

SAI Global File #004008 Burlington, Ontario, Canada

# Super Duster<sup>TM</sup> 134

# 402A-AEROSOL

# Safety Data Sheet

### **Section 1: Identification**

### **Product Identifier and Other Means of Identification**

**Product Name:** Super Duster<sup>™</sup> 134

SDS Code: 402A-Aerosol

Related Part # 402A-285G, 402AR-285G, 402A-450G

## **Recommended Use and Restriction on Use**

Use: Aerosol duster

Uses Advised Against: Not available

# **Details of Manufacturer or Importer**

#### Manufacturer

MG Chemicals 1210 Corporate Drive Burlington, Ontario L7L 5R6 CANADA

+1-800-340-0772

FAX +1-800-340-0773

E-MAIL support@mgchemicals.com

WEB www.mgchemicals.com

MG Chemicals (Head Office) 9347-193 Street Surrey British Columbia VAN

Surrey, British Columbia V4N 4E7

CANADA

+1-905-331-1396 FAX +1-905-331-2682 E-MAIL info@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 24/7

CANADA: Call CANUTEC **2**: +1-613-996-6666 or \*666 on cellular phones



SAI Global File #004008 Burlington, Ontario, Canada

SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

# **Section 2: Hazard(s) Identification**

# **Classification of Hazardous Chemical**

# **GHS Categories**

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

Note: The degree of severity is ranked within each hazard class from

1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

# **Label Elements**

Signal Word	WARNING
Pictograms	Hazard Statements
	H280: Contains gas under pressure; may burst if heated
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, flames, and other ignition sources. No Smoking.
P251	Do not pierce or burn, even after use.
	HOLD CAN UPRIGHT to avoid ejection of liquid stream during use.
Storage	Precautionary Statements
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F].



SAI Global File #004008 Burlington, Ontario, Canada

# SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

# **Hazards Not Otherwise Classified**

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Simple Asphyxiants	May displace oxygen and cause rapid suffocation.	Warning	none
Frostbite	The jet or liquid may cause frostbite in contact with skin or eyes.	Warning	none
Inhalation overexposure	Inhalation overexposure following an intentional abuse or use in confined space may cause cardiac or central nervous systems effects.	none	none

# **Section 3: Composition/Information on Ingredients**

CAS #	Chemical Name	%(weight)
811-97-2	1,1,1,2-tetrafluoroethane <sup>a)</sup>	100%

a) Also known as HFC 134a

# **Section 4: First-Aid Measures**

Exposure Condition	GHS Code/Symptoms/Precautionary Statements	
IF INHALED	P304 + P340, P312	
Immediate Symptoms	dizziness, drowsiness, heart thumping	
Response	Remove person to fresh air and keep comfortable for breathing.	
	If you feel unwell: Call a POISON CENTRE/doctor.	
IF IN EYES	P305 + P351 + P338, P336 + P315	
Immediate Symptoms	frostbite, cold burns	
Response	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
	If frostbite occurs: Thaw frosted parts with lukewarm water. Do not use hot water. Do not rub affected area. Get immediate medical attention.	

Section continued on the next page



SAI Global File #004008 Burlington, Ontario, Canada

# SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

IF ON SKIN	P302 + P352, P336 + P315
Immediate Symptoms	frostbite, cold burns
Response	IF ON SKIN: Wash with plenty of water.
	If frostbite occurs: Thaw frosted parts with lukewarm water. Do not use hot water. Do not rub affected area. Get immediate medical attention.
IF SWALLOWED	P301 + P330, P336 + P315
IF SWALLOWED Immediate Symptoms	P301 + P330, P336 + P315  frostbite (mouth)
	<u> </u>

# **Medical Advice**

Avoid giving catecholoamine drugs (such as epinephrine) due to possible cardiac disturbance. Treat symptomatically.

Section 5: Fire-Fighting	Section 5: Fire-Fighting Measures		
Extinguishing Media	In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.		
	Use water spray to cool containers.		
Specific Hazards	Aerosols containers may erupt with force at temperatures above 50 °C [122 °F].		
	Produces irritating and toxic fumes in fires or in contact with hot surfaces.		
	The vapors are heavier than air and may displace oxygen in low-lying areas creating a suffocation hazard.		
<b>Combustion Products</b>	Produces carbon oxides (CO,CO $_2$ ), halogenated compounds, and hydrogen fluorides.		
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.		



SAI Global File #004008 Burlington, Ontario, Canada

# SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

### **Section 6: Accidental Release Measures**

**Personal Protection** See personal protection recommendations in Section 8.

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

gloves.

Precautions for Response

For aerosol can spills in confined or low lying space, leave the

immediate spill area.

If it can safely be done, extinguish open flames or remove high temperature sources to avoid producing toxic decomposition

products.

**Environmental Precautions** 

Not required under normal use.

**Containment Methods** Not applicable

**Cleaning Methods** For aerosol can spills at room temperature, the product turn

gaseous and disperse in atmosphere. Ensure adequate

ventilation, especially in low or enclosed areas.

**Disposal Methods** Dispose of spill waste according to Section 13.

# **Section 7: Handling and Storage**

**Prevention** Keep out of reach of children.

Avoid direct skin or eye contact with liquid or aerosol jet.

Avoid breathing gas/spray. In cases of inadequate ventilation wear

respiratory protection.

Do not pierce or burn, even after use.

**Handling** Wear cold-insulating gloves if exposure to liquid or aerosol jet is likely.

Wear eye protection.

Keep upright when in use to avoid liquid jet. Do NOT spray when container

is inverted or more than 45 degrees off vertical.

**Storage** Protect from sunlight. Do not expose to temperatures exceeding

50 °C [122 °F].



SAI Global File #004008 Burlington, Ontario, Canada

Super Duster<sup>TM</sup> 134

402A-AEROSOL

### **Section 8: Exposure Controls/Personal Protection**

# **Substances with Occupational Exposure Limit Values**

Chemical Name	Country/ Provinces	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)  Not established Not established Not established Not established	
1,1,1,2- tetrafluoroethane	MG Chemicals <sup>a)</sup> ACGIH U.S.A. OSHA PEL Canada	1 000 ppm Not established Not established Not established		

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

a) MG Chemicals recommended limit corresponding to prevalent international threshold values

### **Engineering Controls**

**Ventilation** Keep airborne concentrations below the occupational exposure

limits (OEL).

General ventilation is adequate for normal use; keep overall

exposure as low as possible.

### **Personal Protective Equipment**

**Eye protection** Wear appropriate protective eyeglasses or chemical safety

goggles.

**Recommendation:** Ensure that glasses have side shields for

lateral protection.

**Skin Protection** If exposure to the jet or liquid is likely, wear cold-insulating

gloves to protect the skin against frostbites.

**Respiratory Protection** For extreme exposures, use self-contained breathing apparatus

or supplied by air.

# **General Hygiene Considerations**

Wash hands thoroughly with water and soap after handling.



SAI Global File #004008 Burlington, Ontario, Canada

# SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

# **Section 9: Physical and Chemical Properties**

Physical State	Liquified gas,	Lower Flammability	Not
	in aerosol format	Limit	applicable
Appearance	Colorless	Upper Flammability Limit	Not applicable
Odor	Slight, ether-like	Vapor Pressure @25 °C	630 kPa [4 725 mmHg]
Odor Threshold	Not available	Vapor Density	3.5 (Air =1)
рH	Not Available	Specific Gravity @25 °C	1.21
Freezing/Melting	-101 °C	Solubility in	0.15% (wt)
Point	[-150 °F]	Water	
Boiling Point a)	-26.2°C [-15.2 °F]	Partition Coefficient	1.06 <sup>a)</sup>
Flash Point	None	Auto-ignition	750 °C
	detected	Temperature	[1 382 °F]
Evaporation	≥1	Decomposition	Not
Rate	(Ether = 1)	Temperature	available
Flammability (solid, gas)	Not	Viscosity	Not
	available	@40 °C	available

*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** Temperatures above 50 °C [122 °F], open flames, and incompatible

**Avoid** substances

**Incompatibilities** Strong oxidizing agents, alkali or alkali earth metals, powdered

aluminum, zinc, magnesium, and beryllium

**Polymerization** Will not occur

**Decomposition** Will not decompose under normal conditions. For thermal

decomposition, see combustion products in Section 5.



SAI Global File #004008 Burlington, Ontario, Canada

SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

# **Section 11: Toxicological Information**

# **Routes of Exposure**

Eye contact, Ingestion, Inhalation, and Skin contact

# **Symptoms Summary**

**Eyes** See skin symptoms.

**Skin** Contact with the liquid may cause frostbite due to heat lost caused by

rapid evaporation. Exposure to the jet can also lead to frostbites, because

it can reach -55 °C [-67 °F].

**Inhalation** Extreme exposure may cause central nervous system depression and

irregular heart beat.

**Ingestion** See inhalation and skin symptoms.

**Chronic** No chronic effects known.

# **Acute Toxicity (Lethal Exposure Concentrations)**

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
1,1,1,2-tetrafluoroethane	Not	Not	1 500 g/m³
	available	available	4 h Rat

*Note:* Toxicity data from the RTECS<sup>2</sup> and ECHA databases were consulted. The data from supplier (M)SDS were also consulted.

### **Other Toxicological Effects**

**Skin corrosion/irritation** Based on available data, the classification criteria are not

met.

**Serious eye**Based on available data, the classification criteria are not

damage/irritation m

**Sensitization** Based on available data, the classification criteria are not

(allergic reactions) met.

**Carcinogenicity** Not classified or listed as a carcinogen by IARC, ACGIH,

(risk of cancer) CA Prop 65, or NTP.

**Mutagenicity** Based on available data, the classification criteria are not

(risk of heritable genetic effects) met. No mutagenic effects observed in four tests.



SAI Global File #004008 Burlington, Ontario, Canada

# SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

**Reproductive Toxicity** 

(risk to sex functions)

Based on available data, the classification criteria are not

met.

**Teratogenicity** 

(risk of fetus malformation)

Based on available data, the classification criteria are not met. No observed effect level (NOEL) for rabbit and rat is

40 000 ppm.

**STOT-single exposure** 

Based on available data, the classification criteria are not

met. Can affect the central nervous system and

cardiovascular systems by inhalation at extreme doses

that do not give rise to classification

**STOT-repeated exposure** 

Based on available data, the classification criteria are not

met. The chronic no observed effect level is

10 000 ppm.

**Aspiration hazard** 

Based on available data, the classification criteria are not

met. The liquid content is not classifiable as an aspiration

hazard of category 1 or 2.

# **Section 12: Ecological Information**

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<a href="http://echa.europa.eu">http://echa.europa.eu</a>), and other reliable sources.

The 1,1,1,2-tetrafluoroethane substance is not classifiable as an environmental toxicant.

# **Acute Ecotoxicity**

Based on available data, the classification criteria are not met.

# **Chronic Ecotoxicity**

Based on available data, the classification criteria are not met.

#### **Biodegradability**

No data available

#### Other Effects

### **Global Warming Potential**

The 100 years global warming potential is 1 430.

VOC (Volatile Organic Compounds) exempted substance according to the US (EPA) and Canadian (CEPA) authorities.



SAI Global File #004008 Burlington, Ontario, Canada

SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

# **Section 13: Disposal Information**

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

# **Section 14: Transport Information**

### Ground

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

**Limited Quantity** 



**USA** 

**UN number**: Not applicable **Shipping Name:** Not applicable

**Class:** Not applicable

Packing Group: Not applicable

Marine Pollutant: No

**USA—Special Provision:** Refer to DOT-SP 10232. A copy of this special permit is required.

http://www.sextoncan.com/pdf/certification/DOT-SP10232.pdf

**Refer to TDG**(Canadian Transportation of Dangerous Goods regulations) **Regulations.** 

**Limited Quantity** 



Canada and Global (Excluding USA)

**UN number**: Not applicable **Shipping Name**: Not applicable

Class: Not applicable

Packing Group: Not applicable

Marine Pollutant: No

**CANADA—Permit for Equivalent Level of Safety:** Refer to TC-SU 11282. <a href="http://www.apps.tc.gc.ca/wwwdocs/TDGCertificates/doc/11282-eng.doc">http://www.apps.tc.gc.ca/wwwdocs/TDGCertificates/doc/11282-eng.doc</a>



SAI Global File #004008

Burlington, Ontario, Canada

402A-AEROSOL

# SUPER DUSTER<sup>TM</sup> 134

### Air

### Refer to ICAO-IATA Dangerous Goods Regulations.

### **Limited Quantity**



USA

UN number: UN3159

**Shipping Name:** 1,1,1,2-Tetrafluoroethane

**Class: 2.2** 

Packing Group: Not applicable

Marine Pollutant: No

**USA—Special Provision:** Refer to DOT-SP 10232. A copy of this special permit is required. http://www.sextoncan.com/pdf/certification/DOT-SP10232.pdf

Note: Avoid shipping by air if possible.

# Refer to ICAO-IATA Dangerous Goods Regulations.

### **Limited Quantity**



Canada and Global (Excluding USA)

UN number: UN1950

Shipping Name: AEROSOL, non-flammable

**Class:** 2.2

Packing Group: Not applicable

Marine Pollutant: No

CANADA—Permit for Equivalent Level of Safety: Refer to TC-SU 11282. http://wwwapps.tc.gc.ca/wwwdocs/TDGCertificates/doc/11282-eng.doc

*Note:* Avoid shipping by air if possible.

#### Sea

### Refer to IMDG Regulations.

### **Limited Quantity**



USA

UN number: UN3159

**Shipping Name:** 1,1,1,2-Tetrafluoroethane

**Class: 2.2** 

Packing Group: Not applicable

Marine Pollutant: No

**USA—Special Provision:** Refer to DOT-SP 10232. A copy of this special permit is required. http://www.sextoncan.com/pdf/certification/DOT-SP10232.pdf

Section continued on the next page



SAI Global File #004008 Burlington, Ontario, Canada

# SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

# Refer to IMDG Regulations.

**Limited Quantity** 



Canada and Global (Excluding USA)

UN number: UN1950

**Shipping Name:** AEROSOL, non-flammable

**Class:** 2.2

Packing Group: Not applicable

Marine Pollutant: No

**CANADA—Permit for Equivalent Level of Safety:** Refer to TC-SU 11282. http://wwwapps.tc.gc.ca/wwwdocs/TDGCertificates/doc/11282-eng.doc

*Note:* Shipper must be appropriately <u>trained and certified</u> before involvement with the transport of dangerous goods.

# **Section 15: Regulatory Information**

### Canada

### **Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL.

#### **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.

Section continued on the next page



SAI Global File #004008

Burlington, Ontario, Canada

# Super Duster<sup>TM</sup> 134

402A-AEROSOL

### **USA**

### **Other Classifications**

### **HMIS® RATING**

HEALTH:	*	1
FLAMMABILITY:		0
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:		





Approximate HMIS and NFPA Risk Ratings Legend:

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

### **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, June 06, 2014 revision, USA).

This product does not contain any of the listed substances.

# **Europe**

**RoHS** (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

**WEEE** (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.



SAI Global File #004008 Burlington, Ontario, Canada

402A-AEROSOL

# SUPER DUSTER<sup>TM</sup> 134

# **Section 16: Other Information**

SDS Prepared by Michel Hachey

Date of Revision 04 April 2016

**Supersedes** 24 November 2015

**Reason for Changes:** Update of section 4 and minor corrections.

#### 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**

Abbrevia	ations
ACGIH	American Conference of Governmental Industrial Hygienists (USA)
ECHA	European Chemicals Agency
EU	European Union
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
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



SAI Global File #004008 Burlington, Ontario, Canada

# SUPER DUSTER<sup>TM</sup> 134

402A-AEROSOL

**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: <a href="mailto:support@mgchemicals.com">support@mgchemicals.com</a>

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*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.