

Polar Frost™ Cold Spray

Material Safety Data Sheet

IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Identity	Polar Frost Cold Spray		
Supplied By	Mettler Electronics Corp. 1333 South Claudina Street Anaheim, CA 92805	www.mettlerelectronics.com email: mail@mettlerelectronics.com	
Emergency Phone #	1-800-854-9305 or 1-714-533-2221		
Manufactured By	OY GALENA LTD Sammonkatu 10 FIN-70500 KUOPIO, Finland		

COMPOSITION AND INFORMATION ON INGREDIENTS

Description	Cold Spray. Ingredients: Butane, Propane, Alcohol, Water, Menthol, Eucalyptus Globulus Leaf Oil, Carbomer, Propylene Glycol, Aloe Barbadensis Extract, Triethanolamine
-------------	--

HAZARDOUS INGREDIENTS

Ingredients	%	CAS Number	Warning Symbol, R phrases and other data on the ingredient
Butane	44.6% (w/w)	68476-40-4	F+ Extremely flammable
Propane	44.6% (w/w)	68476-49-3	F+ Extremely flammable
Denatured ethanol	7.6% (w/w)	64-17-5	N/A
Menthol (-)	0.43% (w/w)	2216-51-5	N/A

HAZARDS IDENTIFICATION

	Extremely flammable. Vaporizes easily. Very high concentrations in the air may cause headache, dizziness and indisposition. Contact with eyes, mucous membranes, wounds and irritated skin causes smarting pain. Spraying onto one spot of skin may cause frostbite.
--	--

FIRST AID MEASURES

Inhalation	If unusual tiredness and queasiness occurs when breathing high concentrations, go to fresh air. If symptoms continue, call a doctor.
Skin	N/A
Eye Contact	Wash eye with water for 15 minutes. Seek medical attention if irritation continues.
Ingestion	Induce vomiting, administer a saline laxative and activated charcoal by mouth

FIRE-FIGHTING MEASURES

Suitable extinguishing media	Carbon dioxide, foam, powder and sand for small fires
Extinguishing media which must not be used for safety reasons	N/A
Special exposure hazards in a fire	Risk of explosion if the cans overheat in fire and the pressure rises
Special protective equipment for a fire	Normal protective equipment
Other instructions	N/A

ACCIDENTAL RELEASE MEASURES

Personal precautions	Evacuate all unnecessary people
Environmental precautions	N/A
Methods for cleaning up	Scoop up excess, clean with appropriate cleaner and rinse with water
Other instructions	N/A

HANDLING AND STORAGE

Handling	Avoid breathing of vapors. Avoid contact with eyes, mucous membranes, wounds and irritated skin. Keep away from sources of ignition. No smoking. Do not spray on open flame or any incandescent material. Keep away from children.
Storage	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding +50°C. Keep away from sources of ignition.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Technical measures for exposure controls	N/A
Limit values for workplace air: HTP values Other information on limit values	N/A N/A
Special instructions for protection and hygiene	Contact with eyes, mucous membranes, wounds and irritated skin causes smarting pain.
Respiratory protection	Avoid breathing vapors. Adequate ventilation is recommended.
Hand protection	N/A
Eye protection	Contact with eyes causes smarting pain.
Skin protection	Contact with mucous membranes, wounds and irritated skin causes smarting pain.

PHYSICAL DATA

Physical State	Clear, colorless, menthol-scented liquid	Auto flammability	383°C (ethanol)(**)
Relative Density	0.56 ± 0.03 (g/ml)	Explosion Hazard	Extremely flammable. Pressurized container. Keep away from sources of ignition. No smoking. Do not spray on open flame or any incandescent material.
pH	5.5 – 6.0	Explosive Limits a) lower b) upper	3.3% (v/v)(ethanol)(**) 19% (v/v)(ethanol)(**)
Boiling Point (°C)	78°C (ethanol)(**)	Oxidizing Properties	N/A
Melting Point (°C)	N/A	Vapor Pressure	N/A
Decomposition Temperature	78°C	Solubility: Water (20°C) Fat	Soluble N/A
Flash Point (°C)	<0°C	Partition coefficient (for ingredients): n-octanol/water	N/A
Flammability (solid/gas)	Extremely flammable. Pressurized container	Viscosity	1,000 – 10,000 cp

STABILITY AND REACTIVITY

Conditions to avoid	Keep away from sources of ignition. No smoking. Do not spray on open flame or any incandescent material. Keep away from children. Pressurized container . Protect from sunlight and do not expose to temperatures exceeding +50°C.
Incompatible Materials	Keep away from sources of ignition. No smoking. Do not spray on open flame or any incandescent material.
Hazardous Decomposition Products	Alcoholic vapors

TOXICOLOGICAL INFORMATION

Acute Toxicity	Inhalation of big concentrations affects tiredness and queasiness. Spraying to one spot of skin may cause frostbite.
Irritancy and corrosiveness	Avoid contact with eyes, mucous membranes, wounds and irritated skin.
Sensitization	May give rise to hypersensitivity reactions (*)
Sub acute, sub chronic and prolonged toxicity	Not known
Empirical data on effects on humans	When applied to the skin spray dilates the blood vessels, causing a sensation of coldness followed by an analgesic effect (*)
Other information on health effects	N/A

ECOLOGICAL INFORMATION

Biodegradation	N/A
Chemical degradation	N/A
Bioaccumulation	N/A
Mobility	N/A
Aquatic toxicity	N/A
Other toxicity	N/A
Other information	N/A

DISPOSAL CONSIDERATIONS

Dispose of in accordance to local, state and federal regulations. Do not pierce or burn, even after use.
--

TRANSPORT INFORMATION

UN number	1950
Packaging category	Pressurized container
Land transport Transport class Risk code Name according to bill of freight Other information	RID 2, ADR 5F F+ Extremely flammable Polar Frost™ Cold Spray 165 ml Pressurized container. Protect from sunlight and do not expose to temperatures exceeding +50°C.
Sea transport IMDG class Correct technical name Other information	2.1 Polar Frost™ Cold Spray 165 ml Pressurized container. Protect from sunlight and do not expose to temperatures exceeding +50°C.
Air transport ICAO / IATA class Correct technical name Other information	2.1 Polar Frost™ Cold Spray 165 ml Pressurized container. Protect from sunlight and do not expose to temperatures exceeding +50°C.

REGULATORY INFORMATION

Information on the warning label Letter code of the warning symbol and indications of danger for the preparation Names of the ingredients given on the warning label R phrases NA S phrases NA Special regulations on certain preparations	F+ Extremely flammable Butane, Propane N/A N/A N/A
National regulations	N/A

USE INFORMATION

Purpose of use, expressed in writing.	For the temporary relief of minor pain and swelling from sprains, contusions and minor injuries. For the temporary relief of muscle spasm.
Code for the purpose of use	SIC1: N/A KT1: N/A SIC2: N/A KT2: N/A SIC3: N/A KT3: N/A SIC4: N/A KT4: N/A SIC (TOL) - Standard industrial classification KT - Desired effect of the chemical
Directions for use	Adults and children 2 years of age and older: Hold the can upright to spray. Apply in several short bursts from a distance of at least 6 inches (15 cm). Do not continue spraying after the skin turns white. Children under 2 years of age: Do not use, consult a doctor.
Other information	For external use only Use only as directed Extremely flammable. Contents under pressure. Do not use ■ on wounds or damaged skin. When using this product ■ avoid contact with eyes and mucous membranes. ■ Do not use on diabetics or persons with poor circulation or insensitive skin. ■ Over application of this product might alter skin pigmentation. ■ Keep out of reach of children. ■ Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

PREPARATION INFORMATION

Data Supplied By	OY GALENA LTD Sammonkatu 10 FIN-70500 KUOPIO, Finland
Date	August 2, 2006
Sources of information used in the compilation of the safety data sheet	(*) Martindale 30th Ed., Pharmaceutical Press, London 1993 (**) Handbook of Chemistry and Physics 76th Ed., CRC Press, Boca Raton 1995

OTHER INFORMATION

Person to contact:	Director, QA/RA
--------------------	-----------------

Approved by: Robert E. Fleming — Director, QA/RA

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 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.