



SAFETY DATA SHEET

SPECIALTY ELECTRONIC MATERIALS UK LIMITED

Safety Data Sheet according to REACH Regulation (EC) No 1907/2006, as amended by UK REACH

Product name: MOLYKOTE® 41 Extreme High Temperature Grease

Revision Date: 20.11.2025

Version: 5.1

Date of last issue: 12.05.2025

Print Date: 26.11.2025

SPECIALTY ELECTRONIC MATERIALS UK LIMITED 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.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: MOLYKOTE® 41 Extreme High Temperature Grease

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Electrical industry and electronics Lubricants and lubricant additives

1.3 Details of the supplier of the safety data sheet

COMPANY IDENTIFICATION

SPECIALTY ELECTRONIC MATERIALS UK
LIMITED
KINGS COURT, LONDON ROAD
STEVENAGE
England
SG1 2NG
UNITED KINGDOM

Customer Information Number:

00800-3876-6838

SDSQuestion-EU@dupont.com

1.4 EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: +(44)-2038850382

Local Emergency Contact: +(44)-2038850382

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Long-term (chronic) aquatic hazard - Category 3 - H412

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

2.2 Label elements

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental information The following percentage of the mixture consists of ingredient(s) with unknown acute inhalation toxicity: 1.045 %
The following percentage of the mixture consists of ingredient(s) with unknown acute dermal toxicity: 1.045 %

2.3 Other hazards

Endocrine disrupting properties (human health):

This substance/mixture does not contain components considered to have endocrine disrupting properties for human health according to UK REACH Article 57(f), at levels of 0.1% or higher.

Endocrine disrupting properties (environment):

This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f) at levels of 0.1% or higher.

PBT and vPvB assessment:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Silicone grease.

3.2 Mixtures

This product is a mixture.

Identification number	Component	Classification according to GB-CLP	specific concentration limit/ M-Factors/ Acute toxicity estimate	%
CASRN 12001-85-3 EC-No. 234-409-2 Index-No. — Registration number	Zinc naphthenate	Eye Irrit. 2 - H319 Aquatic Chronic 2 - H411	Oral ATE: > 2,000 mg/kg	>= 1.0 - < 2.5 %

–				
CASRN 84418-68-8 EC-No. 282-780-4 Index-No. – Registration number –	Neodecanoic acid, zinc salt, basic	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	M-Factors: 1 [Acute] 1 [Chronic] Oral ATE: 2,066 mg/kg Inhalation ATE: > 5.7 mg/l (dust/mist) Dermal ATE: > 3,640 mg/kg	>= 0.25 - < 1.0 %

Substances with a workplace exposure limit

Identification number	Component	Classification according to GB-CLP	specific concentration limit/ M-Factors/ Acute toxicity estimate	%
CASRN 1333-86-4 EC-No. 215-609-9 Index-No. – Registration number –	Carbon black	Not classified	Oral ATE: > 8,000 mg/kg Inhalation ATE: 27 mg/l (dust/mist) Dermal ATE: > 3,000 mg/kg	>= 10.0 - < 20.0 %

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

SECTION 4: FIRST AID MEASURES

4.1 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: If inhaled Move person to fresh air; if effects occur, consult a physician.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation occurs: Get medical advice/attention.

Eye contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel. Consult a physician if necessary.

4.2 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.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water spray Alcohol-resistant foam Carbon dioxide (CO₂) Dry chemical

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Silicon oxides Metal oxides

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

5.3 Advice for firefighters

Fire Fighting Procedures: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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

6.2 Environmental precautions: Do not release the product to the aquatic environment above defined regulatory levels. 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.

6.3 Methods and materials for containment and cleaning up: Wipe up or scrape up and contain for salvage or disposal. 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, Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections:

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

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling: 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.

Advice on general occupational hygiene

Handle in accordance with good industrial hygiene and safety practice. Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating. Ensure that eye flushing systems and safety showers are located close to the working place.

7.2 Conditions for safe storage, including any incompatibilities: Keep in properly labelled containers. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents.
Unsuitable materials for containers: None known.

7.3 Specific end use(s): Information on specific end use(s) of this product may be provided in a technical data sheet/annex to the SDS (if available).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 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
Carbon black	GB EH40	TWA	3.5 mg/m3
	GB EH40	STEL	7 mg/m3

8.2 Exposure controls

Engineering measures: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

Individual protection measures

Eye/face protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If there is a potential for exposure to particles which could

cause eye discomfort, wear chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

Skin protection

Hand protection: Use gloves chemically resistant to this material. 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. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. 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, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process.

Environmental exposure controls

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	solid (20 °C,)
	Form Grease
Colour	black
Odour	slight
	Odour Threshold No data available
Melting point/freezing point	Melting point/ range: No data available
Boiling point or initial boiling point and boiling range	Boiling point/boiling range: Not applicable
Flammability	Gases/Solids

Not classified as a flammability hazard

Liquids

No data available

**Lower explosion limit and
upper explosion limit /
flammability limit**

Lower explosion limit / Lower flammability limit

No data available

Upper explosion limit / Upper flammability limit

No data available

Flash point

302 °C

Method: (closed cup)

Auto-ignition temperature

No data available

Decomposition temperature

Thermal decomposition

No data available

pH

Substance/mixture is non-soluble (in water).

Viscosity

Viscosity, kinematic

Not applicable

Viscosity, dynamic

Not applicable

Solubility(ies)

Water solubility

No data available

**Partition coefficient: n-
octanol/water**

No data available

Vapour pressure

Not applicable

**Density and / or relative
density**

Relative density

1.05

Relative vapour density

No data available

Particle characteristics

Particle size

No data available

9.2 Other information

Oxidizing properties

The substance or mixture is not classified as oxidizing.

**Substances and mixtures,
which in contact with water,
emit flammable gases**

The substance or mixture does not emit flammable gases
in contact with water.

Evaporation rate

Not applicable

Molecular weight

No data available

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

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Not classified as a reactivity hazard.

10.2 Chemical stability: Stable under normal conditions.

10.3 Possibility of hazardous reactions: Can react with strong oxidizing agents.

10.4 Conditions to avoid: None known.

10.5 Incompatible materials: Oxidizing agents

10.6 Hazardous decomposition products: Benzene.

SECTION 11: TOXICOLOGICAL INFORMATION

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

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity (Acute oral toxicity)

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Acute toxicity (Acute dermal toxicity)

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Acute toxicity (Acute inhalation toxicity)

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Skin corrosion/irritation

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Serious eye damage/eye irritation

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Respiratory or skin sensitisation

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Germ cell mutagenicity

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Carcinogenicity

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Reproductive toxicity

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Toxicity to reproduction assessment :

Product test data not available. Refer to component data.

Assessment Teratogenicity:

Product test data not available. Refer to component data.

STOT - single exposure

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

STOT - repeated exposure

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

Aspiration Hazard

Not classified

Not classified due to lack of data. / Not classified due to data which are conclusive although insufficient for classification.

Product test data not available. Refer to component data.

COMPONENTS INFLUENCING TOXICOLOGY:

Zinc naphthenate

Acute toxicity (Acute oral toxicity)

LD50, Rat, > 2,000 mg/kg OECD Test Guideline 423

Acute toxicity (Acute dermal toxicity)

The dermal LD50 has not been determined.

Acute toxicity (Acute inhalation toxicity)

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 eye irritation.

May cause corneal injury.

Germ cell mutagenicity

This material was not mutagenic in an Ames bacterial assay. In vitro genetic toxicity studies were negative in some cases and positive in other cases. Information given is based on data obtained from similar substances.

Reproductive toxicity

Toxicity to reproduction assessment :

In animal studies, did not interfere with reproduction. Information given is based on data obtained from similar substances.

Assessment Teratogenicity:

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Information given is based on data obtained from similar substances.

STOT - single exposure

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

STOT - repeated exposure

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

Information given is based on data obtained from similar substances.

Aspiration Hazard

No aspiration toxicity classification

Neodecanoic acid, zinc salt, basic**Acute toxicity (Acute oral toxicity)**

Central nervous system effects. Information given is based on data obtained from similar substances. LD50, Rat, 2,066 mg/kg OECD Test Guideline 401

Acute toxicity (Acute dermal toxicity)

Information given is based on data obtained from similar substances. LD50, Rat, > 3,640 mg/kg OECD Test Guideline 402

Acute toxicity (Acute inhalation toxicity)

An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration. Information given is based on data obtained from similar substances. LC50, Rat, 4 Hour, dust/mist, > 5.7 mg/l OECD Test Guideline 403

Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness.

Serious eye damage/eye irritation

May cause slight temporary eye irritation.

Respiratory or skin sensitisation

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

Information given is based on data obtained from similar substances.

Germ cell mutagenicity

In vitro genetic toxicity studies were negative in some cases and positive in other cases.

Animal genetic toxicity studies were negative. Information given is based on data obtained from similar substances.

Carcinogenicity

No data available

Reproductive toxicity

Toxicity to reproduction assessment :

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Information given is based on data obtained from similar substances.

Assessment Teratogenicity:

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Information given is based on data obtained from similar substances.

STOT - single exposure

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

STOT - repeated exposure

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

Information given is based on data obtained from similar substances.

Aspiration Hazard

No aspiration toxicity classification

Carbon black**Acute toxicity (Acute oral toxicity)**

LD50, Rat, > 8,000 mg/kg

Acute toxicity (Acute dermal toxicity)

LD50, Rabbit, > 3,000 mg/kg No deaths occurred at this concentration.

Acute toxicity (Acute inhalation toxicity)

LC50, Rat, 1 Hour, dust/mist, 27 mg/l No deaths occurred at this concentration.

Skin corrosion/irritation

Prolonged exposure not likely to cause significant skin irritation.

Serious eye damage/eye irritation

Solid or dust may cause irritation or corneal injury due to mechanical action.

Respiratory or skin sensitisation

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

For respiratory sensitization:

No relevant data found.

Germ cell mutagenicity

Animal genetic toxicity studies were negative in some cases and positive in other cases.

Positive findings were observed only at doses which produced significant inflammation.

Carcinogenicity

Lung fibrosis and tumors have been observed in rats exposed to high concentrations of very fine carbon black particles for their lifetime. Effects are believed to be due to overloading of the normal respiratory clearance mechanisms caused by the extreme study conditions. Rats may be particularly susceptible to particle clearance overload, resulting in lung injury and tumors. No increases in tumors were observed in male or female mice exposed under the same conditions.

Reproductive toxicity

Toxicity to reproduction assessment :

No relevant data found.

Assessment Teratogenicity:

No relevant data found.

STOT - single exposure

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

STOT - repeated exposure

Dust may cause irritation of the upper respiratory tract (nose and throat) and lungs.

Repeated exposures to very fine dusts may cause lung injury.

Aspiration Hazard

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

Further information

No data available

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity**Zinc naphthenate****Acute toxicity to fish**

LC50, Cyprinus carpio (Carp), 96 Hour, > 100 mg/l, OECD Test Guideline 203

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 35 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, 4 mg/l, OECD Test Guideline 201

NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, 1 mg/l, OECD Test Guideline 201

Neodecanoic acid, zinc salt, basic**Acute toxicity to fish**

Information given is based on data obtained from similar substances.

LC50, Fish, 96 Hour, 0.439 mg/l

Acute toxicity to aquatic invertebrates

Information given is based on data obtained from similar substances.

LC50, Daphnia magna (Water flea), 48 Hour, 0.8 mg/l

Acute toxicity to algae/aquatic plants

Information given is based on data obtained from similar substances.

EC50, Raphidocelis subcapitata (freshwater green alga), 72 Hour, 0.15 mg/l, OECD Test Guideline 201

Information given is based on data obtained from similar substances.

NOEC, Raphidocelis subcapitata (freshwater green alga), 72 Hour, 0.05 mg/l, OECD Test Guideline 201

Chronic toxicity to fish

Information given is based on data obtained from similar product.

NOEC, Oncorhynchus mykiss (rainbow trout), 30 d, 0.039 - 0.974 mg/l

Chronic toxicity to aquatic invertebrates

Information given is based on data obtained from similar product.

NOEC, Daphnia magna, 21 d, 0.035 mg/l

Carbon black**Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Leuciscus idus (Golden orfe), static test, 96 Hour, > 1,000 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 24 Hour, > 5,600 mg/l

Acute toxicity to algae/aquatic plants

NOEC, Desmodesmus subspicatus (green algae), 72 Hour, 10,000 mg/l

12.2 Persistence and degradability**Zinc naphthenate**

Biodegradability: Inherently biodegradable. Information given is based on data obtained from similar substances.

Biodegradation: 60 %

Exposure time: 17 - 22 d

Method: OECD Test Guideline 310

Neodecanoic acid, zinc salt, basic

Biodegradability: Not readily biodegradable.

Information given is based on data obtained from similar substances.

Biodegradation: 11 %
Exposure time: 28 d
Method: OECD Test Guideline 301

Carbon black

Biodegradability: Biodegradation is not applicable.

12.3 Bioaccumulative potential

Zinc naphthenate

Bioaccumulation: Bioaccumulation is unlikely. Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Partition coefficient: n-octanol/water(log Pow): 0.8 - 5.4

Neodecanoic acid, zinc salt, basic

Bioaccumulation: Bioaccumulation is unlikely. Information given is based on data obtained from similar substances. Not applicable
OECD Test Guideline 305

Carbon black

Bioaccumulation: Not applicable

12.4 Mobility in soil

Zinc naphthenate

Mobility in soil: No relevant data found.

Neodecanoic acid, zinc salt, basic

No data available

Carbon black

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Zinc naphthenate

Not persistent, bioaccumulative, and toxic (PBT).
Not very persistent and very bioaccumulative (vPvB).

Neodecanoic acid, zinc salt, basic

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

Carbon black

Not persistent, bioaccumulative, and toxic (PBT).
Not very persistent and very bioaccumulative (vPvB).
Not applicable to inorganic substances.

12.6 Other adverse effects

Zinc naphthenate

No relevant data found.

Neodecanoic acid, zinc salt, basic

No relevant data found.

Carbon black

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

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment 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.

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

SECTION 14: TRANSPORT INFORMATION

Classification for ROAD and Rail transport (ADR/RID):

- | | |
|-----------------------------------|---|
| 14.1 UN number | Not applicable |
| 14.2 UN proper shipping name | Not regulated for transport |
| 14.3 Transport hazard class(es) | Not applicable |
| 14.4 Packing group | Not applicable |
| 14.5 Environmental hazards | Not considered environmentally hazardous based on available data. |
| 14.6 Special precautions for user | No data available. |

Classification for SEA transport (IMO-IMDG):

- | | |
|---------------------------------|---|
| 14.1 UN number | Not applicable |
| 14.2 UN proper shipping name | Not regulated for transport |
| 14.3 Transport hazard class(es) | Not applicable |
| 14.4 Packing group | Not applicable |
| 14.5 Environmental hazards | Not considered as marine pollutant based on available data. |

14.6 Special precautions for user No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

14.1 UN number Not applicable

14.2 UN proper shipping name Not regulated for transport

14.3 Transport hazard class(es) Not applicable

14.4 Packing group Not applicable

14.5 Environmental hazards Not applicable

14.6 Special precautions for user No data available.

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.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Major Accident Hazard Legislation

Control of Major Accident Hazards Regulations 2015 (COMAH)

Listed in Regulation: Not applicable

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture.

SECTION 16: OTHER INFORMATION

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

H319 Causes serious eye irritation.

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to REGULATION (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and subsequent amendments

Aquatic Chronic - 3 - H412 - Calculation method

Revision

Identification Number: 1673858 / A670 / Issue Date: 20.11.2025 / Version: 5.1

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

Legend

GB EH40	UK. EH40 WEL - Workplace Exposure Limits
STEL	Short-term exposure limit (15-minute reference period)
TWA	Long-term exposure limit (8-hour TWA reference period)
Aquatic Acute	Short-term (acute) aquatic hazard
Aquatic Chronic	Long-term (chronic) aquatic hazard
Eye Irrit.	Eye irritation

Full text of other abbreviations

GB CLP - REGULATION (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, UK SI 2020/1567, and subsequent amendments; UK-REACH - REACH Regulation (EC) No 1907/2006, as amended by UK REACH, UK SI 2019/758 and subsequent amendments; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; 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; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; 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 UK LIMITED 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.

GB