

SAFETY DATA SHEET

Lead Free Conformal Coating

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Lead Free Conformal Coating

Product number LFCC, ELFCC400, ZE

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

Identified uses Appliance protection.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

ELECTROLUBE. A division of HK WENTWORTH LTD
 ASHBY PARK, COALFIELD WAY,
 ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JR
 UNITED KINGDOM
 +44 (0)1530 419600
 +44 (0)1530 416640
 info@hkw.co.uk

1.4. Emergency telephone number

Emergency telephone +44 1865 407333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards Skin Irrit. 2 - H315 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.
 H229 Pressurised container: may burst if heated
 H315 Causes skin irritation.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.
 EUH208 Contains 4,5-Dichloro-2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

Lead Free Conformal Coating

| | |
|---|---|
| Precautionary statements | <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P211 Do not spray on an open flame or other ignition source.</p> <p>P251 Do not pierce or burn, even after use.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p> |
| Contains | Cyclohexane, 1-Methoxy-2-propanol, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics |
| Supplementary precautionary statements | <p>P261 Avoid breathing spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P273 Avoid release to the environment.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P312 Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> |

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | | |
|--|----------------------|--|
| Dimethylether 30-60% | | |
| CAS number: 115-10-6 | EC number: 204-065-8 | REACH registration number: 01-2119472128-37-XXXX |
| Classification Flam. Gas 1 - H220 | | |
| xylene 10-30% | | |
| CAS number: 1330-20-7 | EC number: 215-535-7 | REACH registration number: 01-2119488216-32-XXXX |
| Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 | | |

Lead Free Conformal Coating

| | | | |
|--|------------------------|--|---------------|
| Cyclohexane | | | 10-30% |
| CAS number: 110-82-7 | EC number: 203-806-2 | REACH registration number: 01-2119463273-41-XXXX | |
| M factor (Acute) = 1 | M factor (Chronic) = 1 | | |
| Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 | | | |

| | | | |
|--|----------------------|--|--------------|
| 1-Methoxy-2-propanol | | | 5-10% |
| CAS number: 107-98-2 | EC number: 203-539-1 | REACH registration number: 01-2119457435-35-XXXX | |
| Classification Flam. Liq. 3 - H226 STOT SE 3 - H336 | | | |

| | | | |
|---|----------------------|--|--------------|
| Ethylbenzene | | | 5-10% |
| CAS number: 100-41-4 | EC number: 202-849-4 | | |
| Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304 | | | |

| | | | |
|--|----------------------|--|-------------|
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics | | | 1-5% |
| CAS number: — | EC number: 927-510-4 | REACH registration number: 01-2119475515-33-XXXX | |
| Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411 | | | |

Lead Free Conformal Coating

| | | |
|---|--------------------------|--|
| Propan-2-ol <1% | | |
| CAS number: 67-63-0 | EC number: 200-661-7 | REACH registration number: 01-2119457558-25-XXXX |
| Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336 | | |
| 4,5-Dichloro-2-octyl-2H-isothiazol-3-one <1% | | |
| CAS number: 64359-81-5 | EC number: 264-843-8 | |
| M factor (Acute) = 100 | M factor (Chronic) = 100 | |
| Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 2 - H330 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Skin Sens. 1A - H317 STOT SE 3 - H335 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 | | |

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|-----------------------------------|---|
| General information | Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. |
| Inhalation | Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place. |
| Ingestion | Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. |
| Skin contact | Rinse with water. |
| Eye contact | Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes. |
| Protection of first aiders | First aid personnel should wear appropriate protective equipment during any rescue. |

4.2. Most important symptoms and effects, both acute and delayed

Lead Free Conformal Coating

| | |
|----------------------------|--|
| General information | See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| Inhalation | No specific symptoms known. |
| Ingestion | No specific symptoms known. |
| Skin contact | No specific symptoms known. |
| Eye contact | No specific symptoms known. May be slightly irritating to eyes. |

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|-----------------------------|------------------------|
| Notes for the doctor | Treat symptomatically. |
|-----------------------------|------------------------|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

5.2. Special hazards arising from the substance or mixture

| | |
|--------------------------------------|--|
| Specific hazards | None known. |
| Hazardous combustion products | Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. |

5.3. Advice for firefighters

| | |
|--|---|
| Protective actions during firefighting | Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. |
| Special protective equipment for firefighters | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|-----------------------------|---|
| Personal precautions | No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. |
|-----------------------------|---|

6.2. Environmental precautions

| | |
|----------------------------------|--|
| Environmental precautions | Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air). |
|----------------------------------|--|

6.3. Methods and material for containment and cleaning up

Lead Free Conformal Coating

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Approach the spillage from upwind. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class Unspecified storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Dimethylether

Long-term exposure limit (8-hour TWA): WEL 400 ppm 766 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 958 mg/m³

xylene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

Cyclohexane

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m³

Short-term exposure limit (15-minute): WEL 300 ppm 1050 mg/m³

1-Methoxy-2-propanol

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³

Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³

Sk

Lead Free Conformal Coating

Ethylbenzene

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³

Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³

Sk

Propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls

Keep container tightly sealed when not in use.

Lead Free Conformal Coating

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Appearance | Aerosol. |
| Colour | Colourless to pale yellow. |
| Odour | Solvent. |
| pH | Not available. |
| Melting point | Not available. |
| Initial boiling point and range | Not available. |
| Flash point | <23°C/<73.4°F CC (Closed cup). |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Bulk density | 0.78 kg/l |
| Solubility(ies) | Not available. |
| Partition coefficient | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition Temperature | Not available. |
| Viscosity | Not available. |
| Explosive properties | Not considered to be explosive. |
| Oxidising properties | Does not meet the criteria for classification as oxidising. |

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|-------------------|--|
| Reactivity | See the other subsections of this section for further details. |
|-------------------|--|

10.2. Chemical stability

| | |
|------------------|---|
| Stability | Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions. |
|------------------|---|

10.3. Possibility of hazardous reactions

| | |
|---|---|
| Possibility of hazardous reactions | No potentially hazardous reactions known. |
|---|---|

10.4. Conditions to avoid

| | |
|----------------------------|---|
| Conditions to avoid | There are no known conditions that are likely to result in a hazardous situation. |
|----------------------------|---|

10.5. Incompatible materials

Lead Free Conformal Coating

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 6,330.82

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 300.57

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicity None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Lead Free Conformal Coating

| | |
|----------------------------|---|
| General information | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| Inhalation | No specific symptoms known. |
| Ingestion | No specific symptoms known. |
| Skin contact | No specific symptoms known. |
| Eye contact | No specific symptoms known. |
| Target organs | No specific target organs known. |

Dimethylether

Acute toxicity - oral

Notes (oral LD₅₀) Not applicable.

Acute toxicity - dermal

Notes (dermal LD₅₀) Not applicable.

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation No testing is needed.

Skin sensitisation

Skin sensitisation Not sensitising.

xylene

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 27.571

Species Mouse

ATE inhalation (vapours mg/l) 27.571

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

1-Methoxy-2-propanol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,739.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 3739 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Lead Free Conformal Coating

| | |
|--|--|
| ATE oral (mg/kg) | 3,739.0 |
| <u>Acute toxicity - dermal</u> | |
| Notes (dermal LD₅₀) | LD ₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met. |
| <u>Skin corrosion/irritation</u> | |
| Animal data | Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met. |
| <u>Skin sensitisation</u> | |
| Skin sensitisation | Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met. |
| <u>Germ cell mutagenicity</u> | |
| Genotoxicity - in vitro | Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met. |
| Genotoxicity - in vivo | Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met. |
| <u>Carcinogenicity</u> | |
| Carcinogenicity | NOEL 3000 ppm, Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met. |
| <u>Reproductive toxicity</u> | |
| Reproductive toxicity - fertility | Two-generation study - NOEL 1000 ppm, Inhalation, Rat F1 REACH dossier information. Based on available data the classification criteria are not met. |
| Reproductive toxicity - development | Teratogenicity: - NOEL: 1500 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met. |
| <u>Specific target organ toxicity - single exposure</u> | |
| STOT - single exposure | STOT SE 3 - H336 May cause drowsiness or dizziness. REACH dossier information. |
| Target organs | Central nervous system Brain |
| <u>Specific target organ toxicity - repeated exposure</u> | |
| STOT - repeated exposure | NOEL 919 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met. |

Ethylbenzene

| | |
|---|--|
| <u>Acute toxicity - inhalation</u> | |
| Acute toxicity inhalation (LC₅₀ vapours mg/l) | 17.4 |
| Species | Rat |
| ATE inhalation (vapours mg/l) | 17.4 |
| <u>Carcinogenicity</u> | |
| IARC carcinogenicity | IARC Group 2B Possibly carcinogenic to humans. |

Lead Free Conformal Coating

Propan-2-ol

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 5840 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Primary dermal irritation index: 0 REACH dossier information. Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 1 second, Rabbit Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL 5000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H336 May cause drowsiness or dizziness.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 5000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

2-Methoxypropanol

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 5710 mg/kg, Oral, Rat Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 5660 mg/kg, Dermal, Rabbit Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation May cause serious eye damage.

Lead Free Conformal Coating

Reproductive toxicity

Reproductive toxicity - development Maternal toxicity: - Dose level:: 545 ppm, Inhalation, Rabbit May damage the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H335 May cause respiratory system irritation.

Target organs Respiratory system, lungs

4,5-Dichloro-2-octyl-2H-isothiazol-3-one

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 0.26

Species Rat

ATE inhalation (dusts/mists mg/l) 0.26

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

Dimethylether

Acute toxicity - fish LC₅₀, 96 hours: > 4000 mg/l, Poecilia reticulata (Guppy)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 755,549 mg/l, Daphnia magna

Cyclohexane

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 4 days: 4.5 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 2 days: 0.9 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 3 days: 9.317 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

Lead Free Conformal Coating

M factor (Chronic) 1

1-Methoxy-2-propanol

Acute toxicity - fish LC₅₀, 96 hours: 20800 mg/l, Pimephales promelas (Fat-head Minnow)
REACH dossier information.

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 21100 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants EC₅₀, 7 days: >1000 mg/l, Selenastrum capricornutum
REACH dossier information.

Propan-2-ol

Toxicity Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.

Acute toxicity - fish LC₅₀, 96 hours: 10000 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates LC₅₀, 24 hours: >10000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 7 days: 1800 mg/l, Scenedesmus quadricauda

2-Methoxypropanol

Acute toxicity - fish LC₅₀, 96 hours: >1006 mg/l, Algae, Estimated value.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >13205 mg/l, Daphnia magna, Estimated value.

4,5-Dichloro-2-octyl-2H-isothiazol-3-one

Acute aquatic toxicity

LE(C)₅₀ 0.001 < L(E)C₅₀ ≤ 0.01

M factor (Acute) 100

Chronic aquatic toxicity

M factor (Chronic) 100

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Dimethylether

Persistence and degradability Not expected to be readily biodegradable.

1-Methoxy-2-propanol

Persistence and degradability The substance is readily biodegradable.

Lead Free Conformal Coating

Phototransformation Water - DT₅₀ : 3.1 hours
REACH dossier information.

Biodegradation Water - Degradation 96%: 28 days
REACH dossier information.

Propan-2-ol

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 53%: 5 days

Biological oxygen demand 1.19-1.72 g O₂/g substance

Chemical oxygen demand 2.23 g O₂/g substance

2-Methoxypropanol

Biodegradation No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Cyclohexane

Partition coefficient log K_{ow}: 3.44

1-Methoxy-2-propanol

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log P_{ow}: <1 REACH dossier information.

Propan-2-ol

Bioaccumulative potential Bioaccumulation is unlikely.

2-Methoxypropanol

Bioaccumulative potential BCF: ~ 1 - 10, Estimated value. Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility No data available.

1-Methoxy-2-propanol

Mobility Mobile.

Surface tension 70.7 mN/m @ 20°C

Propan-2-ol

Mobility The product is soluble in water.

Lead Free Conformal Coating

2-Methoxypropanol

| | |
|--|--|
| Mobility | Soluble in water. |
| Adsorption/desorption coefficient | - log Kow: ~ (-0.45) - (-0.49) @ 25°C Calculation method. - Log Koc: ~ 0.0 - 1.13 @ 25°C Calculation method. |

12.5. Results of PBT and vPvB assessment

Dimethylether

| | |
|---|---|
| Results of PBT and vPvB assessment | This product does not contain any substances classified as PBT or vPvB. |
|---|---|

1-Methoxy-2-propanol

| | |
|---|---|
| Results of PBT and vPvB assessment | This substance is not classified as PBT or vPvB according to current EU criteria. |
|---|---|

Propan-2-ol

| | |
|---|---|
| Results of PBT and vPvB assessment | This substance is not classified as PBT or vPvB according to current EU criteria. |
|---|---|

2-Methoxypropanol

| | |
|---|---|
| Results of PBT and vPvB assessment | This substance is not classified as PBT or vPvB according to current EU criteria. |
|---|---|

12.6. Other adverse effects

| | |
|------------------------------|-------------|
| Other adverse effects | None known. |
|------------------------------|-------------|

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|----------------------------|--|
| General information | The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. |
| Disposal methods | Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. |

SECTION 14: Transport information

14.1. UN number

| | |
|-------------------------|------|
| UN No. (ADR/RID) | 1950 |
| UN No. (IMDG) | 1950 |
| UN No. (ICAO) | 1950 |

Lead Free Conformal Coating

UN No. (ADN) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS (CONTAINS Cyclohexane, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2.1

ADR/RID classification code 5F

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

Transport labels



14.4. Packing group

ADR/RID packing group None

IMDG packing group None

ADN packing group None

ICAO packing group None

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-D, S-U

ADR transport category 2

Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

Lead Free Conformal Coating

| | |
|-----------------------------|--|
| National regulations | Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits. |
| EU legislation | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). |

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

| | |
|---|---|
| Abbreviations and acronyms used in the safety data sheet | ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). EC ₅₀ : 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. |
| Training advice | Read and follow manufacturer's recommendations. Only trained personnel should use this material. |
| Issued by | Bethan Massey |
| Revision date | 22/12/2016 |
| Revision | 0 |
| SDS number | 1429 |

Lead Free Conformal Coating

Hazard statements in full

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H229 Pressurised container: may burst if heated
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure.
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.
EUH208 Contains 4,5-Dichloro-2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.