

OVERCOAT PEN—GREEN

419D-P-GR

# Safety Data Sheet

## Section 1: Identification

### Product Identifier and Other Means of Identification

**Product Name:** Overcoat Pen—Green**SDS Code:** 419D-P-GR**Related Part #** 419D-P-GR

### 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  
CANADAMG Chemicals (Head Office)  
9347-193 Street  
Surrey, British Columbia V4N 4E7  
CANADA**☎** +1-800-340-0772  
**FAX** +1-800-340-0773  
**E-MAIL** [support@mgchemicals.com](mailto:support@mgchemicals.com)  
**WEB** [www.mgchemicals.com](http://www.mgchemicals.com)**☎** +1-905-331-1396  
**FAX** +1-905-331-2682  
**E-MAIL** [info@mgchemicals.com](mailto:info@mgchemicals.com)**E-MAIL** (Competent Person): [sds@mgchemicals.com](mailto: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

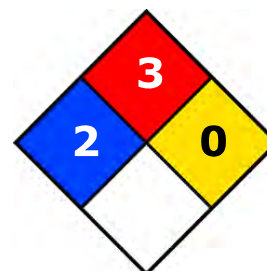
**OVERCOAT PEN—GREEN**
**419D-P-GR**
**Section 2: Hazard(s) Identification**
**Classification of Hazardous Chemical**
**GHS Categories**

Criteria	Category	Signal Word	Pictograms
Flammable Liquid	2	Danger	Flame
Carcinogenicity	2	Warning	Health
Skin Sensitization	1	Warning	Exclamation
Eye Irritation	2	Warning	Exclamation
Specific Target Organ Toxicity Single Exposure	3	Warning	Exclamation
Environmental Hazard Acute Aqua. Tox.	3	none	none

*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**

<b>HEALTH:</b>	<b>* 2</b>
<b>FLAMMABILITY:</b>	<b>3</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	




**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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**OVERCOAT PEN—GREEN**
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**Label Elements**

Signal Word	<b>DANGER</b>
Pictograms	Hazard Statements
	H225: Highly flammable liquid and vapor
	H351: Suspected of causing cancer by inhalation
	H317: May cause an allergic skin irritation H319: Causes serious eye irritation H336: May cause drowsiness or dizziness
No Symbol Mandated	H402: Harmful to aquatic life
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.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P233	Keep container tightly closed.
P261 + P271	Avoid breathing vapors. Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/eye protection.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.

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<b>Prevention</b>	<b>Precautionary Statements</b>
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.
P333 + P313	If skin irritation or rash 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 advice/attention.
<b>Storage</b>	<b>Precautionary Statements</b>
P403 + P235	Store in well-ventilated place. Keep cool.
P405	Store locked up.
<b>Disposal</b>	<b>Precautionary Statements</b>
P501	Dispose of contents/container in accordance to local/regional/international regulations.

**Hazards Not Otherwise Classified**

<b>Other Criteria</b>	<b>Hazard Statements/Precautionary Statement</b>	<b>Signal Word</b>	<b>Pictograms</b>
Skin Dryness	Repeated exposure may cause skin dryness or cracking.	Not applicable	Not applicable

**OVERCOAT PEN—GREEN**
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**Section 3: Composition/Information on Ingredients**

CAS #	Chemical Name	% (wt/wt)
123-86-4	n-butyl acetate	53%
78-93-3	butan-2-one <sup>a)</sup>	12%
108-65-6	1-methoxy-2-propanol acetate	5%
1333-86-4	carbon black	1%
8052-41-3	Stoddard solvent	1%
13463-67-7	titanium dioxide	0.2%
80-62-6	methyl methacrylate	0.1%
97-88-1	n-butyl methacrylate	0.1%

a) Also known as methyl ethyl ketone (MEK)

**Section 4: First-Aid Measures**

<i>Exposure Condition</i>	<i>GHS Code/Symptoms/Precautionary Statements</i>
<b>IF ON SKIN (or hair)</b>	P303 + P361 + P352, P333 + P313, P363
<b>Immediate Symptoms</b>	redness, irritation, dry skin
<b>Response</b>	Take off immediately all contaminated clothing. Wash with plenty of water or shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>IF INHALED</b>	P304 + P340, P312, P308 + P313
<b>Immediate Symptoms</b>	dizziness, drowsiness, cough, headaches, sore throat, nausea
<b>Response</b>	Remove person to fresh air and keep comfortable for breathing. If you feel unwell: Call a doctor. If exposed or concerned: Get medical advice/attention.
<b>IF IN EYES</b>	P305 + P351 + P338, P337 + P313
<b>Immediate Symptoms</b>	redness, irritation, pain
<b>Response</b>	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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<b>IF SWALLOWED</b>	P301 + P330, P331
<b>Immediate Symptoms</b>	<i>nausea, sore throat, diarrhea, drowsiness, dizziness, vomiting</i>
<b>Response</b>	Rinse mouth. Do NOT induce vomiting.

**Section 5: Fire-Fighting Measures**

<b>In case of fire</b>	P370 + P378
<b>Extinguishing Media</b>	Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
<b>Specific Hazards</b>	The liquid may float on water and ignite.  The vapors are heavier than air and may accumulate in low-lying areas. Vapors may travel long distances and ignite at an ignition source, which can cause a flashback or an explosion.
<b>Combustion Products</b>	Produces carbon oxides (CO, CO <sub>2</sub> )
<b>Fire-Fighter</b>	Wear self-contained breathing apparatus and full fire fighting turn-out gear.

**Section 6: Accidental Release Measures**

<b>Personal Protection</b>	See personal protection recommendations in Section 8.
<b>Precautions for Response</b>	Avoid breathing the vapors. Remove or keep away all sources of extreme heat or open flames.
<b>Environmental Precautions</b>	Avoid releasing to the environment. Prevent spill from entering drains and waterways.
<b>Containment Methods</b>	Not applicable
<b>Cleaning Methods</b>	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.
<b>Disposal Methods</b>	Dispose of spill waste according to Section 13.

**OVERCOAT PEN—GREEN****419D-P-GR****Section 7: Handling and Storage**

- Prevention** Keep out of reach of children.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Keep container tightly closed.
- Avoid breathing vapors. Use only outdoors or in a well-ventilated area.
- Do not eat, drink, or smoke when using this product.
- Handling** Wear protective gloves/clothing/eye protection.
- Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.
- Wash hands thoroughly after handling.
- Avoid release to the environment.
- Storage** Store in well ventilated place. Keep cool.
- Store locked up.

**Section 8: Exposure Controls/Personal Protection****Routes of Entry**

Skin contact, Inhalation, and Eyes contact

**Substances with Occupational Exposure Limit Values**

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
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

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Continued...

<b>Chemical Name</b>	<b>Country</b>	<b>Long Term Exposure Limits (PEL)</b>	<b>Short Term Exposure Limits (STEL)</b>
butan-2-one	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	200 ppm 200 ppm 200 ppm 50 ppm 200 ppm 150 ppm	125 ppm 300 ppm 300 ppm 100 ppm 300 ppm 300 ppm
1-methoxy-2-propanol acetate	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	Not established 50 ppm Not established 50 ppm 50 ppm Not established	Not established Not established Not established 75 ppm Not established Not established
carbon black <sup>a)</sup>	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	3.5 mg/m <sup>3</sup> 3.5 mg/m <sup>3</sup> 3.5 mg/m <sup>3</sup> 3 mg/m <sup>3</sup> 3.5 mg/m <sup>3</sup> 3.5 mg/m <sup>3</sup>	Not established Not established Not established Not established Not established Not established
Stoddard solvent	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	100 ppm 500 ppm 100 ppm 290 mg/m <sup>3</sup> 100 ppm 100 ppm	Not established Not established Not established 580 mg/m <sup>3</sup> Not established Not established
titanium dioxide	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	10 mg/m <sup>3</sup> 15 mg/m <sup>3</sup> 10 mg/m <sup>3</sup> 10 mg/m <sup>3</sup> 10 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Not established Not established Not established Not established Not established Not established
methyl methacrylate	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	50 ppm <sup>b)</sup> 100 ppm 50 ppm 50 ppm <sup>b)</sup> 50 ppm 100 ppm	100 ppm Not established 100 ppm 100 ppm 100 ppm Not established
n-butyl methacrylate	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	Not established Not established Not established 50 ppm Not established Not established	Not established Not established Not established Not established Not established Not established

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*Note:* Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH<sup>1</sup>, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from RTECS database<sup>2</sup> of the Canadian Centre for Occupational Health and Safety (CCOHS) and 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.

a) Respirable airborne particles

b) Sensitizer (S)

**Engineering Controls****Ventilation**

Keep airborne concentrations below the occupational exposure limits (OEL).

Because the carbon black and titanium dioxide are bound to the liquid mixture, it does not present an airborne hazard under normal use. Ensure adequate ventilation if the product is mechanically misted or aerosolized.

**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**

For likely contacts, use of protective butyl rubber or other chemically resistant gloves.

For incidental contacts, use nitrile or other chemically resistant gloves.

**Respiratory Protection**

For over-exposures up to 10 x OEL of vapors, wear respirator such as a half-mask respirator with organic vapor cartridges.

Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.

**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.

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**Section 9: Physical and Chemical Properties**

<b>Physical State</b>	Liquid	<b>Lower Flammability Limit</b> <sup>c)</sup>	1.8%
<b>Appearance</b>	Green	<b>Upper Flammability Limit</b> <sup>c)</sup>	9.2%
<b>Odor</b>	Fruity	<b>Vapor Pressure @20 °C</b> <sup>c)</sup>	40 hPa [31 mmHg]
<b>Odor Threshold</b>	0.007 ppm	<b>Vapor Density</b>	>2.5 (Air =1)
<b>pH</b>	Not available	<b>Specific Gravity @25 °C</b>	0.93
<b>Freezing/Melting Point</b>	Not available	<b>Solubility in Water</b>	Slightly soluble
<b>Boiling Point</b> <sup>a)</sup>	≥80 °C [≥176 °F]	<b>Partition Coefficient</b>	Not available
<b>Flash Point</b> <sup>a), b)</sup>	-3 °C [26.6 °F]	<b>Auto-ignition Temperature</b> <sup>d)</sup>	≥315 °C [≥599 °F]
<b>Evaporation Rate</b>	<1 (ButAc = 1)	<b>Decomposition Temperature</b>	Not available
<b>Flammability (solid, gas)</b>	Not available	<b>Viscosity @25 °C</b>	110 mm <sup>2</sup> /s

a) Values based on butan-2-one component.

b) Pensky-Martens closed cup

c) Calculated based on components.

d) Values based on 1-methoxy-2-propanol acetate, which is the component with the lowest auto-ignition value.

**OVERCOAT PEN—GREEN****419D-P-GR****Section 10: Stability and Reactivity**

<b>Reactivity</b>	Not available
<b>Chemical Stability</b>	Chemically stable at normal temperatures and pressures
<b>Conditions to Avoid</b>	Ignition sources, open flames, and incompatible substances
<b>Incompatibilities</b>	Strong oxidizing agents, strong acids
<b>Polymerization</b>	Will not occur
<b>Decomposition</b>	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

**Section 11: Toxicological Information****Routes of Exposure**

Skin contact, Inhalation, Eye contact

**Symptoms Summary**

<b>Eyes</b>	May cause redness, severe irritation, or pain.
<b>Skin</b>	May cause skin redness, irritation, and dry skin.
<b>Inhalation</b>	May cause dizziness, drowsiness, cough, headaches, or nausea.
<b>Ingestion</b>	May cause nausea, sore throat, diarrhea, or vomiting (see inhalation symptoms).
<b>Chronic</b>	Prolonged or repeated exposure may cause skin dryness, cracking, as well as defatting the skin. May also cause skin allergies.

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**OVERCOAT PEN—GREEN****419D-P-GR****Acute Toxicity (Lethal Exposure Concentrations)**

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
n-butyl acetate	>10 768 mg/kg Rat	>17 600 mg/kg Rabbit	390 ppm 4 h Rat
butan-2-one	2 737 mg/kg Rat	6 480 mg/kg Rabbit	23 500 mg/m <sup>3</sup> 8 h Rat
1-methoxy-2-propanol acetate	8 532 mg/kg Rat	>5 g/kg Rabbit	Not available
carbon black	>15 g/kg Rat	>3 g/kg Rabbit	Not established
Stoddard solvent	>5 000 mg/kg Rat	>3 000 mg/kg Rat	14 000 ppm 8 h Rat
titanium dioxide	60 g/kg Rat	Not available	Not available
methyl methacrylate	7 872 mg/kg Rat	>5 000 mg/kg Rabbit	78 000 mg/m <sup>3</sup> 4 h Rat
n-butyl methacrylate	16 000 mg/kg Rat	113 000 µL/kg Rabbit	29.8 mg/L 4 h Rat

*Note:* Toxicity data from the RTECS database accessed through the Canadian Centre for Occupational Health and Safety (CCOHS)<sup>2</sup> 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 damage/irritation**

Butan-2-one is a known serious eye irritant.

**Sensitization**

(allergic reactions)

The methyl methacrylate and n-butyl methacrylate may cause skin sensitization according to animal studies.

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**OVERCOAT PEN—GREEN****419D-P-GR****Carcinogenicity**  
(risk of cancer)

The carbon black and titanium dioxide are possibly carcinogenic by airborne routes of exposures under WHMIS.

Because the carbon black and titanium dioxide are bound in the liquid mixture, they are not available as an airborne hazard (dust) under normal use.

**Carbon Black [1333-86-4]**

IARC Group 2B: Possibly carcinogenic to humans

ACGIH A4: Not classified as a human carcinogen

CA Prop 65: Listed as a carcinogen (airborne, as unbound particles of respirable size)

NTP: Not listed

**Titanium Dioxide [13463-67-7]**

IARC Group 2B: Possibly carcinogenic to humans

ACGIH A4: Not classified as a human carcinogen

CA Prop 65: Listed as a carcinogen (airborne, as unbound particles of respirable size)

NTP: Not listed

**Mutagenicity**  
(risk of heritable genetic effects)

No known effects

**Reproductive Toxicity**  
(risk to sex functions)

No known effects

**Teratogenicity**  
(risk of fetus malformation)

No known effects

**STOT-single exposure**

The n-butyl acetate, butan-2-one, Stoddard solvent, methyl methacrylate, and n-butyl methacrylate components can affect the central nervous system by inhalation causing drowsiness or dizziness.

**STOT-repeated exposure**

No known effects

**Aspiration hazard**

Based on available data, the classification criteria are not met. Contains less than 10% components of category 1, and the mixture has a kinematic viscosity of >20.5 mm<sup>2</sup>/s at 40 °C.

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## Section 12: Ecological Information

The IMDG Code criteria, the raw-material safety data sheets, and supporting data from the European Chemical Agency database (<http://echa.europa.eu>) were used to support the classification.

The n-butyl acetate ingredient is an acute category 3 environmental toxicant (biodegradable, with minimal LC50 of 18 mg/L for fathead minnow).

The 2-butanone (MEK) ingredient is not classified as an environmental hazard according to GHS criteria.

The 1-methoxy-2-propanol acetate component is an acute category 3 environmental toxicant (with minimal LC50 96 h of  $\geq 100$  mg/L *Salmo gairdneri*).

Based on available data, carbon black and titanium dioxide are not classified as environmental hazards according to GHS criteria.

The Stoddard solvent is a chronic category 2 environmental toxicant.

### Acute Ecotoxicity

Category 3

H402: Harmful to aquatic life

Avoid release to the environment.

### Chronic Ecotoxicity

Available data doesn't give rise to classification as a chronic ecotoxicant.

### Biodegradability

Expected to be biodegradable. The volatile solvent constituents will oxidize rapidly in air by photochemical reaction.

### Other Effects

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

VOC = 74% [681 g/L]

**OVERCOAT PEN—GREEN**
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**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** (Canadian Transportation of Dangerous Goods regulations) and **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Sizes 5 liters and under

**Limited Quantity**



**UN number:** UN1263  
**Shipping Name:** PAINT  
**Class:** 3  
**Packing Group:** II  
**Marine Pollutant:** No  
Flash Point = -3 °C [26.6 °F]

**Air**

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

Sizes 30 mL and under

**Excepted Quantity**  
Document as class **E2**



**UN number:** UN1263  
**Shipping Name:** PAINT  
**Class:** 3  
**Packing Group:** II  
**Marine Pollutant:** No  
Flash Point = -3 °C [26.6 °F]

*Section continued on the next page*

**Sea**

**Refer to IMDG regulations.**

Sizes 30 mL and under

**Excepted Quantity**  
Document as class **E2**



**UN number:** UN1263  
**Shipping Name:** PAINT  
**Class:** 3  
**Packing Group:** II  
**Marine Pollutant:** No  
Flash Point = -3 °C [26.6 °F]

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

**OVERCOAT PEN—GREEN****419D-P-GR****Section 15: Regulatory Information****Canada****WHMIS 1988 Classification**

B2 – Flammable Liquid;  
D2A – Very Toxic (Carcinogen IARC 2B);  
D2B – Toxic Other (Skin Sensitizer, Eye Irritant)

**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.

**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 methyl methacrylate, which is listed as hazardous air pollutants.

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

This product contains 0.1% of methyl methacrylate (CAS# 80-62-4; 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) and 2-butanone (CAS# 78-93-3), which are subject to the CERCLA reporting requirements at the 5000 lb (2268 kg) threshold.

**TSCA** (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

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**OVERCOAT PEN—GREEN****419D-P-GR**

**California Proposition 65** (Chemicals known to cause cancer or reproductive toxicity, June 06, 2014 revision, USA).

This product contains carbon black and titanium dioxide, which are listed as carcinogenic substances when airborne, as unbound particles of respirable size.

**Europe****RoHS**

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

**WEEE**

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

**Section 16: Other Information**

<b>SDS Prepared by</b>	Michel Hachey
<b>Date of Creation</b>	20 April 2015
<b>Supersedes</b>	Not applicable
<b>Reason for Changes:</b>	New product

**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®)

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**OVERCOAT PEN—GREEN****419D-P-GR****Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
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

**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](http://www.mgchemicals.com).

Email: [support@mgchemicals.com](mailto: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

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