SAFETY DATA SHEET

1. Identification

Product identifier Compressed Gas Duster

Other means of identification 77000-77001

Product code

Recommended use cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Exponent Microport Inc.

Address 30 RUE QUELLETTE
GRANBY, QC J2G 8J3
Canada

Telephone General Assistance 1-450-378-9066

E-mail Not available.

Emergency phone number Emergency - US 1-866-836-8855
Emergency - Outside US 1-952-852-4646

Supplier Not available.

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1

Health hazards Not classified.

Label elements

Signal word Danger

Hazard statement Extremely flammable aerosol.

Precautionary statement

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

Response Wash hands after handling.

Storage Protect from sunlight. Do not expose to temperatures exceeding50°C/122°F.

Disposal Disposeofwasteandresiduesinaccordancewithlocalauthorityrequirements.

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
1,1-difluoroethane		75-37-6	≤99. 99
Denatonium Benzoate		3734-33-6	≤0. 01
Other components below reportable levels			100%

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation	If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Ingestion

Most important symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

General information

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods

General fire hazards

Rinse with water. Get medical attention if irritation develops and persists. Rinse mouth. Get medical attention if symptoms occur.

Direct contact with eyes may cause temporary irritation.

Treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Not available.

Do not use water jet as an extinguisher, as this will spread the fire.

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Level 1 Aerosol. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
1,1-difluoroethane	STEL	1000ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Denatonium Benzoate	STEL	1000ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear suitable protective clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Gas.

Form Aerosol.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range -117 °C estimated

Flashpoint Not available

Evaporationrate Not available.

Flammability(solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%V/V) Not available.

Flammability limit - upper (%V/V) Not available.

Explosive limit -lower(%V/V) 3.7

Explosive limit - upper(%V/V) 18.0

Vapor pressure 531.96KPa (21.1℃)

Vapor density	2.32(Air=1.0)at25℃(22°F)
Relative density	0.91
Solubility(ies)	
Solubility (water)	0.28WT%@25℃ and 87psia
Partition coefficient (n-octanol/water)	Not available.
Auto-ignitiontemperature	Notavailable.
Decompositiontemperature	Notavailable.
Viscosity	Notavailable.
Other information	
Explosive propertiesOxidizing properties	18.0-3.7 Not oxidizing.
Specific gravity	0.971estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
1,1-difluoroethane (CAS 75-28-5)**Acute Inhalation**		
LC50	Mouse	977000mg/l, 120Minutes
		52 %, 120 Minutes
	Rat	1355mg/l
Denatonium Benzoate(CA		

S 3734-33-6)**Acute Inhalation**

LC50	Mouse	1430 mg/l, 120Minutes
		52 %, 120 Minutes
	Rat	1355mg/l
		658 mg/l/4h

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratorysensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not available.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not likely, due to the form of the product.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of thisproduct.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

1,1-difluoroethane	(CAS 75-28-5)	0.76
Denatonium Benzoate	(CAS 3734-33-6)	5.2

Mobilityinsoil No data available.

Otheradverseeffects

Nootheradverseenvironmentaleffects(e.g.ozonedepletion,photochemicalozonecreatio npotential,endocrinedisruption,globalwarmingpotential)areexpectedfromthiscomponent.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transportinformation

TDG

UN number UN1950

UN proper shipping name AEROSOLS, flammable

Transport hazard class(es)

Class 2.1

Subsidiary risk -

Packing group Not applicable.

Environmental hazards D

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity.

IATA

UN number **UN proper shipping name** **Transport hazard class(es)**

Class	UN1950
Subsidiary risk	Aerosols, flammable
	2.1
	-

Label(s)	2.1
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	F-D, S-U

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

IATA; IMDG; TDG

15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) orregion	Inventory name	On inventory(yes/no)*
Australia	Australian Inventory of Chemical Substances(AICS)	No
Canada	Domestic Substances List(DSL)	Yes
Canada	Non-Domestic Substances List(NDSL)	No
China	Inventory of Existing Chemical Substances in China(IECSC)	No
Europe	European Inventory of ExistingCommercialChemicalSubstances(EINECS)	No
Europe	European List of Notified Chemical Substances(ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances(ENCS)	No
Korea	Existing Chemicals List(ECL)	No
New Zealand	New Zeal and Inventory	No
Philippines	Philippine Inventory of Chemicals andChemicalSubstances(PICCS)	No
United States &PuertoRico	Toxic Substances Control Act (TSCA)Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Issue date Janvier 2021

Version# 01

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information Product and Company Identification: Alternate Trade Names