KRONPHOS PZC
Safety Data Sheet

Date of issue: 8/21/2018 Version: 1.0

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

1.1. Product identifier

Product form : Substance

Trade name : KRONPHOS PZC

Type of product : Mineral

Formula : Mixture

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

1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use,Consumer use

Industrial/Professional use spec : Use resulting in inclusion into or onto a matrix

Use of the substance/mixture : Paints
Ink
Fertilizer
Metal surface treatment products, including galvanic and electroplating products

Function or use category : Pigment, Corrosion inhibitor, Formulation of preparations, Fertilizer, Metal surface treatment products, including galvanic and electroplating products, Use as laboratory reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
Zavod Kronakril
11d Stroiteley
152300 Yaroslavl obl, Tutaev, Russia
T +7 4852 985895- F +7 4852 981895
mail@kronakril.com - www.kronakril.ru

Sales department
Zavod Kronakril
11d Stroiteley
152300 Yaroslavl obl, Tutaev, Russia
T +7 4852 985895- F +7 4852 981895
mail@kronakril.com - www.kronakril.ru

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment — Acute Hazard, Category 1
Hazardous to the aquatic environment — Chronic Hazard, Category 1

Full text of H statements : see section 16

H400 H410

Adverse physicochemical, human health and environmental effects

Very toxic to aquatic life with long lasting effects. M-Factor acute (GHS-UN)=1.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS09

Signal word (CLP) : Warning

Hazard statements (CLP) : H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P391 - Collect spillage.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards not contributing to the classification: None under normal conditions. Do not allow product to spread into the environment.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name : KRONPHOS PZC

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
trizinc bis(orthophosphate) (Constituent)	(CAS-No.) 7779-90-0 (EC-No.) 231-944-3 (EC Index-No.) 030-011-00-6	> 55	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
zinc oxide (Impurity)	(CAS-No.) 1314-13-2 (EC-No.) 215-222-5	< 3	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Dicalcium phosphate	CAS N°: 7757-93-9. EINECS N° 231-826-1.	>45	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Remove person to uncontaminated area. Remove victim to fresh air. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. In case of doubt or persistent symptoms, consult always a physician. Place under medical control.

First-aid measures after skin contact : Rinse and then wash skin thoroughly with water and soap. If on skin, take off contaminated clothing.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles : Consult an eye specialist.

First-aid measures after ingestion : Rinse mouth thoroughly with water. Immediately consult a doctor/medical service. Place under medical control. Treat symptomatically. Gastrointestinal complaints.

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

Symptoms/effects : Zinc. Intoxication.

Symptoms/effects after inhalation : Metal fume fever. None under normal use. May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.

Symptoms/effects after skin contact : None under normal conditions. Slight irritation.

Symptoms/effects after eye contact : mild eye irritation. redness, itching, tears.

Symptoms/effects after ingestion : Digestive disorder.

Chronic symptoms : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.

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

Treat symptomatically. Specific treatment is necessary. Zinc.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Product. Non flammable. Not combustible. All extinguishing media allowed.

Unsuitable extinguishing media : Apply aqueous extinguishing media carefully. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Contain the extinguishing fluids by bunding (the product is hazardous for the environment).

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard. Non flammable. Not combustible. Flame retardant.

Explosion hazard : No direct explosion hazard. Avoid creating or spreading dust.

Reactivity in case of fire : Keep the substance free from contamination. Prevent soil and water pollution. Dam up the

liquid spill. Contain the spilled material by bunding.

Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Waterproof retention basin. Do not allow large quantities, as are, to spread into the environment. Do not discharge into drains or rivers. Not degradable in the soil. Contain the extinguishing fluids by bunding. Do not allow run-off from fire fighting to enter drains or water courses. Very toxic to aquatic life with long lasting effects.

Firefighting instructions : Not combustible. Flame retardant. Isolate from fire, if possible, without unnecessary risk. Keep upwind. Avoid raising dust. Very toxic to aquatic life with long lasting effects. Do not allow product to spread into the environment. Soil-Contaminating Substances. Dike and contain spill. Recover as much product as possible. Carefully collect remainder. Contain the extinguishing fluids by bunding (the product is hazardous for the environment). Place in an appropriate container and dispose of the contaminated material at a licensed site. Do not allow run-off from fire-fighting to enter drains or water courses. Do not dispose of fire-fighting water in the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Extra personal protection: complete protective clothing including self-contained breathing apparatus.

Other information : Do not touch or walk on the spilled product. Dike and contain spill.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : . Individual protection measures/Personal protective equipment. Avoid dust formation.
. Measures for environmental protection. Do not discharge into drains or the environment.

6.1.1. For non-emergency personnel

Protective equipment : Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material.

Emergency procedures : . Keep container tightly closed and dry.
. Isolate from fire, if possible, without unnecessary risk.
. Do not touch or walk on the spilled product.
. Ventilate spillage area.
. Unauthorized persons are not admitted.

Measures in case of dust release : Clean up methods. Avoid dust formation. Dust production: dust mask with filter type: P1, P2, P3 (Refer to chapter 8).

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : . Keep upwind.
. Do not allow to enter drains or water courses.
. Contain the spilled material by bunding (product is hazardous for the environment).
. Use closed containers for waste packaging and confinement.

6.2. Environmental precautions

Contain the spilled material by bunding. Do not allow to enter drains or water courses. Danger of pollution of drinking water when product enters the soil. Do not discharge into drains or the environment. Sweep or shovel spills into appropriate container for disposal. Minimize water use for cleaning. Get the package away from the fire if this can be done without risk. Assure discharge complies with applicable regulations. Soil-Contaminating Substances.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Dike and contain spill. Collect all waste in suitable and labelled containers and dispose according to local legislation.

Methods for cleaning up : Mechanically recover the product. Sweeping or shovelling without dust for disposal. Dust deposited may be vacuum cleaned or the area hosed down with water. Use closed containers for waste packaging and confinement.

Other information : . Do not discharge into drains or the environment.
. Do not bring to dump. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : . Avoid dust production.
. Avoid all unnecessary exposure.
. Avoid raising dust.
. Avoid breathing dust, mist or spray.
. Working area. Local exhaust and general ventilation must be adequate to meet exposure standards. If the ventilation is suitable, it is not essential to wear respiratory equipment. In case

of insufficient ventilation, wear suitable respiratory equipment. Do not flush into surface water or sewer system.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Keep container tight closed. Keep away from food, drink and animal feeding stuffs. Take precautionary measures to prevent the formation of static electricity.

Hygiene measures : . Do not eat, drink or smoke when using this product.
. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Materials that will not burn. Store in original container. Store in tightly closed containers. Store in a dry place. Keep away from food, drink and animal feeding stuffs. The floor of the depot should be impermeable and designed to form a water-tight basin. Use care during processing to minimize generation of dust.

Storage conditions : The product is stable at normal handling and storage conditions. Store in a dry, cool area. Store in a well-ventilated place. Keep container tightly closed.

Incompatible products : None under normal use. Keep away from: acids and bases, Ammonia solution. Soluble in : acids and bases, Ammonia solution.

Packaging materials : Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

KRONPHOS PZC		
EU	Assessed dust without specific effect (other particles, not classified anywhere else) (inhalable dust): 10 mg/m³	
trizinc bis(orthophosphate) (7779-90-0)		
France	Local name	Poussières réputées sans effet spécifique
France	VME (mg/m³)	10 mg/m³ 5 mg/m³ (fraction alvéolaire)
France	Note (FR)	Valeurs règlementaires contraignantes
Germany	Local name	Allgemeiner Staubgrenzwert
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	< 10 mg/m³ inhalable dust TRGS 559
Germany	TRGS 900 Occupational exposure limit value (ppm)	< 3 mg/m³ respirable dust TRGS 559
Germany	MAK (DE) dust (Occupational Exposure Limits): 6 mg/m3	
United Kingdom	Local name	Dust
United Kingdom	Dust (UK) (WEL (8 hours ref) TWA of inhalable dust): 10 mg/m3 Dust (UK) (WEL (8 hours ref) 8-hour TWA of respirable dust): 4 mg/m3	
USA - ACGIH	Local name	Total dust (no special effect)
USA - ACGIH	ACGIH TWA (mg/m³)	< 10 mg/m³

Monitoring methods	
Monitoring methods	Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents

KRONPHOS PZC	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	No observed effects
Acute - systemic effects, inhalation	No observed effects

KRONPHOS PZC	
Acute - local effects, dermal	No observed effects
Acute - local effects, inhalation	No observed effects
Long-term - systemic effects, dermal	DNEL skin insoluble Zn = 5000 mg Zn/day (83 mg Zn/kg bodyweight/day)
Long-term - local effects, dermal	No observed effects
Long-term - systemic effects, inhalation	DNEL (Workers) Inhalation of dust Insoluble Zn = 5 mg/m3
Long-term - local effects, inhalation	No observed effects
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	No observed effects
Acute - systemic effects, inhalation	No observed effects
Acute - systemic effects, oral	No observed effects
Acute - local effects, dermal	No observed effects
Acute - local effects, inhalation	No observed effects
Long-term - systemic effects,oral	DNEL oral Insoluble Zinc = 50 mg Zn/day (0.83 mg Zn/kg bodyweight/day)

Long-term - systemic effects, inhalation	DNEL inhalation Insoluble (General population) Zn = 2.5 mg/m3
Long-term - systemic effects, dermal	DNEL skin insoluble Zn = 5000 mg Zn/day (83 mg Zn/kg bodyweight/day)
Long-term - local effects, dermal	No observed effects
Long-term - local effects, inhalation	No observed effects
PNEC (Water)	
PNEC aqua (freshwater)	0.0206 mg/l Zinc Concentration
PNEC aqua (marine water)	0.0061 mg/l Zinc Concentration
PNEC (Sediment)	
PNEC sediment (freshwater)	117.8 mg/kg dwt Zinc Concentration
PNEC sediment (marine water)	56.5 mg/kg dwt Zinc Concentration
PNEC (Soil)	
PNEC soil	35.6 mg/kg dwt Zinc Concentration
PNEC (Oral)	
PNEC oral (secondary poisoning)	Not potentially bioaccumulable
PNEC (STP)	
PNEC sewage treatment plant	0.1 mg/l Zinc Concentration
PNEC (additional information)	
Additional information	PNEC. Value. Zinc Concentration

8.2. Exposure controls

Appropriate engineering controls:

Handle product only in closed system or provide appropriate exhaust ventilation. Containment as appropriate.
. Exposure controls.
. Worker. Ensure good ventilation of the work station. Observe strict hygiene. Avoid raising dust. Extraction to remove dust at its source. Atmospheric monitoring at regular intervals.
. Environmental exposure controls. Do not discharge the product into the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.
. Air. Use a dust filter. Local exhaust and general ventilation must be adequate to meet exposure standards. Efficiency >84%.
. Water. Dam up the liquid spill. Assure effluents are compliant with applicable regulations.
. Soil. Waterproof retention basin. Dike and contain spill.
. Risk Management Measures. Applicable. ISO 14001. ISO 9001. IPPC. Directive 2012/18/EU (SEVESO III).

Personal protective equipment:

Dust formation: dust mask.

Materials for protective clothing:

When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection must be worn. Efficiency >90%

Hand protection:

Use loose-fitting rubber or leather gloves. Efficiency >90%. Chemical resistant gloves (according to European standard NF EN 374 or equivalent)

Eye protection:

Safety glasses. optional

Type	Use	Characteristics	Standard
Safety glasses	Fine dust	With side shields	EN 166

Skin and body protection:

Protective clothing (with elasticated cuffs and closed neck): textiles, Tyvek® Gown/Coveralls... Efficiency >90%

Respiratory protection:

In case of excessive dust production. In the event of insufficient ventilation: > OEL/DNEL. Wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Half-mask, Full face mask	Type P1	Dust protection, Efficiency 75%	EN 136, EN 140, EN 143, EN 149
Half-mask, Full face mask	Type P2	Dust protection, Efficiency 90%	EN 136, EN 140, EN 143, EN 149
Half-mask	Type P3	Dust protection, Efficiency 97.5%	EN 140, EN 143, EN 149
Full face mask	Type P3	Dust protection, Efficiency 97.5%	EN 136

Personal protective equipment symbol(s):

Environmental exposure controls:

Avoid release to the environment. Avoid creating or spreading dust. Environmental exposure controls: water, air, soil. Efficiency >90%.

Other information:

Training staff on good practice. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Normal overalls. Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Colour	: white.
Odour	: odourless.
Odour threshold	: Not relevant
pH	: 6 – 8 ISO 787/9 10g/100g suspension
pH solution	: Not relevant
Relative evaporation rate (butylacetate=1)	: Not relevant
Relative evaporation rate (ether=1)	: Not relevant
Melting point	: 846 ℃
Freezing point	: Not relevant
Boiling point	: Not relevant
Flash point	: Not applicable, Not combustible
Critical temperature	: Not relevant
Auto-ignition temperature	: Not applicable, Not combustible
Decomposition temperature	: > 900 ℃None under nor mal use
Flammability (solid, gas)	: Not relevant Not flammable
Vapour pressure	: Negligible vapour pressure at ambient conditions, Not applicable
Vapour pressure at 50 ℃	: Not relevant
Critical pressure	: Not relevant
Relative vapour density at 20 ℃	: Not relevant
Relative density	: Not relevant
Relative density of saturated gas/air mixture	: Not relevant
Density	: 3.3 g/ml ISO 787/10
Relative gas density	: Not relevant
Solubility	: Very slightly soluble in: water. Water: < 30 mg/l Organic solvent:Insoluble
Log Pow	: Not applicable, Inorganic Particulate Substances
Log Kow	: Inorganic Particulate Substances, Not applicable
Viscosity, kinematic	: Not relevant
Viscosity, dynamic	: Not relevant
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not relevant Not relevant
Lower explosive limit (LEL)	: Not relevant
Upper explosive limit (UEL)	: Not relevant

9.2. Other information

VOC content	: Not applicable: solid mineral
Fat solubility	: Insoluble in oils/fats

Bulk density	: ≈ 0,6 g/cm³
Refractive index	: ≈ 1.6
Other properties	: Dehydration - 70-600°C Zn3(PO4)2,4H2O - 120-600°C Zn3(PO4)2,3H2O - 160-600°C Zn3(PO4),2H2O.
Additional information	: Take precautionary measures to prevent the formation of static electricity

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions. The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use: Handling and storage.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Take precautionary measures to prevent the formation of static electricity.

10.5. Incompatible materials

Acids and bases. Strong acids. Strong bases. Ammonia solution.

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 (oral)	: Not classified (Based on available data, the classification criteria are not met: > 2 000 mg/kg bodyweight)
Acute toxicity (dermal)	: Not classified (Not classified. insoluble in oils/fats, insoluble in water. Based on available data, the classification criteria are not met: . . LD50 dermal >2000 mg/kg bodyweight)
Acute toxicity (inhalation)	: Not classified (Not classified. Based on available data, the classification criteria are not met. . LC50 inhalation rat (Dust/Mist - mg/l/4h) >5.7 mg/l 4H Classification by analogy: ZnO (Klimisch and all 1982))

KRONPHOS PZC	
LD50 oral rat	> 5000 mg/kg > 5000 mg/kg zinc phosphate (OECD 401 method)
LD50 dermal	> 2000 mg/kg Classification by analogy: ZnO, No observed effects
LC50 inhalation rat (Dust/Mist - mg/l/4h)	5.7 mg/l/4h Classification by analogy: ZnO (Klimisch et al. 1982)

Skin corrosion/irritation	: Not classified (Not irritating. . Skin. No observed effects, Classification by analogy: Löser 1977, Lansdown 1991. . Respiratory tract. No observed effects. Classification by analogy: ZnO (Klimisch et al. 1982)) pH: 6 - 8 ISO 787/9 10g/100g suspension
Serious eye damage/irritation	: Not classified (Not irritating to eyes (Mirbeau et all, 1999). OECD 405 method) pH : 6 - 8 ISO 787/9 10g/100g suspension
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met. . Respiratory tract. No information available. . Skin. No sensitisation responses were observed. Van Huygevoort AHBM 1999)
Germ cell mutagenicity	: Not classified (No observed effects, Classification by analogy: . compoundszinc. Inconclusive data)
Carcinogenicity	: Not classified (Inconclusive data. Technical impossibility to obtain the data)
Reproductive toxicity	: Not classified (Inconclusive data. No observed effects. . Fertility. NOAEL (Oral) >50 mg/kg bodyweight/day. . Developmental toxicity. NOAEL (subacute, oral, rat) NOAEL> 20mg/kg bodyweight/day)
STOT-single exposure	: Not classified (No data available. No observed effects. Based on available data, the classification criteria are not met. Not classified: By analogy ZnO)
STOT-repeated exposure	: Not classified (No observed effects. No data available. Based on available data, the classification criteria are not met. Not classified: By analogy ZnO)
Additional information	: Specific target organ toxicity (repeated exposure) - Description NOAEC respiratory system, lungs

NOAEC, Inhalation of dust Guinea pig, 2.7 mg/m3 ZnO (5 days)
NOAEL cardiovascular system, digestive system, pancreas, blood system
NOAEL (oral rat, 90 days) 13.3 mg Zn/kg, mg/kg bw/day)

Aspiration hazard : Systemic effect. long term.
. DNEL (Workers) Inhalation of dust Insoluble Zn = 5 mg/m3.
. DNEL inhalation Insoluble (General population) Zn = 2.5 mg/m3

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity : (freshwater) Fish: 5 Species, aquatic invertebrates: 5 Species, algae: 1 Species.

Chronic aquatic toxicity : NOEC chronic **(freshwater)** fish: 7 Species,
NOEC chronic (freshwater) aquatic invertebrates: 13 Species,
NOEC chronic (freshwater) algae: 2 Species,

NOEC (additional information). **(marine water)**
. NOEC fish: 1 Species. Zinc = 0.025 mg Zn/l.
. NOEC aquatic invertebrates: 26 Species, 0.0056<Zn mg/l<0.9 26 Species.
. NOEC aquatic algae 12 Species 0.0078<Zn mg/l<0.67

Not rapidly degradable

KRONPHOS PZC	
LC50 fish 1	0.169 mg/l a zinc Oncorhynchus mykiss (Rainbow trout)
LC50 fish 2	0.78 mg/l a zinc Pimephales promelas
EC50 Daphnia 1	0.147 mg/l a zinc Ceriodaphnia dubia
EC50 72h algae (1)	0.136 mg/l a zinc Pseudokirchneriella subcapitata (OECD 201 method)
NOEC chronic fish	0.044 mg/l a zinc (freshwater)
NOEC chronic crustacea	0.037 mg/l a zinc (freshwater)
NOEC chronic algae	0.019 mg/l a zinc Pseudokirchneriella subcapitata (freshwater)

12.2. Persistence and degradability

KRONPHOS PZC	
Persistence and degradability	Not relevant. Inorganic Particulate Substances. Very toxic to aquatic life with long lasting effects.

12.3. Bioaccumulative potential

KRONPHOS PZC	
Log Pow	Not applicable, Inorganic Particulate Substances
Log Kow	Inorganic Particulate Substances, Not applicable
Bioaccumulative potential	not bioaccumulable.

12.4. Mobility in soil

KRONPHOS PZC	
Ecology - soil	No additional information available. . Soil. K Zn soil Partition coefficient Solid/Water (log K Zn value=2.2, 158.5 l/kg). . PNEC add. sediment. . PNEC add. =. Freshwater, marine water.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects : None known.

Additional information : Do not discharge the product into the environment.
. M-Factor acute (CLP). M-Factor acute (GHS-UN)=1

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : USA. RCRA. Not applicable.

Waste treatment methods : Comply with local regulations for disposal. Dispose of this material and its container at hazardous or special waste collection point.

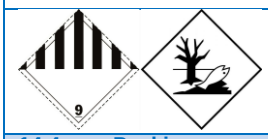
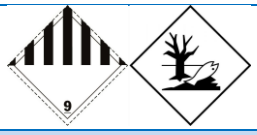
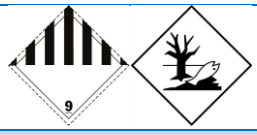
Sewage disposal recommendations : Hazardous waste. Cleaning residues containing this material may be classified hazardous waste.

Product/Packaging disposal recommendations : Hazardous waste. Dispose in a safe manner in accordance with local/national regulations. Dispose of materials or solid residues at an authorized site.

Ecology - waste materials : Do not discharge the product into the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number		
3077	3077	3077
14.2. UN proper shipping name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Environmentally hazardous substance, solid, n.o.s.
Transport document description		
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s., 9, III
14.3. Transport hazard class(es)		
9	9	9
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : M7
Limited quantities (ADR) : 5kg
Mixed packing provisions (ADR) : MP10

Transport category (ADR) : 3
Special provisions for carriage - Loading, unloading and handling (ADR): CV13
Tunnel restriction code (ADR) : -
EAC code : 2Z

- Transport by sea

EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW23

- Air transport

PCA Limited quantities (IATA) : Y956
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 956
PCA max net quantity (IATA) : 400kg
CAO packing instructions (IATA) : 956
CAO max net quantity (IATA) : 400kg

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

15.1.1. EU-Regulations

VOC content : Not applicable: solid mineral

Seveso Information : SEVESO Upper-tier >200 T, SEVESO LOW >100T

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out

SECTION 16: Other information

Other information : **. EU**.
. *RoHS "2" Directive 2015/863/EU*. Meet the legal requirements.
Contains lead less than 0.1% . Contains cadmium less than 0.01% .
. *Recycling. end-of-life vehicles*. Directive 2000/53/EC Modified. Meet the legal requirements.
. *Seveso III* Part I (Categories of dangerous substances).
Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1.
. **Germany**. Hazardous to water (WGK 2). ID No. 5067.
. **Australia**. Listed on the AICS (Australian Inventory of Chemical Substances).
. **Canada**. Listed on the Canadian DSL (Domestic Substances List).
. **Korea**. Listed on the Korean ECL (Existing Chemicals List). ECL/MOE Yes KE-34945.
. **USA**. Classification concerning the environment: not applicable.
. *Classification and labelling (GHS-USA):* Not classified.
. GHS-USA labelling: None.
. Hazard pictograms (GHS-USA): None.
. Signal word (GHS-USA): None.
. Hazard statements (GHS-USA): None.
. *Registered in the TSCA inventory*.
. *CERCLA* Toxicity 2 - Flammability 0 - Reactivity 0 - Persistence 3 .
. *NFPA* ratings (scale 0-4): Health=0 - Fire=0 - Reactivity=0.
. *HMIS*: Hazard Rating: H=0 - F=0 - PH=0.
. *RTECS* no TD 0590000.
. **Japan**. Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory. 1-526.
. **Malaysia**. Malaysian Classified Chemical. EHSNR Yes.
. **New Zealand**. HSNO HSR003554. Listed on NZIoC (New Zealand Inventory of Chemicals).
. **Philippines**. Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances).
. **People's Republic of China**. Listed on IECSC.
. **Taiwan**. NECI Yes.
. **Turkey**. Listed on Turkish inventory of chemical.

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.