited Quantity

Max Net Qty/Pkg
30 kg Gross



Canada and *other jurisdictions*

UN number: UN1950

Shipping Name: Aerosols, non-flammable

Class: 2.2

Packing Group: Not applicable

Marine Pollutant: No

CANADA—Permit for Equivalent Level of Safety: Refer to TC-SU4836 (Ren. 4).

<http://www.wapps.tc.gc.ca/saf-sec-sur/3/tdgcert-tmdcert/certificate.aspx/4836>

Sea

Refer to IMDG Dangerous Goods Regulations.

USA only (*other jurisdictions differ*)

UN number: UN1030

Shipping Name:

1,1-DIFLUOROETHANE

Class: 2.1

Packing Group: Not applicable

Marine Pollutant: No



USA—Special Provision: Refer to DOT-SP 111516. A copy of this special permit is required.

http://www.phmsa.dot.gov/staticfiles/PHMSA/SPA_App/OfferDocuments/SP11516_2009030606.pdf

Refer to IMDG Dangerous Goods Regulations.

Limited Quantity



Canada and *other jurisdictions*

UN number: UN1950

Shipping Name: Aerosols, non-flammable

Class: 2.2

Packing Group: Not applicable

Marine Pollutant: No

CANADA—Permit for Equivalent Level of Safety: Refer to TC-SU4836 (Ren. 4).

<http://www.wapps.tc.gc.ca/saf-sec-sur/3/tdgcert-tmdcert/certificate.aspx/4836>

Note: Shipper must be appropriately trained and certified before involvement with the transport of dangerous goods.

SUPER DUSTER 152**402B****Section 15: Regulatory Information****Canada****Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL/NDSL.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

USA**CAA** (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains does not contain substances which are subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, Sept 2, 2011 revision, USA).

This product does not contain any of the listed substances.

Europe

This product is not classified under the DPD regulations.

SUPER DUSTER 152**402B****Section 16: Other Information****SDS Prepared by** Michel Hachey**Date of Revision** 05 January 2015**Supersedes** 02 April 2014**Reason for Changes:** Format adjustment for HCS 2012 and WHMIS 2.0.**Reference**

1) ACGIH 2013 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2013).

2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
IARC	International Agency for Research on Cancer
NOELR	No observable effect loading ratio
NTP	National Toxicology Program
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

Email: support@mgchemicals.com

Mailing Addresses *Manufacturing & Support*
1210 Corporate Drive
Burlington, Ontario, Canada
L7L 5R6

Head Office
9347-193rd Street
Surrey, British Columbia, Canada
V4N 4E7

SUPER DUSTER 152**402B**

Disclaimer This material safety data sheet is provided as an information resource only. *M.G. Chemicals, Ltd.* believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional, national, and international regulations.