

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)

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

1.1 Product identifier

Product name: Anti-Seize Assembly Paste

UFI: QSQ0-90P7-Y00A-4WDT

Product code: 260000

Color: Gray

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

Identified uses

Corrosion inhibitor. Lubricating agent

When using Anti-Seize on chrome-nickel steel, the formation of chromium(VI) can occur above 400°C.

1.3 Details of the supplier of the safety data sheet

Supplier

KS TOOLS Werkzeuge-Maschinen GmbH

Seligenstädter Grund 10 - 12

63150 Heusenstamm

Tel.: 06104 4974-0 Fax: 06104 4974-11

Mail: aftersales@kstools.com

1.4 Emergency telephone number

Telephone number: EMERGENCY CONTACT – UK, UAE,

South Africa (24h): Tel: ++44 1865407333 (English) TRANSPORT EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Eye Dam. 1, H318

Aquatic Acute 1, H400

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.



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2.2 Label elements

Hazard pictograms:





Signal word: Danger

Hazard statements: H318 - Causes serious eye damage.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention: P280 - Wear eye or face protection.

P273 - Avoid release to the environment.

Response: P391 - Collect spillage.

> P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Contains Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts.

Storage: Not applicable.

P501 - Dispose of waste according to applicable legislation. Disposal:

calcium dihydroxide Hazardous ingredients:

Supplemental label

elements: May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

None known.



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SECTION 3: Composition/information on ingredients

3.2 Mixtures: Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
calcium dihydroxide	REACH#: 01-2119475151-45 EG: 215-137-3 CAS: 1305-62-0	<10	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	-	[1] [2]
copper	REACH#: 01-2119480154-42 EG: 231-159-6 CAS: 7440-50-8	≤5	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	ATE [Oral] = 500 mg/kg M [Akut] = 10	[1] [2]
aluminium powder (stabilised)	REACH #: 01-2119529243-45 EG: 231-072-3 CAS: 7429-90-5 Verzeichnis: 013- 002-00-1	≤5	Flam. Sol. 1, H228 Water-react. 2, H261	-	[2]
zinc oxide	REACH #: 01-2119463881-32 EG: 215-222-5 CAS: 1314-13-2 Verzeichnis: 030-013-00-7	≤3	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Akut] = 1 M [Chronisch] = 1	[1] [2]
Benzenesulfonic acid, di- C10-18-alkyl derivs, calcium salts	EG: 298-637-4 CAS: 93820-57-6	<1	Skin Sens. 1, H317 See Section 16 for the full text of the H statements declared above.	-	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.



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SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: Get medical attention immediately. Call a poison center or physician. Immediately flush

eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns

must be treated promptly by a physician.

Inhalation: Get medical attention immediately. Call a poison center or physician. Remove victim to

fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Get medical attention immediately. Call a poison center or physician. Flush contaminated

skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing

before reuse. Clean shoes thoroughly before reuse.

Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth

with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing

such as a collar, tie, belt or waistband.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable

training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth

resuscitation. Wash contaminated clothing thoroughly with water before

removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following: pain, watering, redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following: pain or irritation redness blistering

may occur

Ingestion: Adverse symptoms may include the following: stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.



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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture:

In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products:

Decomposition products may include the following materials: metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.



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6.3 Methods and materials for containment and cleaning up:

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections:

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling

Protective measures:

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

Do not reuse container.

Advice on general occupational hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E1	100 tonne	200 tonne



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7.3 Specific end use(s)

Recommendations:

When using Anti-Seize on chrome-nickel steel, the formation of chromium(VI) can occur above 400°C.

Industrial sector specific solutions:

Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Occupational exposure	
Product/ingredient name	Exposure limit values
calcium dihydroxide	DFG MAC-values list (Germany, 10/2021).
	TWA: 1 mg/m³ 8 hours. Form: inhalable fraction
	PEAK: 2 mg/m³, 4 times per shift, 15 minutes. Form: inhalable
	TRGS 900 OEL (Germany, 7/2021).
	TWA: 1 mg/m³ 8 hours. Form: inhalable fraction
	PEAK: 2 mg/m³ 15 minutes. Form: inhalable fraction
copper	DFG MAC-values list (Germany, 10/2021). [Copper and ist inorganic compounds]
	PEAK: 0.02 mg/m³, 4 times per shift, 15 minutes. Form: respirable fraction
	TWA: 0.01 mg/m³ 8 hours. Form: respirable fraction
aluminium powder (stabilised)	TRGS 900 OEL (Germany, 7/2021). []
(0.000.000.00)	TWA: 1.25 mg/m³ 8 hours. Form: alveolar fraction
	PEAK: 2.5 mg/m³ 15 minutes. Form: alveolar fraction
	PEAK: 20 mg/m³ 15 minutes. Form: inhalable fraction
	TWA: 10 mg/m³ 8 hours. Form: inhalable fraction
	DFG MAC-values list (Germany, 10/2021). [Aluminium, Aluminium oxide and Aluminium hydroxide, containing dusts]
	TWA: 4 mg/m³ 8 hours. Form: inhalable dust
	TWA: 1.5 mg/m ³ 8 hours. Form: respirable dust



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zinc oxide	DFG MAC-values list (Germany, 10/2021). [Zinc and its inorganic compounds]					
	TWA: 2 mg/m³ 8 hours. Form: inhalable fraction					
	PEAK: 4 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction					
	PEAK: 0.4 mg/m³, 4 times per shift, 15 minutes. Form: respirable fraction					
	TWA: 0.1 mg/m³ 8 hours. Form: respirable fraction					
chromium (VI) trioxide	[Air contaminant - at Temperature (°C):] TRGS 910 (Germany, 7/2021). []					
	PEAK: 8 μg/m³, 0 times per shift, 15 minutes. Form: inhalable fraction					
	TWA-TC: 1 μg/m³ 8 hours. Form: inhalable fraction					

Recommended monitoring procedures:

If this product contains ingredients with exposure limits, personal, workplace atmosphere 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. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/	Туре	Exposure	Value	Population	Effects
ingredient name					
Calciumdihydroxid	DNEL	Long term Inhalation	1 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	4 mg/m³	Workers	Local
	DNEL	Short term Inhalation	4 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	1 mg/m³	General population	Local
	DNEL	Long term Inhalation	1 mg/m³	Workers	Local
	DNEL	Short term Inhalation	4 mg/m³	General population	Local



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				T	1
copper	DNEL	Short term Inhalation	1 mg/m³	General population	Local
	DNEL	Long term Inhalation	1 mg/m³	General population	Local
	DNEL	Short term Inhalation	20 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	20 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	137 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	137 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	273 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	273 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	0.041 mg/ kg bw/day	General population	Systemic
zinc oxide	DNEL	Long term Inhalation	0.5 mg/m ³	Workers	Local
	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.5 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls:

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.



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Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Recommended: 1 - 4 hours (breakthrough time): nitrile rubber; 4 - 8 hours (breakthrough time): Viton®/butyl rubberk

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection:

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Recommended: organic vapor (Type AX) and particulate filter

Environmental exposure controls:

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

<u>Appearance</u>

Physical state: Liquid

Color: Gray

Odor: Characteristic

Odor threshold: Not available

Melting point/freezing point: Not available



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Initial boiling point and boiling range: Not available

Flammability: Not available

Upper/lower flammability or

explosive limits: Not available

Flash point: Closed cup: 170°C (338°F)

Auto-ignition temperature: Not applicable

Decomposition temperature : Not available

pH: Not available

Viscosity: Not applicable

Solubility(ies): Not available

Solubility in water: Not available

Miscible with water: No

Partition coefficient:

n-octanol/ water: Not applicable

Vapor pressure: Not available

Relative density: Not available

Density: 1.2 g/cm³ [20°C (68°F)]

Vapor density: Not available

Explosive properties: Not available

Oxidizing properties: Not available

Particle characteristics

Median particle size: Not applicable

9.2 Other information

SADT: Not available

SAPT: Not available

SECTION 10: Stability and reactivity

10.1 Reactivity:

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability:

The product is stable.



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10.3 Possibility of hazardous reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid:

No specific data.

10.5 Incompatible materials:

No specific data.

10.6 Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
calcium dihydroxide	LD50 Oral	Rat	7340 mg/kg	-

Conclusion/Summary: Not available.

Acute toxicity estimates

Route	ATE value	
Oral	13333.33 mg/kg	

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
calcium dihydroxide	Eyes - Severe irritant	Rabbit	-	10 mg	-
zinc oxide	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Conclusion/Summary: Not available

Sensitization

Conclusion/Summary: Not available

Mutagenicity

Conclusion/Summary: Not available



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Carcinogenicity

Conclusion/Summary: Not available

Reproductive toxicity

Conclusion/Summary: Not available

Teratogenicity

Conclusion/Summary: Not available

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
calcium dihydroxide	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure:

Not available.

Potential acute health effects

Eye contact: Causes serious eye damage.

Inhalation: No known significant effects or critical hazards.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following: pain, watering, redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following: pain or irritation, redness, blistering

may occur

Ingestion: Adverse symptoms may include the following: stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure:

Potential immediate effects: Not available

Potential delayed effects: Not available



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Long term exposure:

Potential immediate effects: Not available

Potential delayed effects: Not available

Potential chronic health effects:

Not available.

Conclusion/Summary: Not available.

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposur e
calcium dihydroxide	Acute LC50 33884.4 μg/l Fresh water	Fish - Clarias gariepinus - Fingerling	96 hours



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copper	Acute EC50 1100 μg/l Fresh water	Aquatic plants - Lemna minor	4 days
	Acute EC50 2.1 μg/l Fresh water	Daphnia - Daphnia longispina - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute IC50 16 μg/l Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	72 hours
	Acute IC50 5.4 mg/l Marine water	Aquatic plants - Plantae - Exponential growth phase	72 hours
	Acute LC50 0.072 µg/l Marine water	Crustaceans - Amphipoda - Adult	48 hours
	Acute LC50 7.56 μg/l Marine water	Fish - Periophthalmus waltoni - Adult	96 hours
	Chronic NOEC 2.5 µg/l Marine water	Algae - Nitzschia closterium - Exponential growth phase	72 hours
	Chronic NOEC 7 mg/l Fresh water	Aquatic plants - Ceratophyllum demersum	3 days
	Chronic NOEC 0.02 mg/l Fresh water	Crustaceans – Cambarus bartonii - Mature	21 days
	Chronic NOEC 2 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0.8 µg/l Fresh water	Fish - Oreochromis niloticus - Juvenile (Fledgling, Hatchling, Weanling)	6 weeks
zinc oxide	Acute IC50 1.85 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute LC50 98 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
zinc oxide	-	28960	high

12.4 Mobility in soil

Soil/water partition coefficient (KOC):

Not available

Not available



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12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste:

The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC)

Waste code	Waste designation
12 01 12*	spent waxes and fats

Packaging

Methods of disposal:

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
15 01 02	plastic packaging



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Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN3077	UN3077	UN3077
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper, zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper, zinc oxide)	Environmentally hazardous substance, solid, n.o.s. (copper, zinc oxide)
14.3 Transport	9	9	9
hazard class(es)	★	★	★
14.4	III	III	III
Packing group			
14.5	Yes.	Yes.	Yes.
Environmental	copper, zinc oxide	copper, zinc oxide	
hazards			

Additional information

ADR/RID: This product is not regulated as a dangerous good when transported in sizes of

≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1,

4.1.1.2 and 4.1.1.4 to 4.1.1.8. Hazard identification number: 90

Limited quantity: 5 kg

Special provisions: 274, 335, 601, 375

Tunnel code: (-)

ADR Classification Code: M7

IMDG: This product is not regulated as a dangerous good when transported in sizes of

≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1,

4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules: F-A, S-F

Special provisions: 274, 335, 966, 967, 969

IATA: This product is not regulated as a dangerous good when transported in sizes of

≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1,

5.0.2.6.1.1 and 5.0.2.8.

Quantity limitation Passenger and Cargo Aircraft: 400 kg. Packaging instructions:

956. Cargo Aircraft Only: 400 kg. Packaging instructions: 956.

Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y956.

Special provisions: A97, A158, A179, A197



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)

14.6 Special precautions for user:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments:

Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Not applicable.

Restrictions on Manufacture, Marketing and Use

Country Product name Conc. Designation Usage

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air:

Listed

Industrial emissions (integrated pollution prevention and control) - Water

Listed

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

F1

National regulations

Storage class (TRGS 510) : 10

Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

Danger criteria

Category	Reference number
E1	1.3.1

Hazard class for water : 3

Technical instruction on TA-Luft Number 5.2.5: 5-10%

air quality control: TA-Luft Class III - Number 5.2.2: 2.5-5%

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)

Eurasian: Russian Federation inventory: Not determined.

Economic Union

Japan : Japan inventory (CSCL): All components are listed or exempted.

Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Thailand: Not determined.

Turkey : All components are listed or exempted.

United States : All components are active or exempted.

Viet Nam : All components are listed or exempted.

15.2 Chemical Safety Assessment:

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation

(EC) No.1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Eye Dam. 1, H318	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 2, H411	Calculation method



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)

Full text of abbreviated H statements

H228	Flammable solid.
H261	In contact with water releases flammable gas.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Flam. Sol. 1H335	FLAMMABLE SOLIDS - Category 1
Skin Irrit. 2H410	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3
Water-react. 2	SUBSTANCES AND MIXTURES, WHICH IN CONTACT WITH WATER, EMIT FLAMMABLE GASES - Category 2

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