New Tech Lubes Limited

# SAFETY DATA SHEET
# According to REACH etc (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended
# NTL SDS 055-1.5
# October 2024

Unit 3 & 4
Harrison Drive Ind Est
Worksop, Nottinghamshire
UK, S81 9RL

t. 01909 730900
f. 01909 730909
e. info@newtechlubes.com
w. www.newtechlubes.com

@newtechlubes.com

# COPPER TECH

## SECTION 1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY / UNDERTAKING

**1.1 Product name:** Copper Tech
**1.2 Identified use(s):** Anti Seize Paste/Assembly Aid.
**Use(s) advised against:** None known
**1.3 Details of supplier of SDS:** New Tech Lubes Ltd, Unit 2-4 Harrison Drive Ind Est, Worksop Notts, S81 9RL
**E Mail (competent person):** info@newtechlubes.com
**1.4 Emergency telephone:** +44 (0)1909 730900 (08.00 -16.00 GMT Monday to Friday)

## SECTION 2. HAZARDS IDENTIFICATION

**2.1 Classification of the substance/mixture:** Classification (SI 2019 No. 720):
Physical hazards: Not classified
Health hazards: Not classified
Environmental hazards: Aquatic Chronic 3: H412

**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 in accordance with national regulations.

**2.3 Other hazards:** The mixture does not contain any vPvB or PBT substances.

## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

**3.2 Mixtures:**

| Name | Identifiers | % | Classification according to Regulation (EC) No. 1272/2008 |
|---|---|---|---|
| Copper flakes (coated with aliphatic acid) | CAS No: 7440-50-8<br>EC No: 231-159-6 | 5-10 | Acute Tox.4: H302<br>Acute Tox. 3: H331<br>Eye Irrit. 2: H319<br>Aquatic Acute 1: H400<br>Aquatic Chronic 1: H410 |

The Full Text for all R-Phrases and Hazard Statements are displayed in section 16.

## SECTION 4. FIRST AID MEASURES

**4.1 Description of first aid measures:**
General information: If in doubt, get medical attention promptly. Show this safety data sheet to the medical personnel.
Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Ingestion: Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Skin contact: Rinse with water.

Eye contact: Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.
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:**
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: Prolonged contact may cause dryness of the skin.
Eye contact: No specific symptoms known. May be slightly irritating to eyes.

**4.3 Indication of any immediate medical attention and special treatment needed:** Treat symptomatically.

## SECTION 5. FIRE FIGHTING MEASURES

**5.1 Extinguishing media:**
Suitable extinguishing media: 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:** Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

**5.3 Advice for fire fighters:** 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. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:** Wear protective clothing as described in section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material.

**6.2 Environmental precautions:** Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

**6.3 Methods and material for containment and clearing:** Wear protective clothing as described in section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see section 13.

**6.4 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:** 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. Keep container tightly sealed when not in use. Avoid discharge to the aquatic environment. Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

**7.2 Conditions for safe storage, including any incompatibilities:** Store away from incompatible materials (see section 10). Keep only in the original container. Keep container tightly closed, in a cool, well-ventilated place. Keep containers upright. Protect containers from damage. Storage class: Miscellaneous hazardous material storage.

**7.3 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:
**Distillates (petroleum), hydrotreated heavy naphthenic**
Short-term exposure limit (15-minute): WEL, EH40(2002) 10 mg/m³ mist
**Calcium Carbonate**
Long term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust
**Talc (Mg3H2(SiO3)4**
Long-term exposure limit (8-hour TWA): WEL 1 mg/m³ respirable dust
**Copper flakes (coated with aliphatic acid)**
Long-term exposure limit (8-hour TWA): WEL 0.2 mg/m³ fume as Cu
**Graphite**
Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust
Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
WEL = Workplace Exposure Limit

**Distillates (petroleum), hydrotreated heavy naphthenic (CAS: 64742-52-5)**
DNEL: Workers – Inhalation; Long term local effects: 5,58 mg/m³
**Copper flakes (coated with aliphatic acid) (CAS: 7440-50-8)**
PNEC: Fresh water; 7.8 mg/l
Marine water; 5.2 µg/l
Sediment (Freshwater); 87 mg/kg
Soil; 65.5 mg/kg

**8.2 Exposure controls:**
Protective equipment:

Appropriate engineering controls: Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.
Eye/face protection: Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.
Hand protection: No specific hand protection recommended. Avoid contact with skin.
Other skin and body protection: Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures: Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection: Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges suitable for intended use should be used. Full face mask respirators with replaceable filter cartridges suitable for intended use should be used. Half mask and quarter mask respirators with replaceable filter cartridges suitable for intended use should be used.
Environmental exposure controls: Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties:**
Appearance: Paste
Colour: Copper
Odour: Almost odourless
Odour threshold: No information available
pH Not applicable
Melting point: Technical impossibility to obtain the data.
Initial boiling point and range: No information available.
Flash point: >200°C Pensky-Martens closed cup.
Information given is applicable to the major ingredient.
Evaporation rate: No information available
Evaporation factor: No information available
Flammability (solid, gas): No information available
Upper/lower flammability or explosive limits: No information available
Other flammability: No information available

Vapour pressure: No information available
Vapour density: No information available
Relative density: 0.97 @ 25°C
Bulk density: No information available
Solubility(ies): Soluble in the following materials: Mineral acids. Organic solvents. Insoluble in water.
Partition coefficient: No information available
Auto-ignition temperature: No information available
Decomposition temperature: No information available
Viscosity: 100 cSt @ 40°C
Information given is applicable to the major ingredient.
Explosive properties: Not considered to be explosive
Explosive under the influence of a flame: Not considered to be explosive
Oxidising properties: Not applicable

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** No test data specifically related to reactivity available for this product or its ingredients.

**10.2 Chemical stability:** Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

**10.3 Possibility of hazardous reactions:** Under normal conditions of storage and use, no hazardous reactions will occur.

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

**10.5 Incompatible materials:** Avoid contact with the following materials: Strong oxidising agents.

**10.6 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. Carbon dioxide (CO2). Carbon monoxide (CO).

## SECTION 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effect:**

Toxicological effects: Not regarded as a health hazard under current legislation.
Acute toxicity – oral: Notes (oral $LD_{50}$): Based on available data the classification criteria are not met.
ATE oral (mg/kg): 20,080.32
Acute toxicity – dermal: Notes (dermal $LD_{50}$): Based on available data the classification criteria are not met.
Acute toxicity – inhalation: Notes (inhalation $LC_{50}$):Based on available data the classification criteria are not met.
ATE inhalation (dusts/mists mg/l): 28.11
Skin corrosion/irritation: Based on available data the classification criteria are not met.
Serious eye damage/irritation: Based on available data the classification criteria are not met.
Respiratory sensitisation: Based on available data the classification criteria are not met.
Skin sensitisation: Based on available data the classification criteria are not met.
Genotoxicity - in vitro: Based on available data the classification criteria are not met.
Carcinogenicity: Based on available data the classification criteria are not met.
IARC carcinogenicity: None of the ingredients are listed or exempt.
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 (STOT) – single exposure: Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxicity (STOT) – repeated exposure: Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard: Not relevant. Solid.
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. May cause discomfort if swallowed.
Skin contact: Prolonged contact may cause dryness of the skin.
Eye contact: No specific symptoms known. May be slightly irritating to eyes.
Route of entry: Ingestion Inhalation Skin and/or eye contact.
Target organs: No specific target organs known.
**Toxicological information on ingredients:**

**Distillates (petroleum), hydrotreated heavy naphthenic**
Acute toxicity – oral: Notes (oral $LD_{50}$): OECD 401 >5000mg/kg, Oral, Rat
API 1982 Read-across data.
Acute toxicity – dermal: Notes (dermal $LD_{50}$): OECD 402 >5000mg/kg, Dermal, Rabbit
API 1982 Read-across data.
Acute toxicity – inhalation: Notes (inhalation $LC_{50}$): OECD 403 >5.53mg/l, 4 hours, Dust/Mist Rat
EMBSI 1988a Read-across data
Skin corrosion/irritation: Based on available data the classification criteria are not met.
Serious eye damage/irritation: Based on available data the classification criteria are not met.
Respiratory sensitisation: Based on available data the classification criteria are not met.
Skin sensitisation: Based on available data the classification criteria are not met.
Genotoxicity – in vitro: Based on available data the classification criteria are not met.
Genotoxicity – in vivo: Based on available data the classification criteria are not met.
Carcinogenicity: Based on available data the classification criteria are not met.
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.
Aspiration hazard: Not available.
**Calcium Carbonate**
Acute toxicity – oral: ($LD_{50}$ mg/kg): 5,000.0
Species: Rat
Notes (oral $LD_{50}$): $LD_{50}$ >5000 mg/kg, Oral, Rat
ATE oral (mg/kg): 5,000.0
Acute toxicity – dermal: Notes (dermal $LD_{50}$): $LD_{50}$ >5000 mg/kg, Oral, Rat
Skin corrosion/irritation: Not irritating.
Serious eye damage/irritation: Not irritating.
Respiratory sensitisation: No data available.
**Talc ($Mg_3H_2(SiO_3)_4$)**
Toxicological effects: Supplier's information.
Acute toxicity – oral: Based on available data the classification criteria are not met.
Acute toxicity – dermal: Based on available data the classification criteria are not met.
Acute toxicity – inhalation: Based on available data the classification criteria are not met.
Skin corrosion/irritation: May cause irritation.
Serious eye damage/irritation: May cause irritation.
Respiratory sensitisation: May cause irritation.
Respiratory sensitisation: May cause irritation.
Skin sensitisation: May cause irritation.
Germ cell mutagenicity: Based on available data the classification criteria are not met.
Carcinogenicity: Based on available data the classification criteria are not met.
IARC carcinogenicity: IARC Group 2B Possibly carcinogenic to humans.
Reproductive toxicity: No data available.
Specific target organ toxicity (STOT) - single exposure: Based on available data the classification criteria are not met.
Specific target organ toxicity (STOT) - repeated exposure: Based on available data the classification criteria are not met.
Aspiration hazard: Based on available data the classification criteria are not met.
**Copper flakes (coated with aliphatic acid)**
Acute toxicity – oral: ($LD_{50}$ mg/kg): 500.0
Species: Rat
ATE oral (mg/kg): 500.0
Acute toxicity – dermal: ($LD_{50}$ mg/kg): 2,000.0
Species: Rat
Acute toxicity – inhalation: ($LC_{50}$ dust/mist mg/l): 0.7
Species: Rat
ATE inhalation (dusts/mists mg/l): 0.7
**Graphite**
Acute toxicity – oral: ($LD_{50}$ mg/kg): 2,000.0
Species: Rat
Notes (oral $LD_{50}$): $LD_{50}$ >2000mg/kg, Oral, Rat
Acute toxicity – inhalation: >2000 mg/m³, Inhalation, Rat

## 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:** Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.
Ecological information on ingredients:
**Distillates (petroleum), hydrotreated heavy naphthenic**
Acute aquatic toxicity:
Acute toxicity – fish: $LL_{50}$, 96 hours: >100 mg/l,
Acute toxicity – aquatic invertebrates: $EC_{50}$, 96 hours: >10000 mg/l,
Acute toxicity – aquatic plants: NOEC, 72 hours: >100 mg/l,
Chronic toxicity – aquatic invertebrates: NOEC, 21 days: 10 mg/l,
**Calcium Carbonate**
Acute aquatic toxicity:
Acute toxicity – fish: $LC_{50}$, 96 hours: >10000 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity – aquatic invertebrates: $EC_{50}$, 48 hours: >1000 mg/l, Daphnia magna
Acute toxicity – aquatic plants: $EC_{50}$, 72 hours: >200 mg/l, Desmodesmus subspicatus
**Talc (Mg3H2(SiO3)4**
Toxicity: No adverse effects known.
**Copper flakes (coated with aliphatic acid)**
Acute aquatic toxicity:
$LE(C)_{50}$: 0.01 < L(E)C50 ≤ 0.1
M factor (Acute): 10
Chronic aquatic toxicity:
NOEC: 0.01 < NOEC ≤ 0.1
Degradability: Non-rapidly degradable
M factor (Chronic): 1

**12.2 Persistence and degradability:** The degradability of the product is not known.
Ecological information on ingredients:
**Distillates (petroleum), hydrotreated heavy naphthenic:** Biodegradation: Inherently biodegradable.
**Calcium Carbonate:** Persistence and degradability: The product contains only inorganic substances which are not biodegradable.
**Talc (Mg3H2(SiO3)4:** Persistence and degradability: The product contains inorganic substances which are not biodegradable.

**12.3 Bio accumulative potential:**
Bio accumulative potential: No data available on bioaccumulation.
Partition coefficient: No information available.
Ecological information on ingredients:
**Distillates (petroleum), hydrotreated heavy naphthenic:** Bio-accumulative potential: Bioaccumulation is unlikely to be significant because of the low water-solubility of this product. Partition coefficient: log Pow: 2 to 6
**Calcium Carbonate:** Partition coefficient: Not applicable.
**Talc (Mg3H2(SiO3)4:** Bio accumulative potential: Bioaccumulation is unlikely.

**12.4 Mobility in soil:** No data available.
Ecological information on ingredients:
**Distillates (petroleum), hydrotreated heavy naphthenic:** Mobility: Mobile.
Adsorption/desorption coefficient: Estimated value. Highly mobile - log Kow: > 3.0 @ °C
**Talc (Mg3H2(SiO3)4:** Mobility: Not relevant.

**12.5 Results of PBT and vPvB assessment:**
Ecological information on ingredients:
**Distillates (petroleum), hydrotreated heavy naphthenic:** This substance is not classified as PBT or vPvB according to current UK criteria.
**Calcium Carbonate:** This product does not contain any substances classified as PBT or vPvB.
**Talc (Mg3H2(SiO3)4:** Not relevant.

**12.6 Other adverse effects:** None known.

## SECTION 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods:** 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. 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. Do not empty into drains.

## SECTION 14. TRANSPORT INFORMATION

**14.1 UN number:** Not applicable.

**14.2 UN proper shipping name:** Not applicable.

**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:** Not applicable.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC code:** Not applicable.

## SECTION 15. REGULATORY INFORMATION

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

**15.2 Chemical safety assessment:** No chemical safety assessment has been carried out.

## SECTION 16. OTHER INFORMATION

**Classification methods used to derive classification of mixture:** Classification according to calculation procedure detailed in EC1272/2008

**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: 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, Bio-accumulative and Toxic substance.
vPvB: Very Persistent and Very Bio-accumulative.

**Hazard statements in full:**
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

**Additional information:** This safety data sheet has been produced based on information supplied by the manufacturers of the materials therein and is believed to be accurate. No warranty is expressed or implied by this information. It is for the user to satisfy themselves of the suitability of the product for their own purposes.