



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

1.1 Product identifier

Trade name

Octocure ZNO-50

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

Relevant identified uses of the substance or mixture

Industrial raw material

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Tiarco Chemical Europe GmbH

Am Gut Baarking 12

46395 Bocholt

Telephone no. +49 2871 23476-0

Fax no. +49 2871 23476-44

Email office@tiarco.de

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Aquatic Acute 1; H400

Aquatic Chronic 1; H410

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms



GHS09

Signal word

Warning

Hazard statements

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273

Avoid release to the environment.

P391

Collect spillage.

P501

Dispose of contents/container in accordance with local and national regulations.

2.3 Other hazards

No data available.


Octocure ZNO-50
SECTION 3: Composition/information on ingredients
3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures
Chemical characterization

Aqueous dispersion

Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	zinc oxide		
	1314-13-2 215-222-5 030-013-00-7 01-2119463881-32	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 50.00 - < 70.00 %b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	-	M = 1	-

SECTION 4: First aid measures
4.1 Description of first aid measures
General information

In case of persisting adverse effects, consult a physician.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with soap and water. Change contaminated, saturated clothing.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

After ingestion

Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures
5.1 Extinguishing media
Suitable extinguishing media

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel

Refer to protective measures listed in sections 7 and 8.



Octocure ZNO-50

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pump off large amounts. Pick up with absorbent material (e.g. kieselguhr). When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Do not inhale vapours. Provide eye wash fountain in work area. Have emergency shower available. Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Keep from freezing. Protect from direct sunlight.

Recommended storage temperature

Value 5 - 35 °C

Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed.

Inappropriate material Copper, copper alloys; aluminium

Advice on storage assembly

Do not store together with: Acids; oxidizing substances

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	zinc oxide	1314-13-2	215-222-5
List of approved workplace exposure limits (WELs) / EH40			
Zinc oxide, fume			
	STEL	10	mg/m ³
	TWA	5	mg/m ³

DNEL and PNEC values

DNEL values (worker)

No	Substance name	CAS / EC no		
	Route of exposure	Exposure time	Effect	Value
1	zinc oxide			1314-13-2 215-222-5
	dermal	Long term (chronic)	systemic	83 mg/kg/day
	with reference to: Zn Remarks: insoluble			
	inhalative	Long term (chronic)	systemic	5 mg/m ³
	with reference to: Zn Remarks: insoluble			


Octocure ZNO-50
DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	zinc oxide			1314-13-2 215-222-5	
	oral	Long term (chronic)	systemic	0.83	mg/kg/day
	with reference to: Zn Remarks: insoluble				
	dermal	Long term (chronic)	systemic	83	mg/kg/day
	with reference to: Zn Remarks: insoluble				
	inhalative	Long term (chronic)	systemic	2.5	mg/m ³
	with reference to: Zn Remarks: insoluble				

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	zinc oxide		1314-13-2 215-222-5	
	water	fresh water	20.6	µg/l
	with reference to: Zn			
	water	marine water	6.1	µg/l
	with reference to: Zn			
	water	fresh water sediment	117.8	mg/kg
	water	marine water sediment	56.5	mg/kg
	with reference to: Zn, dry weight			
	soil	-	35.6	mg/kg
	with reference to: Zn, dry weight			
	sewage treatment plant	-	100	µg/l

8.2 Exposure controls
Appropriate engineering controls

No data available.

Personal protective equipment
Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties

Form/Colour
Liquid
white
Odour
characteristic

**Octocure ZNO-50**

Odour threshold			
No data available			
pH value			
Value	8.0	-	10.0
Boiling point / boiling range			
Value	100	°C	
Reference substance	Water		
Melting point / melting range			
No data available			
Decomposition point / decomposition range			
No data available			
Flash point			
No data available			
Auto-ignition temperature			
No data available			
Oxidising properties			
No data available			
Explosive properties			
No data available			
Flammability (solid, gas)			
No data available			
Lower flammability or explosive limits			
No data available			
Upper flammability or explosive limits			
No data available			
Vapour pressure			
Value	23	hPa	
Reference temperature	20	°C	
Vapour density			
No data available			
Evaporation rate			
No data available			
Relative density			
No data available			
Density			
Value	1.65	-	1.85 g/cm³
Solubility in water			
Remarks	insoluble		
Solubility(ies)			
No data available			
Partition coefficient: n-octanol/water			
No data available			
Viscosity			
No data available			

9.2 Other information

Other information			
No data available.			

**Octocure ZNO-50****SECTION 10: Stability and reactivity****10.1 Reactivity**

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

None, if handled according to intended use.

10.5 Incompatible materials

Acids; oxidizing substances

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	zinc oxide	1314-13-2	215-222-5
LD50	>	5000	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	zinc oxide	1314-13-2	215-222-5
LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 402		
Source	ECHA		

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	zinc oxide	1314-13-2	215-222-5
LC50	>	5.7	mg/l
Duration of exposure		4	h
State of aggregation	Dust/mist		
Species	rat		
Method	OECD 403		
Source	ECHA		

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	zinc oxide	1314-13-2	215-222-5
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	zinc oxide	1314-13-2	215-222-5
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		

**Octocure ZNO-50****Respiratory or skin sensitisation**

No data available

Germ cell mutagenicity

No data available

Reproduction toxicity

No data available

Carcinogenicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information**12.1 Toxicity****Toxicity to fish (acute)**

No data available

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information**Other information**

Do not discharge into the drains or waters and do not store on public depositories.

Ecological data are not available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.



Octocure ZNO-50

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	9
Classification code	M6
Packing group	III
Hazard identification no.	90
UN number	UN3082
Technical name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Danger releasing substance	zinc oxide
Tunnel restriction code	E
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Danger releasing substance	zinc oxide
EmS	F-A+S-F
Label	9
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Danger releasing substance	zinc oxide
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3
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**Octocure ZNO-50****Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is subject to Part I of Annex I, risk category:

E1

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H400

Very toxic to aquatic life.

Department issuing safety data sheet

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Alterations/supplements:

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