

Trade name: Ozon Treatment Catalyst**Product no.:** 638-65232**Current version :** 3.1.0, issued: 14.11.2022**Replaced version:** 3.0.2, issued: 15.09.2021**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

Ozon Treatment Catalyst**1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

General chemical processes

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet**Address**

Shimadzu Europa GmbH

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Information provided by / telephone

Tel.: +49 (0)203 - 7687-0

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 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.

This product does not meet the classification criteria given in the Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

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Signal word

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Hazard statement(s)

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Hazard statements (EU)

EUH210 Safety data sheet available on request.

Precautionary statement(s)

-

Labelling information

The labelling (EU hazard statements) meets the criteria of annex II of Directive (EC) Nr. 1272/2008 (CLP).

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable. The product is not a substance.

3.2 Mixtures**Hazardous ingredients**

Trade name: Ozon Treatment Catalyst**Product no.:** 638-65232**Current version :** 3.1.0, issued: 14.11.2022**Replaced version:** 3.0.2, issued: 15.09.2021**Region:** GB

No	Substance name	Classification (EC) 1272/2008 (CLP)	Additional information	
	CAS / EC / Index / REACH no		Concentration	%
1	trimanganese-tetraoxide			
	1317-35-7 215-266-5 - -	-	>= 10.00 - < 25.00	wt%
2	diiron trioxide			
	1309-37-1 215-168-2 - -	-	>= 50.00 - < 70.00	wt%

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

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

In case of persisting adverse effects, consult a physician. Change contaminated, saturated clothing.

After inhalation

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

After skin contact

Wash off immediately with soap and water.

After eye contact

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

After ingestion

Seek medical advice immediately. Rinse the mouth thoroughly with water. Never give anything by mouth to an unconscious person.

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**

Foam; Carbon dioxide; Extinguishing powder

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixtureIn the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO₂)**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. Ensure adequate ventilation. Avoid dust formation. Keep away from ignition sources.

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

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

Trade name: Ozon Treatment Catalyst**Product no.:** 638-65232**Current version :** 3.1.0, issued: 14.11.2022**Replaced version:** 3.0.2, issued: 15.09.2021**Region:** GB**7.1 Precautions for safe handling****Advice on safe handling**

No special measures necessary if stored and handled as prescribed. Avoid the formation and deposition of dust. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Provide eye wash fountain in work area. Do not inhale dust.

Advice on protection against fire and explosion

No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

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

Requirements for storage rooms and vessels

Store product in closed containers.

Incompatible products

Do not store together with: organic materials; Metal as powder

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	diiron trioxide	1309-37-1	215-168-2
List of approved workplace exposure limits (WELs) / EH40			
	Iron oxide		
	fume		
	Fe		
	WEL short-term (15 min reference period)	10	mg/m ³
	WEL long-term (8-hr TWA reference period)	5	mg/m ³
List of approved workplace exposure limits (WELs) / EH40			
	Rouge		
	total inhalable dust		
	WEL long-term (8-hr TWA reference period)	10	mg/m ³
List of approved workplace exposure limits (WELs) / EH40			
	Rouge		
	respirable dust		
	WEL long-term (8-hr TWA reference period)	4	mg/m ³
2	trimanganese-tetraoxide	1317-35-7	215-266-5
2017/164/EU			
	Manganese and inorganic manganese compounds (as manganese)		
	WEL long-term (8-hr TWA reference period)	0,2 (Inhal)	mg/m ³
2017/164/EU			
	Manganese and inorganic manganese compounds (as manganese)		
	WEL long-term (8-hr TWA reference period)	0,05 (Resp)	mg/m ³
List of approved workplace exposure limits (WELs) / EH40			
	Manganese and its inorganic compounds (as Mn) Inhalable fraction		
	WEL long-term (8-hr TWA reference period)	0.2	mg/m ³
List of approved workplace exposure limits (WELs) / EH40			
	Manganese and its inorganic compounds (as Mn) Respirable fraction		
	WEL long-term (8-hr TWA reference period)	0.05	mg/m ³

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 dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified.

Eye / face protection

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Safety glasses with side protection shield (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). 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. 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.

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**

State of aggregation	
solid	
Form	
solid	
Colour	
black	
Odour	
No data available	
pH value	
No data available	
Boiling point / boiling range	
No data available	
Melting point/freezing point	
No data available	
Decomposition temperature	
No data available	
Flash point	
Not applicable	
Ignition temperature	
No data available	
Flammability	
No data available	
Lower explosion limit	
No data available	
Upper explosion limit	
No data available	
Vapour pressure	
No data available	
Relative vapour density	
No data available	
Relative density	
No data available	
Density	
No data available	
Bulk density	
Value	0.27 - 0.37 kg/l
Solubility in water	
Comments	insoluble
Solubility	
No data available	
Partition coefficient n-octanol/water (log value)	

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No data available

Kinematic viscosity

No data available

Particle characteristics

No data available

9.2 Other information**Other information**

No data available.

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

Keep away sources of ignition.

10.5 Incompatible materials

organic materials

10.6 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity****No Product Name****1 Ozon Treatment Catalyst**

LD50	>	3478	mg/kg
Species	rat		
Source	RTECS		

Acute dermal toxicity

No data available

Acute inhalational toxicity

No data available

Skin corrosion/irritation**No Product Name****1 Ozon Treatment Catalyst**

Evaluation	Irritation is possible.
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Serious eye damage/irritation**No Product Name****1 Ozon Treatment Catalyst**

Evaluation	Irritation is possible.
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Respiratory or skin sensitisation**No Product Name****1 Ozon Treatment Catalyst**

Route of exposure	respiratory tract
Evaluation	Sensitization possible.

Germ cell mutagenicity

No data available

Reproduction toxicity

No data available

Carcinogenicity

No data available

STOT - single exposure

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No data available

STOT - repeated exposure

No data available

Aspiration hazard

No data available

Symptoms related to the physical, chemical and toxicological characteristics

The product can cause skin and eye irritation.

11.2 Information on other hazards**Endocrine disrupting properties**

No data available.

Other information

Exercise customary precautions when handling chemicals.

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 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information**Other information**

Do not discharge product unmonitored into the environment.

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.

Packaging

Residues 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

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The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

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 Maritime transport in bulk according to IMO instruments

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, MIXTURES AND ARTICLES

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	diiron trioxide	1309-37-1	215-168-2	75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

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.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

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 section.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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