



# SAFETY DATA SHEET

## SPECIALTY ELECTRONIC MATERIALS SWITZERLAND GMBH

**Product name:** MOLYKOTE® G-Rapid Plus Paste

**Issue Date:** 2018.10.17

**Print Date:** 2023.06.23

SPECIALTY ELECTRONIC MATERIALS SWITZERLAND GMBH encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

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## 1. PRODUCT AND COMPANY IDENTIFICATION

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**Product name:** MOLYKOTE® G-Rapid Plus Paste

**Recommended use of the chemical and restrictions on use**

**Identified uses:** Lubricants and lubricant additives

### COMPANY IDENTIFICATION

SPECIALTY ELECTRONIC MATERIALS  
SWITZERLAND GMBH  
GROSSMATTE 4  
6014 LUZERN  
SWITZERLAND

**Customer Information Number:**

00800-3876-6838

SDSQuestion-EU@dupont.com

### EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** +(41)- 435082011

**Local Emergency Contact:** +1 703-741-5970

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## 2. HAZARDS IDENTIFICATION

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### Classification of the substance or mixture

Serious eye damage - Category 1 - H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

### Label elements

### Hazard pictograms



**Signal word: DANGER**

**Hazard statements**

H318 Causes serious eye damage.

**Precautionary statements**

P280 Wear eye protection/ face protection.

P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

**Contains** Calcium hydroxide

**Other hazards**

No data available

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Chemical nature:** Inorganic and organic compounds, Mixture

This product is a mixture.

CASRN / EC-No. / Index-No.	Concentration	Component	Classification
CASRN 1305-62-0 EC-No. 215-137-3 Index-No. —	>= 16.0 - <= 24.0 %	Calcium hydroxide	Skin Irrit. - 2 - H315 Eye Dam. - 1 - H318 STOT SE - 3 - H335
CASRN 8042-47-5 EC-No. 232-455-8 Index-No. —	>= 38.0 - <= 56.0 %	White mineral oil (petroleum)	Not classified
CASRN 1317-33-5 EC-No. 215-263-9	>= 19.0 - <= 29.0 %	Molybdenum disulfide	Not classified

Index-No. —			
CASRN 7782-42-5 EC-No. 231-955-3 Index-No. —	>= 7.0 - <= 11.0 %	Graphite	Not classified

For the full text of the H-Statements mentioned in this Section, see Section 16.

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## 4. FIRST AID MEASURES

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### Description of first aid measures

**General advice:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if effects occur, consult a physician.

**Skin contact:** Wash off with plenty of water.

**Eye contact:** Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

**Ingestion:** No emergency medical treatment necessary.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

### Indication of any immediate medical attention and special treatment needed

**Notes to physician:** Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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## 5. FIREFIGHTING MEASURES

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**Suitable extinguishing media:** Water spray Alcohol-resistant foam Carbon dioxide (CO<sub>2</sub>) Dry chemical

**Unsuitable extinguishing media:** None known.

### Special hazards arising from the substance or mixture

**Hazardous combustion products:** Sulphur oxides Metal oxides Carbon oxides

**Unusual Fire and Explosion Hazards:** Exposure to combustion products may be a hazard to health.

**Advice for firefighters**

**Fire Fighting Procedures:** Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

**Special protective equipment for firefighters:** In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

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## **6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

**Environmental precautions:** Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up:** Soak up with inert absorbent material. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, Clean up remaining materials from spill with suitable absorbent. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

See sections: 7, 8, 11, 12 and 13.

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## **7. HANDLING AND STORAGE**

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**Precautions for safe handling:** Do not swallow. Do not get in eyes. Avoid prolonged or repeated contact with skin. Keep container tightly closed. Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

**Conditions for safe storage:** Keep in properly labelled containers. Keep tightly closed. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
White mineral oil (petroleum)	ACGIH	TWA Inhalable fraction	5 mg/m <sup>3</sup>
	ARE OEL	TWA Measured as inhalable fraction of the aerosol.	5 mg/m <sup>3</sup>
Molybdenum disulfide	ARE OEL	TWA Mist	0.2 mg/m <sup>3</sup>
	ACGIH	TWA Inhalable fraction	10 mg/m <sup>3</sup> , Molybdenum
	ACGIH	TWA Respirable fraction	3 mg/m <sup>3</sup> , Molybdenum
	ARE OEL	TWA Respirable dust	3 mg/m <sup>3</sup> , Molybdenum
	ARE OEL	TWA Measured as inhalable fraction of the aerosol.	10 mg/m <sup>3</sup> , Molybdenum
Graphite	ACGIH	TWA Respirable fraction	2 mg/m <sup>3</sup>
	ARE OEL	TWA Respirable dust	2 mg/m <sup>3</sup>
	ARE OEL	TWA Respirable dust	2 mg/m <sup>3</sup>

### Exposure controls

**Engineering controls:** Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

### Individual protection measures

**Eye/face protection:** Use chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

#### Skin protection

**Hand protection:** Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent on the specific composition of the

material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief contact is expected. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

Use the following CE approved air-purifying respirator: Organic vapor cartridge, type A (boiling point >65 °C)

See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

Physical state	paste
Color	black
Odor	slight
Odor Threshold	No data available
pH	Not applicable
Melting point/range	No data available
Freezing point	No data available
Boiling point (760 mmHg)	Not applicable
Flash point	<b>closed cup</b> > 200.0 °C
Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	Not classified as a flammability hazard
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor Pressure	Not applicable

Relative Vapor Density (air = 1)	No data available
Relative Density (water = 1)	1.4
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Dynamic Viscosity	Not applicable
Kinematic Viscosity	Not applicable
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Molecular weight	No data available
Particle size	No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** Not classified as a reactivity hazard.

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents. When heated to temperatures above 150 °C (300 °F) in the presence of air, product can form formaldehyde vapours. Safe handling conditions may be maintained by keeping vapour concentrations within the occupational exposure limit for formaldehyde.

**Conditions to avoid:** None known.

**Incompatible materials:** Oxidizing agents

**Hazardous decomposition products**

No hazardous decomposition products are known.

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data is available.*

**Acute toxicity**

**Acute oral toxicity**

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s):  
LD50. Rat. > 5,000 mg/kg Estimated.

**Acute dermal toxicity**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

Based on information for component(s):  
LD50. Rabbit. > 2,000 mg/kg Estimated.

**Acute inhalation toxicity**

Prolonged excessive exposure to dust may cause adverse effects.

As product: The LC50 has not been determined.

**Skin corrosion/irritation**

Brief contact may cause slight skin irritation with local redness.

**Serious eye damage/eye irritation**

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

**Sensitization**

Based on information for component(s):

For skin sensitization:

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**

The substance or mixture is not classified as specific target organ toxicant, single exposure.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

**Carcinogenicity**

Contains component(s) which did not cause cancer in laboratory animals.

**Teratogenicity**

Contains component(s) which did not cause birth defects in laboratory animals.

**Reproductive toxicity**

Contains component(s) which did not interfere with reproduction in animal studies.

**Mutagenicity**

Contains a component(s) which were negative in in vitro genetic toxicity studies.



**Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

**COMPONENTS INFLUENCING TOXICOLOGY:****Calcium hydroxide****Acute inhalation toxicity**

The LC50 has not been determined.

**White mineral oil (petroleum)****Acute inhalation toxicity**

LC50. Rat. male and female. 4 Hour. dust/mist. > 5 mg/l OECD Test Guideline 403

**Molybdenum disulfide****Acute inhalation toxicity**

LC50. Rat. 4 Hour. dust/mist. > 2.82 mg/l No deaths occurred at this concentration.

**Graphite****Acute inhalation toxicity**

LC50. Rat. 4 Hour. dust/mist. > 2 mg/l OECD Test Guideline 403 No deaths occurred at this concentration.

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**12. ECOLOGICAL INFORMATION**

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*Ecotoxicological information appears in this section when such data is available.*

**Toxicity****Calcium hydroxide****Acute toxicity to fish**

Material is harmful to aquatic organisms (LC50/EC50/IC50 between 10 and 100 mg/L in the most sensitive species).

LC50. Gasterosteus aculeatus (threespine stickleback). 96 Hour. 457 mg/l

**Acute toxicity to aquatic invertebrates**

EC50. Daphnia magna (Water flea). 48 Hour. 49.1 mg/l. OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

EC50. Pseudokirchneriella subcapitata (green algae). 72 Hour. 184.57 mg/l. OECD Test Guideline 201

**Toxicity to bacteria**

EC50. 3 Hour. 300.4 mg/l. OECD Test Guideline 209

**Chronic toxicity to aquatic invertebrates**

NOEC. 14 d. 32 mg/l

**White mineral oil (petroleum)****Acute toxicity to fish**

Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

LC50. *Lepomis macrochirus* (Bluegill sunfish). static test. 96 Hour. > 10,000 mg/l

LL50. *Oncorhynchus mykiss* (rainbow trout). static test. 96 Hour. > 100 mg/l. OECD Test Guideline 203

LL50. *Leuciscus idus* (Golden orfe). static test. 96 Hour. > 10,000 mg/l. OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

LL50. *Daphnia magna* (Water flea). static test. 48 Hour. > 100 mg/l. OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

NOEC. *Pseudokirchneriella subcapitata* (green algae). 72 Hour. 100 mg/l. OECD Test Guideline 201

**Chronic toxicity to fish**

NOEC. *Oncorhynchus mykiss* (rainbow trout). 28 d. 1,000 mg/l

**Chronic toxicity to aquatic invertebrates**

NOEC. *Daphnia magna* (Water flea). 21 d. 1,000 mg/l

**Molybdenum disulfide****Acute toxicity to fish**

Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

For similar material(s):

LC50. Fish. 96 Hour. > 100 mg/l

**Acute toxicity to aquatic invertebrates**

Based on data from similar materials

EC50. *Daphnia magna* (Water flea). 48 Hour. > 100 mg/l

**Acute toxicity to algae/aquatic plants**

Based on data from similar materials

ErC50. algae. 72 Hour. Growth rate. > 100 mg/l

**Toxicity to bacteria**

EC50. 30 Hour. Respiration rates.. > 100 mg/l

**Chronic toxicity to fish**

Based on data from similar materials

NOEC. Fish. 34 d. > 10 mg/l

**Chronic toxicity to aquatic invertebrates**

Based on data from similar materials

NOEC. *Daphnia magna*. 21 d. > 10 mg/l

**Graphite**

**Acute toxicity to fish**

Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

LC50. Danio rerio (zebra fish). 96 Hour. > 100 mg/l. OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

EC50. Daphnia magna (Water flea). 48 Hour. > 100 mg/l. OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

EC50. Pseudokirchneriella subcapitata (green algae). 72 Hour. > 100 mg/l. OECD Test Guideline 201

**Toxicity to bacteria**

EC50. 3 Hour. > 1,012.5 mg/l. OECD Test Guideline 209

**Persistence and degradability**

**Calcium hydroxide**

**Biodegradability:** No relevant data found.

**White mineral oil (petroleum)**

**Biodegradability:** Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).

10-day Window: Fail

**Biodegradation:** 0 - 24 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301B or Equivalent

**Molybdenum disulfide**

**Biodegradability:** Biodegradability is not applicable to inorganic substances.

**Graphite**

**Biodegradability:** Biodegradation is not applicable.

**Bioaccumulative potential**

**Calcium hydroxide**

**Bioaccumulation:** Not applicable

**White mineral oil (petroleum)**

**Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

**Partition coefficient: n-octanol/water(log Pow):** 5.18 Measured

**Bioconcentration factor (BCF):** 1,900 Fish

**Molybdenum disulfide**

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

**Graphite**

**Bioaccumulation:** No relevant data found.

**Mobility in soil**

**Calcium hydroxide**

No relevant data found.

**White mineral oil (petroleum)**

Potential for mobility in soil is low (Koc between 500 and 2000).

**Partition coefficient (Koc):** 510 Estimated.

**Molybdenum disulfide**

No relevant data found.

**Graphite**

No relevant data found.

**Results of PBT and vPvB assessment**

**Calcium hydroxide**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**White mineral oil (petroleum)**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Molybdenum disulfide**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Graphite**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Other adverse effects**

**Calcium hydroxide**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**White mineral oil (petroleum)**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Molybdenum disulfide**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Graphite**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

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## 13. DISPOSAL CONSIDERATIONS

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**Disposal methods:**

Do not dump into any sewers, on the ground, or into any body of water. This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required.

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## 14. TRANSPORT INFORMATION

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**Classification for ROAD and Rail transport:**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

Not regulated for transport

**Transport in bulk  
according to Annex I or II  
of MARPOL 73/78 and the  
IBC or IGC Code**

Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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## 15. REGULATORY INFORMATION

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**Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.**

Listed in Regulation: Not applicable

Classification and labeling have been performed according to Regulation (EC) No 1272/2008.

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## 16. OTHER INFORMATION

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**Full text of H-Statements referred to under sections 2 and 3.**

H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.

**Revision**

Identification Number: 1687697 / A715 / Issue Date: 2018.10.17 / Version: 1.9

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
ARE OEL	Abu Dhabi Emirate - EHSMS Manual, Volume 2, Environment, Health and Safety Protection Policies, Section 2, Part I: EEPP Air Quality Standards
TWA	8-hour, time-weighted average
Eye Dam.	Serious eye damage
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure

**Full text of other abbreviations**

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations

Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

SPECIALTY ELECTRONIC MATERIALS SWITZERLAND GMBH urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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