

EC-Safety Data Sheet conforming to 1907/2006/EG, Article 31


Ciric LM 1 CK

Date 31.07.2019 Page 1

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

1.1 Product identifier	Ciric LM 1 CK
1.2 Relevant identified uses of the substance or mixture and uses advised against	Lubrication Paste - Only suitable for industrial use. Not suitable for commercial or private use.
1.3 Details of the supplier of the safety data sheet	MOLYDUVAL GmbH * Halskestr.6 * 40880 Ratingen * Germany * +49 (2102) 9757-00 * safety@molyduval.com
1.4 Emergency telephone number	+49 (2102) 9757-20 (24h)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture 1272/2008/EG	hazard statements / category of danger / Hazard class H319 / Eye Irrit. 2 / Causes serious eye irritation. H412 / Aquatic Chronic 3 / Harmful to aquatic life with long lasting effects. The product is classified acc to 1272/2008/EG
2.2 label elements	 <p>signal word: Danger GHS07 Irritation H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects. P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves, clothing, eye and face protection. P305+P351+P338 For a few minutes, rinse cautiously with water: In case of contact with eyes. Remove contact lenses if possible. Continue rinsing. P337+P313 If eye irritation persists: Seek medical advice. P501 Dispose of contents and container in accordance with local regulations of the disposal.</p>
2.3 Other hazards	-

SECTION 3: Composition - Information on Ingredients

3.2 Mixtures	Mixture of substances listed below with nonhazardous additions. ----- 1,0 % - 3,0 % Calcium hydroxide EG: 215-137-3 CAS: 1305-62-0 H315 Skin Irrit. 2 / H318 Eye Dam. 1 / H335 STOT SE 3 (MTCACAOH) ----- 1,0 % - 10,0 % Zinkorthosphat Hydrated EG: 231-944-3 CAS: 7779-90-0 (MTCAPOZN) ----- 1,0 % - 25,0 % Copper powder EG: 231-159-6 CAS: 7440-50-8 Reach: 01-2119480154-42 H302 Acute Tox. 4 / H400 Aqua Acute 1 / H410 Aqua Chron. 1 (MTADFSCU)
--------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SECTION 4: First Aid Measures

General Instructions	Remove victim from danger zone, without exposing yourself to any personal risk. Remove wetted clothing and shoes and clean items before using them again.
After Inhalation	Remove exposed person to fresh air.
After Skin Contact	Wash with plenty of soap and plenty of water. Consult a doctor if skin irritation persists.
After Eye Contact	Long lasting rinse Rinse opened with water, if necessary, use eye wash. If symptoms persist, seek medical advice.
After Ingestion	Rinse mouth and drink plenty of water. Do not induce vomiting. If symptoms persist, seek medical advice.
Most important symptoms and effects, both acute and delayed	No information available
Indication of any immediate medical attention and special treatment needed	Prolonged or repeated exposure may cause skin discomfort.

SECTION 5: Fire-Fighting Measures

5.1 Extinguishing media	Suitable extinguishing media : Water spray. Foam. Dry powder. Carbon dioxide (CO2). Unsuitable extinguishing media : Strong water jet.
5.2 Special hazards arising from the substance or mixture	In case of a fire, there may arise poisonous (CO, CO2 and other organic gases) gases. Run-off does not allow to enter drains or watercourses by firefighters.

EC-Safety Data Sheet conforming to 1907/2006/EG, Article 31

Ciric LM 1 CK

Date 31.07.2019 Page 2

5.3 Advice for firefighters If necessary, use in case of fire, self contained breathing apparatus. Collect contaminated firefighting water separately, must not be discharged into drains. Fire residues and contaminated firefighting water must be disposed of in accordance with local regulations. Extinguishing measures to the surroundings. Standard procedure for chemical fires. Extinguishing measures to the surroundings.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Wear personal protective equipment. Avoid contact with eyes and skin.

6.2 Special Environmental Protection Avoid entering into drains, water courses or soil. Fire or police agree, if the product has escaped into a water course or sewage system, or has contaminated the soil and plants.

6.3 Methods and material for containment and cleaning up Use oil sucking materials f.e chemical absorbents.

6.4 Reference to other sections n.a.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling Advice on safe handling: Do not breathe mixture. Avoid generation of vapors and aerosols. Hygiene measures: Immediately change contaminated clothing. Preventive skin protection. Wash hands and face after work.

7.2 Conditions for safe storage, including any incompatibilities Store in closed containers. Open container in well ventilated areas
Storage Class VCI: 11 Flammable Solids

SECTION 8: Limiting and supervising the exposure / personal protection

8.1 Control parameters

Calcium hydroxide EG: 215-137-3 CAS: 1305-62-0:
AGW long-term value: 1E mg / m³ 2 (I); Y, EU, DFG
DNELs:
Short-term inhalation / local 4 mg / m³ professional
Long-term inhalation / local 1 mg / m³ professional
Short-term inhalation / local 4 mg / m³ in general
Long-term inhalation / local 1 mg / m³ in general
PNECs:
Fresh water: 490 mg / l
Soil: 1080 mg / kg
Sediment (fresh water): 1080 mg / k

Zinkorthophosphat Hydrated EG: 231-944-3 CAS: 7779-90-0:
Trizinkbis(orthophosphat)
DNEL
Wert Zielgruppe Expositionsweg Quelle
5 mg/m³ DNEL Arbeitnehmer DNEL Langzeit inhalativ (systemisch) 102
83 mg/kg KG/Tag DNEL Arbeitnehmer DNEL Langzeit dermal (systemisch) 102
83 mg/kg KG/Tag DNEL Verbraucher DNEL Langzeit dermal (systemisch) 102
2,5 mg/m³ DNEL Verbraucher DNEL Langzeit inhalativ (systemisch) 102
0,83 mg/kg KG/Tag DNEL Verbraucher DNEL Langzeit oral (wiederholt) 102
PNEC
Wert Expositionsweg Quelle
20,6 µgZn/L PNEC Gewässer, Süßwasser 102
6,1 µgZn/L PNEC Gewässer, Meerwasser 102
117,8 mgZn/kg sediment dw PNEC Sediment, Süßwasser 102
56,5 mgZn/kg sediment dw PNEC Sediment, Meerwasser 102
35,6 mgZn/kg soil dw PNEC Boden 102
100 µgZn/L PNEC Kläranlage (STP) 102
Quelle: 102 - REACH Dossier

Copper powder EG: 231-159-6 CAS: 7440-50-8 Reach: 01-2119480154-42:
AGW (Alveolengängige Fraktion) 1 mg/m³ 2009-02-16 DE TRGS 900
Weitere Information Ausschuss für Gefahrstoffe
DNEL: Kupfer (7440-50-8) Anwendungsbereich: Arbeitnehmer Expositionsweg:
Hautkontakt Mögliche Gesundheitsschäden: Kurzzeit - systemische Wirkungen Wert: 273 mg/kg
DNEL: Kupfer (7440-50-8) Anwendungsbereich: Arbeitnehmer Expositionsweg: Einatmen
Mögliche Gesundheitsschäden: Kurzzeit - systemische Wirkungen Wert: 20 mg/m³
DNEL: Kupfer (7440-50-8) Anwendungsbereich: Arbeitnehmer Expositionsweg:
Hautkontakt Mögliche Gesundheitsschäden: Langzeit - systemische Wirkungen Wert: 137 mg/kg
DNEL: Kupfer (7440-50-8) Anwendungsbereich: Verbraucher Expositionsweg: Hautkontakt
Mögliche Gesundheitsschäden: Kurzzeit - systemische Wirkungen Wert: 273 mg/kg
DNEL: Kupfer (7440-50-8) Anwendungsbereich: Verbraucher Expositionsweg: Einatmen
Mögliche Gesundheitsschäden: Kurzzeit - systemische Wirkungen Wert: 20 mg/m³
PNEC: Kupfer (7440-50-8) Boden Wert: 65,5 mg/kg
PNEC: Kupfer (7440-50-8) Süßwasser Wert: 0,0078 mg/l
PNEC: Kupfer (7440-50-8) Süßwassersediment Wert: 87 mg/kg

EC-Safety Data Sheet conforming to 1907/2006/EG, Article 31

Ciric LM 1 CK

Date 31.07.2019 Page 3

PNEC: Kupfer (7440-50-8) Meerwasser Wert: 0,0052 mg/l
PNEC: Kupfer (7440-50-8) Meeressediment Wert: 676 mg/kg
PNEC: Kupfer (7440-50-8) STP Wert: 0,230 mg/l

8.2 Limitation and supervision of exposure - Personal Protective Equipment
Respiratory protection: Not required, except in case of aerosol formation. Avoid inhalation of vapors. Use respiratory protective device against the effects of fumes / dust / aerosol. Combination filter, eg. As DIN 3181 ABEK
Hand protection: Gloves - oil resistant. Glove material: nitrile rubber, butyl rubber or fluoro rubber. Recommended thickness: = 0,4 mm. Penetration time of glove material Value for the permeation: Level = 480 min. The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of breakthrough time is recommended.
Eye protection: Safety glasses
Hygiene measures: Wash hands before breaks and immediately after handling the product. Keep working clothes separately. Take off all contaminated clothing immediately.
Protective measures: Handle in accordance with good industrial hygiene and safety practice.
Body protection: work clothes

8.3 Delimitation and monitoring of environmental exposure
Do not discharge into surface water or drains

SECTION 9: Physical and Chemical Properties

Appearance Form	pasty
Color	copper
Appearance	like grease
Odour	without
Boiling Point / Boiling Range	-
Melting Point / Melting Range	-
Flash Point	Not applicable
Autogenous Ignition Temperature	-
Upper Explosion Limit	-
Lower Explosion Limit	-
Vapor Density	-
Specific Gravity, 20°C	0,99 g/cm ³
Water Solubility	No
Partition Coefficient n-oct/water	-
VOC-Content	-

SECTION 10: Stability and Reactivity

10.1 Reactivity	This product is stable in normal-use temperatures.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use. Fumes can combine with air to form an explosive mixture.
10.4 Conditions to be avoided	No information available
10.5 Incompatible Materials	no information available
10.6 Hazardous products of instability / decomposition	no

SECTION 11: Toxicological Information

Toxicological Information	Calcium hydroxide EG: 215-137-3 CAS: 1305-62-0: Oral LD50> 2000 mg / kg (rat) Dermal LD50> 2500 mg / kg (rabbit) ----- Zinkorthophosphat Hydrated EG: 231-944-3 CAS: 7779-90-0: Orale Toxizität [mg/kg] Wert Testkriterium Versuchstier Bemerkung > 5000 mg/kg LD50: Ratte. Trizinkbis(orthophosphat) Dermale Toxizität [mg/kg] Es liegen keine Informationen vor. Inhalative Toxizität [mg/l] Wert Testkriterium Versuchstier Anmerkung Expositionsdauer > 5,7 mg/L LC50: Ratte. Trizinkbis(orthophosphat)4h ----- Copper powder EG: 231-159-6 CAS: 7440-50-8 Reach: 01-2119480154-42:
---------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

EC-Safety Data Sheet conforming to 1907/2006/EG, Article 31

Ciric LM 1 CK

Date 31.07.2019 Page 4

	Schätzwert Akuter Toxizität : 571,82 mg/kg
Symptoms after ingestion	Provoking the mucous membranes with high concentrations.
At Skin Contact	Causes skin irritation. Causes serious eye damage.
Symptoms after Inhalation	Irritation of mucous membranes
Symptoms after eye contact	Risk of serious damage to eyes
Other information	No sensitizing effects known.
Toxicological Tests	There are no human toxicological data.
Further Toxicologic Effects	The product is classified acc to 1272/2008 [CLP]

SECTION 12: Ecological Information

12.1 Toxicity	Calcium hydroxide EG: 215-137-3 CAS: 1305-62-0: EC 50 184,57 mg/l (Algentoxizität) (48h) LC 50 158 mg/l (Akute Daphnientoxizität) (96h) 160 mg/l (Akute Fischtoxizität) (96h) ----- Zinkorthophosphat Hydrated EG: 231-944-3 CAS: 7779-90-0: Trizinkbis(orthophosphat) CAS-Nr.: 7779-90-0 : LD 50 mouse intraperitoneal: 522 mg/kg. LD 50 oral (rat): : > 5 000 mg/kg. Ecotoxicity : Acute toxicity for fish (Oncorhynchus mykiss) as zinc LC50(96 h) 0.14 – 2.6 mg Zn/l. Acute toxicity for crustacea (Daphnia magna) as zinc EC50(48 h) 0.04 – 0.86 mg Zn/l. Acute toxicity for algae (Selenastrum capricornutum) as zinc EC50(72 h) 0.136– 0.150 mg Zn/l. ----- Copper powder EG: 231-159-6 CAS: 7440-50-8 Reach: 01-2119480154-42: Keine weiteren relevanten Informationen verfügbar.
12.2 Persistence and degradability	Ecotoxicological data have not been determined specifically for this product. The information provided is based on the knowledge of the components. Product is not readily biodegradable. The main constituents are expected to be inherently biodegradable, but some components that may persist in the environment.
12.3 Bioaccumulative potential	not information available
12.4 Mobility in soil	No information available
12.5 Results of PBT and vPvB assessment	No information available
12.6 Other adverse effects	No information available

SECTION 13: Disposal Considerations

13.1 Waste treatment methods	May not be disposed together with domestic rubbish. Disposal in compliance with federal, state, and local laws. EÄK Waste Product Code : 130899 Ölabfälle, nicht anders spezifiziert
------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SECTION 14: Transport information in accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1 UN-No	Not classified as dangerous in the meaning of transport regulations
14.2 UN proper shipping name	No
14.3 Transport hazard class	No transport regulations.
14.4 Packing group	-
14.5 Environmental hazards	n.a.
14.6 Special precautions for user	No information available
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture	DE: water polluting category: 2 DE: Employment restrictions concerning juveniles must be observed (§ 22 JArbSchG).
15.2 Chemical safety assessment	There is no information available

SECTION 16: Further Information

EC-Safety Data Sheet conforming to 1907/2006/EG, Article 31

Ciric LM 1 CK

Date 31.07.2019 Page 5

16.1 Full text of the dangers in section 2 and 3

GHS07 Irritation

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

P264 Wash skin thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves, clothing, eye and face protection.

P305+P351+P338 For a few minutes, rinse cautiously with water: In case of contact with eyes. Remove contact lenses if possible. Continue rinsing.

P337+P313 If eye irritation persists: Seek medical advice.

P501 Dispose of contents and container in accordance with local regulations of the disposal.

16.2 Further Information

The information in this SDS is correct to the best of our knowledge at the time of its publication. The information is intended to give you advice about the safe handling of the product named in this safety during storage, processing, transport and disposal. The details are not transferable to other products. The information given in this safety combination with any other materials or in any process, or undergoes processing, can use the information in this SDS, to the extent that it does not specifically indicate otherwise, are not transferred to the new made material. The material data referred to in item 9 are safety information, but no guarantees on properties. Warranties are excluded without clarification of the technical intended use and the operating conditions. If you have further questions we are available.