Green Overcoat Pen **4190-GP**

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Name: Green Overcoat Pen **SDS Code:** 4190–GP

Related Part # 4190-GP

Recommended Use and Restriction on Use

Use: Protective coating for printed circuit boards

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 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 ☎: ***+1-613-996-6666*** or ****666*** on cellular phones

Section 2: Hazard(s) Identification

Classification of Hazardous Chemical

GHS Categories

Criteria		Category	Signal Word	Pictograms
Flammable liquid		2	Danger	Flame
Specific target organ toxicity	Repeated exposure	2	Warning	Health
Reproductive Toxicity		2	Warning	Health
Carcinogenicity		2	Warning	Health
Eye Irritation		2A	Warning	Exclamation
Skin Irritation		2	Warning	Exclamation
Specific target organ toxicity	Single exposure	3	Warning	Exclamation
Environmental Hazard	Acute aqua. tox.	3	*none*	*None mandated*

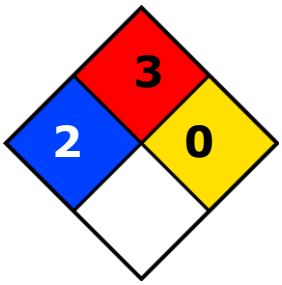
Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

Other Classifications

HMIS® RATING

HEALTH:	* 2
FLAMMABILITY:	3
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:
0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

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Label Elements

Signal Word	**DANGER**
Pictograms	**Hazard Statements**
	H225: Highly flammable liquid and vapor
	H373: May cause damage to central nervous system or inner ear through prolonged or repeated exposure H351: Suspected of causing cancer H361: Suspected of damaging fertility or the unborn child
	H319: Causes serious eye irritation H315: Cause skin irritation H336: May cause dizziness or drowsiness
No symbol mandated	H412: Harmful to aquatic life with long lasting effects.

Prevention	**Precautionary Statements**
P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P260 + P271	Do not breathe mist/vapors/spray/fumes. Use only outdoors or in well-ventilated area.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/eye protection/face protection.
P273	Avoid release to the environment.

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Response	Precautionary Statements
P370 + P378	In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
P303 + P361 + P364 + P352	IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical attention.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P314	Get medical advice/attention if you feel unwell.
Storage	**Precautionary Statements**
P403 + P235	Store in well ventilated place. Keep cool.
P405	Store locked up.
Disposal	**Precautionary Statements**
P501	Dispose of contents/container in accordance to local/regional/international regulations.

Other Hazards

Repeated exposure may cause skin dryness or cracking.

See specific target organ toxicity repeated exposure in Section 11 for possible hearing loss hazard.

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(Wt/Wt)
108-88-3	toluene	20–30%
123-86-4	n-butyl acetate	7–13%
110-19-0	isobutyl acetate	5–10%
110-43-0	2-heptanone	5–10%
64-17-5	ethanol	5–10%
108-65-6	1-methoxy-2-propanol acetate	1–5%
141-78-6	ethyl acetate	1–5%
8052-41-3	Stoddard solvent	0.5–1.5%
13463-67-7	titanium dioxide	0.5%

Section 4: First Aid Measures

Exposure Condition	*GHS Code/Symptoms/Precautionary Statements*
IF ON SKIN (or hair)	P303 + P361 + P364, P352, P333 + P313
Immediate Symptoms	*irritation, dry skin, redness*
Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water. If you feel unwell or skin irritation occurs: Get medical advice/attention.
IF INHALED	P304 + P340, P312, P308 + P313
Immediate Symptoms	*cough, irritation of the respiratory track, dizziness, drowsiness, headaches, (in extreme exposure cases: unconsciousness and death)*
Response	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. If feeling unwell: Call a doctor. If exposed or concerned: Get medical advice/attention.

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IF IN EYES	P305 + P351 + P338, P337 + P313
Immediate Symptoms	*irritation, redness, pain*
Response	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF SWALLOWED	P301 + P330, P331, P314 (*Not a likely route of exposure under normal use*)
Immediate Symptoms	*abdominal pain, nausea, headaches, dizziness, drowsiness, vomiting*
Response	Rinse mouth. Do NOT induce vomiting. If feeling unwell or concerned: Get medical advice.

Section 5: Fire Fighting Measures

Auto-ignition Temperature [a]	≥315 °C [599 °F]	**Flash Point** [b]	4 °C [39 °F]	**LFL [LEL]**	1%
				UFL [UEL] [c]	11%

In case of fire	P370 + P378
Extinguishing Media	Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
Specific Hazards	Vapors are heavier than air, and may travel to sources of ignition near the ground. They can cause flash fire or ignite explosively.
Combustion Products	Produces carbon oxides (CO, CO_2).
Fire-Fighter	Wear self-contained breathing apparatus for fire fighting

a) Values based on 1-methoxy-2-propanol acetate, which is the component with the lowest auto-ignition value.
b) Toluene literature value, which is the component with the lowest flash point.
c) LFL = Lower Flammability [or Explosion] Limit (in volume %);
UFL = Upper Flammability [or Explosion] Limit (in volume %)

Section 6: Accidental Release Measures

Personal Protection	See Section 8.
	Avoid breathing the mist/vapors.
Containment	Remove all ignition sources.
	Avoid release to the environment. Prevent spill from entering drains and waterways. Contain with inert absorbent (such as soil, sand, vermiculite).
Cleaning	Collect liquid in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wash spill area with soap and water to remove the last traces of residue.
	Recommendation: Use a grounded stainless steel or carbon steel container.
Disposal	Do not flush to sewer. Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention	Keep out of reach of children.
	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	Keep container tightly closed.
	Do not breathe mist/vapors. Use only outdoors or in well-ventilated area.
	Do not eat, drink, or smoke when using this product.
Handling	Wear protective gloves/clothing/eye protection.
	Wash hands thoroughly after handling.
	Avoid release to the environment.
Storage	Store in a well-ventilated and dry area. Keep cool.
	Store locked up.

Section 8: Exposure Controls/Personal Protection

Routes of Entry

Eyes, ingestion, inhalation, and skin

Substances with Occupational Exposure Limit Values

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
toluene	ACGIH	20 ppm (TWA)	Not established
	U.S.A. OSHA PEL	100 ppm	150 ppm
	Canada AB	50 ppm	Not established
	Canada BC	20 ppm	Not established
	Canada ON	50 ppm	Not established
	Canada QC	100 ppm	150 ppm
n-butyl acetate	ACGIH	150 ppm	Not established
	U.S.A. OSHA PEL	150 ppm	Not established
	Canada AB	150 ppm	200 ppm
	Canada BC	20 ppm	200 ppm
	Canada ON	150 ppm	Not established
	Canada QC	150 ppm	200 ppm
isobutyl acetate	ACGIH	150 ppm	Not established
	U.S.A. OSHA PEL	150 ppm	Not established
	Canada AB	150 ppm	Not established
	Canada BC	150 ppm	Not established
	Canada ON	150 ppm	Not established
	Canada QC	150 ppm	Not established
heptan-2-one	ACGIH	50 ppm	Not established
	U.S.A. OSHA PEL	100 ppm	Not established
	Canada AB	50 ppm	Not established
	Canada BC	50 ppm	Not established
	Canada ON	25 ppm	Not established
	Canada QC	50 ppm	Not established
ethanol	ACGIH	1 000 ppm	Not established
	U.S.A. OSHA PEL	1 000 ppm	Not established
	Canada AB	1 000 ppm	Not established
	Canada BC	Not established	1 000 ppm
	Canada ON	Not established	1 000 ppm
	Canada QC	1 000 ppm	500 ppm
1-methoxy-2-propanol acetate	ACGIH	Not established	Not established
	U.S.A. OSHA PEL	50 ppm	Not established
	Canada BC	50 ppm	75 ppm
	Canada ON	50 ppm	Not established

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Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
ethyl acetate	ACGIH	400 ppm	Not established
	U.S.A. OSHA PEL	400 ppm	Not established
	Canada AB	400 ppm	Not established
	Canada BC	150 ppm	Not established
	Canada ON	Not established	Not established
	Canada QC	400 ppm	Not established
Stoddard solvent	ACGIH	100 ppm	Not established
	U.S.A. OSHA PEL	500 ppm	Not established
	Canada AB	100 ppm	Not established
	Canada BC	290 mg/m^3	580 mg/m^3
	Canada ON	100 ppm	Not established
	Canada QC	100 ppm	Not established
titanium dioxide (dust)	ACGIH	10 mg/m^3	Not established
	U.S.A. OSHA PEL	15 mg/m^3	Not established
	Canada AB	10 mg/m^3	Not established
	Canada BC	10 mg/m^3	Not established
	Canada ON	10 mg/m^3	Not established
	Canada QC	10 mg/m^3	Not established

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH[1], OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database[2] 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.

Engineering Controls

Ventilation

Keep airborne concentrations below exposure limits.

RECOMMENDATION: Respect the time weighted average of 20 ppm for toluene.

Personal Protective Equipment

Eye protection

Wear appropriate protective eyeglasses or chemical safety goggles.

Skin Protection

For prolonged contacts, use of protective gloves chemically resistant gloves.

For incidental exposure, you may use nitrile gloves or other chemically resistant disposable gloves.

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Respiratory Protection	If exposed to vapors above the exposure limit, wear respirator such as a half-mask respirator with organic vapor cartridge. **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.

Section 9: Physical and Chemical Properties

Physical State	Liquid	**Lower Flammability Limit** [c]	1%
Appearance	Green	**Upper Flammability Limit** [c]	14%
Odor	Aromatic, ethereal like	**Vapor Pressure** [c] **@20 °C**	25 mmHg [3.4 kPa]
Odor Threshold	~0.14 ppm	**Vapor Density** [b]	>3.18 (Air =1)
pH	Not available	**Specific Gravity @25 °C**	0.95
Freezing Point/ Melting Point	Not available	**Solubility in Water**	Slightly soluble
Boiling Point [a]	≥77 °C [180 °F]	**Partition Coefficient**	Not available
Flash Point [b]	4 °C [39 °F]	**Auto-ignition Temperature** [d]	≥363 °C [≥685 °F]
Evaporation Rate [b]	>1.9 (ButAc =1)	**Decomposition Temperature**	Not available
Flammability (solid, gas)	Not available	**Viscosity @40 °C**	>20.5 mm^2/s

a) Lowest component literature value, which corresponds to ethyl acetate
b) Based on toluene major component
c) Calculated using Raoult's Law and LeChatelier Principle
d) Lowest component auto-ignition literature value, which corresponds to ethanol

Section 10: Stability and Reactivity

Reactivity	Not available.
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Ignition sources, extreme temperatures of more than 70 °C [158 °F], and incompatible substances
Incompatibilities	oxidizing agents, strong reducing agents, strong acids
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5

Section 11: Toxicological Information

Routes of Exposure

Eyes, ingestion, inhalation, and skin

Symptoms Summary

Eyes	Causes severe eye irritation if splashed in eyes or exposed to vapors. May also cause eye redness or pain.
Skin	May causes skin irritation, redness, and dry skin.
Inhalation	May cause nose, throat and lung irritation leading to coughing, sore throat, and shortness of breath. Overexposure may lead to visual impairment and central nervous system effects such as dizziness, drowsiness, or weakness.
Ingestion	The mixture may cause irritation and burning sensation. See inhalation symptoms.
Chronic	Prolonged and repeated exposure may cause dermatitis, defatting of the skin and adverse central nervous systems effects. Ingestion or inhalation of paint material, mist, or vapor during pregnancy may increase the chances fetal death and developmental defects.

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation	TCLo inhalation
toluene	636 mg/kg Rat	12 124 mg/kg Rabbit	49 g/m^3 4h Rat	200 ppm Human
n-butyl acetate	>10 768 mg/kg Rat	>17 600 mg/kg Rabbit	390 ppm 4 h Rat	200 ppm Human
isobutyl acetate	13 400 mg/kg Rat	>17 400 mg/kg Rabbit	Not available	8 000 ppm 4h Rat LCLo [a)]
heptan-2-one	1 670 mg/kg Rat	12 600 μL/kg Rabbit	Not available	7 000 mg/m^3 4 h Guinea pig
ethanol	7 060 mg/kg Rat	Not available	20 000 ppm 10 h Rat	2 500 mg/m^3 20 min Human
1-methoxy-2-propanol acetate	8 532 mg/kg Rat	> 5 g/kg Rabbit	Not available	1 105 mg/m^3 4 h Rat
ethyl acetate	5 620 mg/kg Rat	>20 000 μL/kg Rabbit	45 g/m^3 2 h Mouse	400 ppm Human
Stoddard solvent	15 400 mg/kg Rat	Not available	Not available	Not available
titanium dioxide	Not available	Not available	Not available	Not available

Note: Representative toxicity data from by RTECS database of the Canadian Centre for Occupational Health and Safety (CCOHS)[2] data. Supplier (M)SDS were also consulted.

Other Toxicological Effects

Skin corrosion/irritation Toluene may causes skin irritation, redness, and dry skin.

Serious eye damage/irritation Ethanol, ethyl acetate, (and toluene) are known serious eye irritant

Sensitization (allergic reactions) No sensitization effects known

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Carcinogenicity (risk of cancer)	Based on animal studies, the titanium dioxide are possibly carcinogenic by airborne routes of exposures. **Titanium dioxide [CAS# 13463-67-7]** IARC Group 2B: Possibly carcinogenic to humans ACGIH A3: Confirmed animal carcinogen with unknown relevance to humans. CA Prop 65: Listed as a carcinogen (airborne, unbound particles of respirable size) NTP: Not listed
Mutagenicity (risk of heritable genetic effects)	No effects known
Reproductive Toxicity (risk to sex functions)	At high doses, toluene and ethanol present a reproductive and developmental hazard.
Teratogenicity (risk of fetus malformation)	At high doses, fetotoxicity is observed in animal studies for inhalation and oral exposures for toluene.
STOT-single exposure	Inhalation of toluene, n-butyl acetate, isobutyl acetate, heptan-2-one, and ethyl acetate can affect the central nervous system leading to dizziness and drowsiness.
STOT-repeated exposure	Toluene may cause damage to the central nervous system through prolonged and repeated exposure. Prolonged or repeated over-exposure to toluene and noise can lead to hearing loss (cochlear impairment) according to rat inhalation studies.
Aspiration hazard	Viscosity at 40 °C is >20.5 mm^2/s, so this product does not meet the classification criteria for aspiration hazard.

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.

Toluene is a chronic category 3 environmental toxicant (rapidly biodegradable, with minimal LC50 of 7.63 mg/L for Oncorhhynchus mykiss (rainbow trout); EC50 of 8.9 mg/L 24 h Daphnia magna (water flea); EC50 of 10 mg/L 24 h Pseudokirchneriella subcapitata (green algae)).

The n-butyl acetate ingredient is an acute category 3 environmental toxicant liquid (biodegradable, with minimal LC50 of 100 mg/L for Lepomis macrochirus (bluegill)).

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Isobutyl acetate is not classifiable as an environmental toxicant (with minimal LC50 of 101 mg/L Leuciscus idus melanotus).

Heptan-2-one is not classifiable as an environmental toxicant (biodegradable, with minimal LC50 of >126 mg/L Pimephales promelas (fathead minnow)).

Ethanol is not classifiable as an environmental toxicant (with minimal LC50 of 12 000 mg/L 96 h for Oncorhynchus mykiss (rainbow trout) and 5 770 mg/L for Pimephales promelas (fathead minnow); LC50 48 h of 5 012 mg/L for Cerodaphnia sp.)

The 1-methoxy-2-propanol acetate is a chronic category 3 environmental toxicant liquid (biodegradable, with minimal LC50 of >100 mg/L for Salmo gairdneri; EC50 of >500 mg/L 24 h Daphnia magna (water flea)).

Ethyl acetate is not classifiable as an environmental toxicant (biodegradable, with minimal LC50 of 220 mg/L for Pimephales promelas (fathead minnow); LC50 24 h of 560 mg/L and EC50 24 h of 2 3000 mg/L Daphnia magna (Puce d'eau)).

Acute Ecotoxicity

Category 3

GHS Code: Hazard Statement

H402: Harmful to aquatic life

P273: Avoid release to the environment

Chronic Ecotoxicity

Category 3

GHS Code: Hazard Statement

H412: Harmful to aquatic life with long lasting effects.

P273: Avoid release to the environment

Biodegradability

Not available

Other Effects

Regulated Volatile Organic Content according to the authorities of the US EPA, Canadian, and European agencies.

VOC = 73% [692 g/L]

Section 13: Disposal Information

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

Section 14: Transport Information

Ground

Refer to TDG Regulations (Canadian Transportation of Dangerous Goods regulations); **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Sizes 5 liters and under	Sizes greater than 5 liters
Limited Quantity 	**UN number**: UN1263 **Shipping Name:** PAINT **Class:** 3 **Packing Group**: II **Marine Pollutant:** No Flash Point = 4 °C [39 °F]

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Sizes 30 mL and under	Sizes greater than 30 mL
Excepted Quantity Document as class **E2** 	**UN number**: UN1263 **Shipping Name:** PAINT **Class:** 3 **Packing Group**: II **Marine Pollutant:** No Flash Point = 4 °C [39 °F]

Sea

Refer to IMDG regulations.

Sizes 5 liters and under	Sizes greater than 5 liters
Limited Quantity 	**UN number**: UN1263 **Shipping Name:** PAINT **Class:** 3 **Packing Group**: II **Marine Pollutant:** No Flash Point = 4 °C [39 °F]

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

Section 15: Regulatory Information

Canada

WHMIS Classification

B2 – Flammable Liquid;
D2A – Very Toxic Material (Teratogenicity/Embryotoxicity and Carcinogecity);
D2B – Toxic Material (Skin/Eye Irritation)

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

All hazardous ingredients are listed on the DSL/NDSL.

Health Canada

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

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.

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 contains toluene that is listed as hazardous air pollutants.

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

This product contains toluene (CAS# 108-88-3; reportable quantity = 1000 lb), which is subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

This product contains n-butyl acetate (CAS# 123-86-4), isobutyl acetate (CAS# 110-19-0), and ethyl acetate (CAS# 141-78-6), which can be subject to the CERCLA reporting requirements at a threshold of 5000 lb (2268 kg).

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

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

This product contains toluene, which is listed as reproductively toxic.

This product contains titanium dioxide (airborne, unbound particles of respirable size), which is listed as a carcinogen.

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.

Section 16: Other Information

SDS Prepared by	Michel Hachey
Date of Revision	30 July 2014
Supersedes	15 July 2014
Date of Issue	16 April 2014

Reason for Changes: Ecotoxicity classification change and formatting changes 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®) MDL Information Systems, Inc.

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Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
PEL	Permissible Exposure Limit
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.

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