



SAFETY DATA SHEET

Version #: 01

Issue date: 21-April-2022

Revision date: -

Supersedes date: -

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

1.1. Product identifier

Trade name or designation of the mixture CARULITE® 600 Catalyst

Registration number -

Synonyms None.

SDS number -

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

Identified uses Air purification media for the destruction of carbon monoxide.

Uses advised against Use in accordance with supplier's recommendations.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name CARUS LLC

Address 315 Fifth Street,
Peru, IL 61354, USA

Telephone +1 815 223-1500 - All other non-emergency inquiries about the product should be directed to the company

e-mail salesmkt@carusllc.com

Website www.carusllc.com

Contact person Shelley Corban

Supplier

Company name CARUS EUROPE S.L.

Address CALLE ROSAL N°4, 1ºB 33009 OVIEDO,
ASTURIAS – SPAIN

Telephone +34 985 78 55 13

Fax +34 985 78 55 10

1.4. Emergency telephone number For Hazardous Materials [or Dangerous Goods] Incidents ONLY

(spill, leak, fire, exposure or accident), call CHEMTREC at
CHEMTREC®, Germany (toll free): 0800-181-7059
CHEMTREC®, Other countries: 001 (703) 527-3887

General in EU 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Specific target organ toxicity - repeated exposure	Category 2 (brain)	H373 - May cause damage to organs (Brain) through prolonged or repeated exposure by inhalation.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: copper(II) oxide, manganese dioxide

Hazard pictograms



Signal word

Warning

Hazard statements

H302

Harmful if swallowed.

H332

Harmful if inhaled.

H373

May cause damage to organs (Brain) through prolonged or repeated exposure by inhalation.

Precautionary statements

Prevention

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

P264

Wash thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P271

Use only outdoors or in a well-ventilated area.

Response

P301 + P312

IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

P304 + P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312

Call a POISON CENTRE/doctor if you feel unwell.

P330

Rinse mouth.

Storage

Not assigned.

Disposal

P501

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

Supplemental information on the label

None.

2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

This product is a metal mixture and based on 28-day Transformation/Dissolution testing, does not meet the definition of environmentally hazardous.

The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
manganese dioxide	40 - 70	1313-13-9 215-202-6	01-2119452801-43-0019	025-001-00-3	#
Classification: Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Acute Tox. 4;H332, STOT RE 2;H373					
copper(II) oxide	15 - 40	1317-38-0 215-269-1	01-2119502447-44-0051	029-016-00-6	
Classification: Aquatic Acute 1;H400(M=100), Aquatic Chronic 1;H410(M=10)					

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The full text for all H-statements is displayed in section 16.

#: This substance has been assigned Community workplace exposure limit(s).

SECTION 4: First aid measures

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing. Wash off with soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Ingestion	Rinse mouth. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed	Dusts may irritate the respiratory tract, skin and eyes. Prolonged exposure may cause chronic effects.
4.3. Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
SECTION 5: Firefighting measures	
General fire hazards	Not itself combustible but assists fire in burning materials.
5.1. Extinguishing media	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None.
5.2. Special hazards arising from the substance or mixture	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Carbon oxides (COx). Metal oxides.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
Special fire fighting procedures	In case of fire do not breathe fumes. Cool containers exposed to flames with water until well after the fire is out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
SECTION 6: Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Do not breathe dust. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up.
For emergency responders	Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unnecessary personnel away. Ensure adequate ventilation. Use personal protection recommended in Section 8 of the SDS. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.
6.2. Environmental precautions	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.
6.3. Methods and material for containment and cleaning up	Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Following product recovery, flush area with water. For waste disposal, see Section 13 of the SDS.
6.4. Reference to other sections	For personal protection, see Section 8 of the SDS. For waste disposal, see Section 13 of the SDS.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	Provide adequate ventilation. Avoid inhalation of dust and contact with skin and eyes. Do not taste or swallow. Do not eat, drink or smoke when using the product. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Handle and open container with care. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Keep out of reach of children. Use care in handling/storage. Store away from incompatible materials (See Section 10). Storage class (TRGS 510): 13 (Non-combustible solids that cannot be assigned to any of the above storage classes)
7.3. Specific end use(s)	Air purification media for the destruction of ethylene oxide.
SECTION 8: Exposure controls/personal protection	
8.1. Control parameters	

Occupational exposure limits

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
copper(II) oxide (CAS 1317-38-0)	TWA	0,01 mg/m3	Respirable fraction.
manganese dioxide (CAS 1313-13-9)	TWA	0,2 mg/m3	Inhalable fraction.
		0,02 mg/m3	Respirable fraction.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
manganese dioxide (CAS 1313-13-9)	AGW	0,2 mg/m3	Inhalable fraction.
		0,02 mg/m3	Respirable fraction.

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Components	Type	Value	Form
manganese dioxide (CAS 1313-13-9)	TWA	0,2 mg/m3	Inhalable fraction.
		0,05 mg/m3	Respirable fraction.

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General population

Components	Value	Assessment factor	Notes
manganese dioxide (CAS 1313-13-9)			
Long-term, Systemic, Dermal	0,002 mg/kg bw/day		
Long-term, Systemic, Inhalation	0,043 mg/m3		

Workers

Components	Value	Assessment factor	Notes
manganese dioxide (CAS 1313-13-9)			
Long-term, Systemic, Dermal	0,004 mg/kg bw/day		
Long-term, Systemic, Inhalation	0,2 mg/m3		Repeated dose toxicity

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
copper(II) oxide (CAS 1317-38-0)			
Freshwater	7,8 µg/l	1	
Marine water	5,2 µg/l	1	
Sediment (freshwater)	87 mg/kg	1	
Sediment (marine water)	676 mg/kg	1	
Soil	65 mg/kg	1	
STP	230 µg/l	1	
manganese dioxide (CAS 1313-13-9)			
Freshwater	0 mg/l	50	
Marine water	0 mg/l	500	
Sediment (freshwater)	0,037 mg/kg	500	
Sediment (marine water)	0,004 mg/kg	5000	
Soil	0,028 mg/kg	500	
STP	100 mg/l	10	

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Ventilate as needed to control airborne dust. Observe occupational exposure limits and minimise the risk of inhalation of dust. Eye wash facilities and emergency shower must be available when handling this product. Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Wear dust-resistant safety goggles where there is danger of eye contact. Eye protection should meet standard EN 166.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves. Wear suitable gloves tested to EN374. In full contact: Glove material: Nitrile rubber. Layer thickness: 0.11 mm. Breakthrough time: ≥ 480 min. In splash contact: Glove material: Nitril rubber Layer thickness: 0.11 mm. Breakthrough time: ≥ 480 min.
- Other	Wear suitable protective clothing. Use of an impervious apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter. Use filter type P1 according to EN 143. Seek advice from local supervisor.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Keep away from food and drink.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Form	Solid.
Colour	Brown or black.
Odour	Odorless
Melting point/freezing point	Property has not been measured.
Boiling point or initial boiling point and boiling range	Not measured yet.
Flammability	Not itself combustible but assists fire in burning materials.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)	Not applicable, material is a solid.
Explosive limit – upper (%)	Not applicable, material is a solid.
Flash point	Not applicable, material is a solid.
Auto-ignition temperature	Not applicable as product is a solid.
Decomposition temperature	704 °C (1299,2 °F)
pH	Material is non soluble in water.
Kinematic viscosity	Not applicable as product is a solid.

Solubility

Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water) (log value)	not applicable, insoluble
Vapour pressure	Not measured yet.

Density and/or relative density

Density	800 - 900 kg/m ³
Relative density	Not measured yet.
Vapour density	Not measured yet.
Particle characteristics	Not measured yet.

9.2. Other information

9.2.1. Information with regard to physical hazard classes	No relevant additional information available.
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9.2.2. Other safety characteristics

Evaporation rate	Not measured yet.
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Flammability	Not itself combustible but assists fire in burning materials.
Viscosity	Not measured yet.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Stable under normal temperature conditions.
10.3. Possibility of hazardous reactions	Hazardous polymerisation does not occur.
10.4. Conditions to avoid	Avoid incompatible materials and intense heat.
10.5. Incompatible materials	Oxidising material. Combustible material. Reducing Agents. Aluminium. Strong acids.
10.6. Hazardous decomposition products	Copper fumes. Carbon oxides. Metal oxides.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
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Information on likely routes of exposure

Inhalation	Harmful if inhaled. Dust may irritate respiratory system or lungs.
Skin contact	Dust may irritate skin.
Eye contact	Dust in the eyes may cause irritation.
Ingestion	Harmful if swallowed.

Symptoms	Prolonged exposure may cause chronic effects. Dust may irritate the respiratory tract, skin and eyes.
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11.1. Information on toxicological effects

Acute toxicity	Harmful if inhaled or swallowed.
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Components	Species	Test Results
copper(II) oxide (CAS 1317-38-0)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours (OECD Test Guideline 402)
Oral		
LD50	Rat	> 2500 mg/kg (OECD Test Guideline 423)

Skin corrosion/irritation	Dust may cause skin irritation.
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Corrosivity		
manganese dioxide (CAS 1313-13-9)		OECD 404, EU Method B,4 Result: Not irritating. Species: Rabbit
copper(II) oxide (CAS 1317-38-0)		OECD Test Guideline 404 Result: Not irritating. Species: Rabbit

Serious eye damage/eye irritation	Dust may cause eye irritation.
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Eye		
manganese dioxide (CAS 1313-13-9)		OECD 405, EU Method B,5 Result: Not irritating. Species: Rabbit
copper(II) oxide (CAS 1317-38-0)		OECD Test Guideline 405 Result: Not irritating. Species: Rabbit

Respiratory sensitisation	Not classified.
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Skin sensitisation	Not classified.
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Skin Sensitisation		
copper(II) oxide (CAS 1317-38-0)		OECD Test Guideline 406 Result: Not sensitizing. Species: Guinea pig

Germ cell mutagenicity	Not classified.
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Carcinogenicity	Not classified.
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Reproductive toxicity	Not classified.
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Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Brain.
Aspiration hazard	Not classified.
Mixture versus substance information	The product is a mixture.

11.2. Information on other hazards

Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other information	Chronic exposure to breathing low levels of manganese dust or fume over a long period of time can result in "manganism," a disease of the central nervous system similar to Parkinson's Disease, gait impairment, muscle spasms and behavioral changes. Frequent inhalation of dust over a long period of time increases the risk of developing asthma, chronic lung diseases, and skin irritation. Prolonged exposure, usually over many years, to manganese oxide fume/dust can lead to chronic manganese poisoning, chiefly affecting the central nervous system.

SECTION 12: Ecological information

12.1. Toxicity	A 28-day Transformation/Dissolution protocol test was conducted with this product at a 1 mg/L loading in a standard aqueous medium at pH 6. The 7 and 28 days release factors for copper were 1.82% and 4.35%, respectively. For manganese, no concentrations were measured above the validated and accredited reporting limits after 7 and 28 days of extraction (limit of 5 µg/L).
	The implementation of the GHS classification system, taking into account the results of the T/Dp test, results in an Aquatic Acute 2 classification for the product; this classification is driven by the presence of copper (as CuO). Under CLP (EU-implementation of GHS) there is no environmental classification for the product. Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
manganese dioxide (CAS 1313-13-9)		
Other		
Other	EC50	Activated sewage sludge
	NOEC	Activated sewage sludge
		> 1000 mg/l, 3 hr
		1000 mg/l
12.2. Persistence and degradability	No data available.	
12.3. Bioaccumulative potential	No data available.	
Partition coefficient n-octanol/water (log Kow)	Not available.	
Bioconcentration factor (BCF)	Not available.	
12.4. Mobility in soil	Not available.	
Mobility in general	The product is insoluble in water.	
12.5. Results of PBT and vPvB assessment	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.	
12.6. Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	
12.7. Other adverse effects	None known.	

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
Hazard No. (ADR)	Not assigned.
Tunnel restriction code	Not assigned.
14.4. Packing group	Not assigned.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

RID

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
14.4. Packing group	Not assigned.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

ADN

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
14.4. Packing group	Not assigned.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

IATA

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
14.4. Packing group	Not assigned.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

IMDG

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
14.4. Packing group	Not assigned.
14.5. Environmental hazards	
Marine pollutant	No.
EmS	Not assigned.
14.6. Special precautions for user	Not assigned.

14.7. Maritime transport in bulk according to IMO instruments This product is not intended to be transported in bulk.

SECTION 15: Regulatory information

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

CARULITE® 600 Catalyst

921371 Version #: 01 Revision date: - Issue date: 21-April-2022

SDS Germany

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EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

copper(II) oxide (CAS 1317-38-0)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

copper(II) oxide (CAS 1317-38-0)

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

Water hazard class

AwSV

WGK3

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.

IARC: International Agency for Research on Cancer.

IMDG: International Maritime Dangerous Goods.

MARPOL: International Convention for the Prevention of Pollution from Ships.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

References

HSDB® - Hazardous Substances Data Bank

Registry of Toxic Effects of Chemical Substances (RTECS)

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements, which are not written out in full under sections 2 to 15

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

This SDS contains revisions in the following section(s):

1, 2, 3, 4, 7, 8, 9, 11, 12, 14, 15, 16.

Training information

Follow training instructions when handling this material.

Disclaimer

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