

SAFETY DATA SHEET NON-SILICON HEAT TRANSFER COMPOUND

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name NON-SILICON HEAT TRANSFER COMPOUND

Product number HTCP, EHTCP02S, EHTCP100T, EHTCP700G, EHTCP01K, EHTCP25K, ZE

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

Uses advised againstNo 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 info@hkw.co.uk +44 (0)1530 419600 +44 (0)1530 416640

1.4. Emergency telephone number

Emergency telephone +44 (0)1530 419600 between 8.30am - 5.00pm GMT Mon - Fri

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

EC No 1272/2008

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

Classification (67/548/EEC or N;R50/53.

1999/45/EC)

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H410 Very toxic to aquatic life with long lasting effects.

NON-SILICON HEAT TRANSFER COMPOUND

Precautionary statements P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Aluminium Oxide

CAS number: 1344-28-1

Classification

Classification (67/548/EEC or 1999/45/EC)

Not Classified

Classified

ZINC OXIDE 10-30%

CAS number: 1314-13-2 EC number: 215-222-5 REACH registration number: 01-

2119463881-32-XXXX

M factor (Acute) = 1 M factor (Chronic) = 1

Classification Classification (67/548/EEC or 1999/45/EC)

Aquatic Acute 1 - H400 N;R50/53

Aquatic Chronic 1 - H410

DIPHENYLAMINE <1%

CAS number: 122-39-4 EC number: 204-539-4 M factor (Acute) = 1 M factor (Chronic) = 1

Classification Classification (67/548/EEC or 1999/45/EC)

Acute Tox. 3 - H301 T;R23/24/25 R33 N;R50/53

Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT RE 2 - H373 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

levels of disclosure.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Get medical attention if any discomfort continues.

Inhalation Not relevant.

Ingestion Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention.

Skin contact Wash skin thoroughly with soap and water. Get medical attention if irritation persists after

washing.

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Eye contact Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse

for at least 15 minutes. Get medical attention if any discomfort continues.

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

Skin contact Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

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. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards The product is non-combustible. Toxic gases or vapours. No unusual fire or explosion hazards

noted.

Hazardous combustion

products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during

firefighting

No specific firefighting precautions known.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area

with plenty of water.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11

for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in

the original container.

Storage class Unspecified storage.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

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8.1. Control parameters

Occupational exposure limits

Aluminium Oxide

Long-term exposure limit (8-hour TWA): 10 mg/m³

ZINC OXIDE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ Short-term exposure limit (15-minute): WEL 10 mg/m³

DIPHENYLAMINE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ Short-term exposure limit (15-minute): WEL 20 mg/m³

WEL = Workplace Exposure Limit

8.2. Exposure controls

Appropriate engineering controls

All handling should only take place in well-ventilated areas.

Eyewear complying with an approved standard should be worn if a risk assessment indicates

eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with

European Standard EN166.

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/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves

should comply with European Standard EN374.

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of skin contact.

eyewash station. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Environmental exposure

controls

Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Paste.

Colour Grey. White/off-white.

Odour No characteristic odour.

Flash point 280°C/536°F CC (Closed cup).

Relative density 3.000

Solubility(ies) Insoluble in water.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

NON-SILICON HEAT TRANSFER COMPOUND

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Not known. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

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

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Other health effects There is no evidence that the product can cause cancer.

Ingestion Liquid irritates mucous membranes and may cause abdominal pain if swallowed. Nausea,

vomiting.

Acute and chronic health

hazards

No specific health hazards known. No specific acute or chronic health impact noted, but this chemical may still have adverse impact on human health, either in general or on certain

individuals with pre-existing or latent health problems.

Toxicological information on ingredients.

A MIXTURE OF ISOMERS OF: C7-9-ALKYL 3-(3,5-DI-TRANS-BUTYL-4-HYDROXYPHENYL)PROPIONATE

Acute toxicity - oral

Acute toxicity oral (LD₅o

2,000.0

mg/kg)

Species Rat

DIPHENYLAMINE

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

SECTION 12: Ecological Information

Ecotoxicity Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

Ecological information on ingredients.

ZINC OXIDE

NON-SILICON HEAT TRANSFER COMPOUND

Acute aquatic toxicity

LE(C)₅₀ $0.1 < L(E)C50 \le 1$

M factor (Acute) 1

Chronic aquatic toxicity

NOEC 0.01 < NOEC ≤ 0.1

Degradability Non-rapidly degradable

M factor (Chronic)

A MIXTURE OF ISOMERS OF: C7-9-ALKYL 3-(3,5-DI-TRANS-BUTYL-4-HYDROXYPHENYL)PROPIONATE

Acute toxicity - fish LC50, 96 hours: > 74 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic

invertebrates

EC₅₀, >: > 100 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

 EC_{50} , 72 hours: > 3 mg/l, Scenedesmus subspicatus

Acute toxicity - , 3 hours: > 100 mg/l, Activated sludge

microorganisms

DIPHENYLAMINE

Acute aquatic toxicity

LE(C)₅₀ $0.1 < L(E)C50 \le 1$

M factor (Acute) 1

Chronic aquatic toxicity

NOEC 0.01 < NOEC ≤ 0.1

Degradability Non-rapidly degradable

M factor (Chronic) 1

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

Aluminium Oxide

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility The product contains substances which are insoluble in water and which may spread on water

surfaces.

Ecological information on ingredients.

Aluminium Oxide

NON-SILICON HEAT TRANSFER COMPOUND

Mobility The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

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

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (IMDG) 3077 UN No. (ICAO) 3077

14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)

Proper shipping name (ADN)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID label 9

IMDG class 9

ICAO class/division 9

Transport labels



14.4. Packing group

ADR/RID packing group Ш IMDG packing group Ш ICAO packing group Ш

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



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14.6. Special precautions for user

EmS F-A, S-F

Emergency Action Code 2Z

Hazard Identification Number 90

(ADR/RID)

Tunnel restriction code (E)

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

Transport in bulk according to No information required.

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

EU legislation Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative

occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at

work (as amended).

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).

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).

Authorisations (Title VII

Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII

Regulation 1907/2006)

No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

US - TSCA

All the ingredients are listed or exempt.

SECTION 16: Other information

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Revision 16

SDS number 10491

Risk phrases in full R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

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Hazard statements in full H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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.