

SAFETY DATA SHEET

prepared in accordance with Annex II of the REACH Regulation EC 1907/2006, Regulation (EC) 1272/2008, Regulation (EC) 453/2010 and Regulation (EC) 830/2015.

Version 4.0

Revision Date 01.06.2017 Date of first issue 24.07.2012 Print Date 18.02.2019

SECTION 1: Identification of the substa	ance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	Akdolit® Hydro-Anthrasit N
Synonyms	Carbon anthracite, Natural anthracite
Trade name	Anthrac./Hydro-Anth. N 0,6/1,6mm-bag
Chemical name - Formula	Carbon - C
CAS-No.	8029-10-5
Molecular weight	12,01 g/mol
REACH Registration Number	This substance is exempt from registration according to Regulation (EC) No. 1907/2006 (REACH).
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against
Find hereunder a general description of us	Ses.
Filter material	
There are no uses advised against.	
1.3. Details of the supplier of the safety	data sheet
Company	Rheinkalk GmbH
Address	Am Kalkstein 1
	42489 Wülfrath
	Germany
Telephone	+492058170
Telefax	+492058172210
E-mail of competent person responsible for SDS in the MS or in the EU:	msds@rheinkalk.de
1.4. Emergency telephone number	
	112
Emergency telephone number (Europe)	This telephone number is available 24 hours per day, 7 days per week.
Poison Information Centre telephone number	+ 32 70 245 245 for Belgium
Emorganov tolophone number	+49 2058 17 0
Emergency telephone number (Company)	This telephone number is available 24 hours per day, 7 days per week.

per day, 7 days per week.



SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Further information

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label elements

Hazard pictograms

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Signal word

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Hazard statements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Precautionary statements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3. Other hazards

May form explosive dust-air mixture.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS-No.	EC-No.	REACH No.	Index-No.	Weight percent
Carbon	8029-10-5		_	_	90

Degree of purity (%): No impurities relevant for classification and labelling, Natural product

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
<u>Inhalation</u>	Remove to fresh air.
Skin contact +	Wash off immediately with plenty of water. Get medical attention if irritation develops and persists.
Eye contact • • • • • • • • • • • • • • • • • • •	Rinse thoroughly with plenty of water, also under the eyelids. Consult a physician.



Ingestion	Drink plenty of water. Consult a physician.
4.2. Most important symptoms and effe	ects, both acute and delayed
Skin contact may provoke the following sy irritant effects At high concentrations product causes sev	mptoms: vere inflammation of conjunctiva and cornea.
4.3. Indication of any immediate medical	al attention and special treatment needed
Follow the advice given in section 4.1.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	Dry powder Foam Carbon dioxide (CO2)
Unsuitable extinguishing media	High volume water jet
5.2. Special hazards arising from the su	bstance or mixture
Heating up for more than 600 °C could lea carbon dioxide (CO2).	d to decomposing into carbon monoxide (CO) and
5.3. Advice for firefighters	
Wear self-contained breathing apparatus a	and protective suit.
SECTION 6: Accidental release measure	es
6.1. Personal precautions, protective ed	quipment and emergency procedures
6.1.1. Advice for non-emergency personnel	Keep away from heat and sources of ignition.
6.1.2. Advice for emergency responders	See section 6.1.1
6.2. Environmental precautions	
No special environmental precautions requ	uired.
6.3. Methods and materials for containing	nent and cleaning up
Pick up the product mechanically. Dilute with plenty of water.	
6.4. Reference to other sections	
For more information on exposure controls please check section 8 and 13.	s/personal protection or disposal considerations,



SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
7.1.1. Protective measures	Store substance within a closed system.
7.1.2. Advice on general occupational hygiene	Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep away from children. All ventilation systems should be filtered before discharge to atmosphere.

7.2. Conditions for safe storage, including any incompatibilities

Storage temperature must not exceed 80°C. Silo must allow hermetical closure. Avoid ignition sources. Use only approved equipment in the defined explosion protection zones. Silo components have to be earthed and connected conductively.

7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit

Chemical name	Form	Limit value	Legal basis
Carbon	No data available	No data available	Arrêté royal du 19 mai 2009, MONITEUR BELGE - 11.06.2009, p. 41413

Derived No Effect Level

Workers

Chemical name	Exposure routes	Acute local effects	Acute systemic effects	Long-term local effects	Long-term systemic effects
	Oral	Not required	Not required	Not required	Not required
Carbon	Inhalation	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available

Consumers

Exposure routes	Acute local effects	Acute systemic effects	Long-term local effects	Long-term systemic effects
Oral	No data available	No data available	No data available	No data available
Inhalation	No data available	No data available	No data available	No data available
Dermal	No data available	No data available	No data available	No data available
	Oral Inhalation	Oral No data available Inhalation No data available	Oral No data available No data available Inhalation No data available No data available	Oral No data available

Predicted No Effect Concentration

	Environmental protection target							
Chemical name	Fresh water	Fresh water sediment	Marine water	Marine sediment	Food chain	Microorgan isms in sewage treatment	Soil	Air
Carbon	No data available	No data available	No data available	No data available	No data available	No data available	No data available	No data available

8.2. Exposure controls

To control potential exposures, generation of dust should be avoided. Further, appropriate



protective equipment is recommended. Eye protection equipment (e.g. goggles or visors) must be worn, unless potential contact with the eye can be excluded by the nature and type of application (i.e. closed process). Additionally, face protection, protective clothing and safety shoes are required to be worn as appropriate.

shoes are required to be worn as appropriate to the short and the short and the short are required to be worn as appropriate to the short and the short are required to be worn as appropriate to the short are required to the short are short as appropriate to the short are short as a	priate.
8.2.1. Appropriate engineering controls	Handling systems should preferably be enclosed or suitable ventilation installed to maintain atmospheric dust below the OES, if not wear suitable protective equipment.
8.2.2. Individual protection measures	, such as personal protective equipment
8.2.2.1. Eye/face protection	Safety goggles
8.2.2.2. Skin protection	Nitrile rubber Use protective skin cream before handling the
	product.
8.2.2.3. Respiratory protection	Effective dust mask P1 filter
8.2.2.4. Thermal hazards	Keep away from fire, sparks and heated surfaces.
8.2.3. Environmental exposure controls	All ventilation systems should be filtered before discharge to atmosphere.
SECTION 9: Physical and chemical pr	roperties
9.1. Information on basic physical and	
Appearance:	Colour: black
, ippearance.	Form: granular
Odour:	odourless
Odour Threshold:	Not applicable
pH:	alkaline
Melting point:	No data available
Boiling point:	Not applicable
Flash point:	
· · · · · · · · · · · · · · · · · · ·	Combustible material
Evaporation rate:	Combustible material Not applicable
·	
Evaporation rate:	Not applicable The product is not flammable. lower flammability limit: No data available
Evaporation rate:	Not applicable The product is not flammable.
Evaporation rate:	Not applicable The product is not flammable. lower flammability limit: No data available
Evaporation rate: Flammability:	Not applicable The product is not flammable. lower flammability limit: No data available Upper flammability limit: No data available Not explosive Upper/Lower explosion limit
Evaporation rate: Flammability:	Not applicable The product is not flammable. lower flammability limit: No data available Upper flammability limit: No data available Not explosive Upper/Lower explosion limit lower: No data available
Evaporation rate: Flammability:	Not applicable The product is not flammable. lower flammability limit: No data available Upper flammability limit: No data available Not explosive Upper/Lower explosion limit lower: No data available upper: No data available
Evaporation rate: Flammability:	Not applicable The product is not flammable. lower flammability limit: No data available Upper flammability limit: No data available Not explosive Upper/Lower explosion limit lower: No data available



Relative density:	1,35 - 1,6 g/cm3
Bulk density	650 - 800 kg/m3
Solubility(ies):	insoluble
Partition coefficient: n-octanol/water:	Not applicable
Auto-ignition temperature:	760 °C;
Decomposition temperature:	No data available
Viscosity, kinematic:	Not applicable
Oxidizing properties:	No oxidising properties. (Based on the chemical structure, the substance does not contain a surplus of oxygen or any structural groups known to be correlated with a tendency to react exothermally with combustible material).
0.2 Other information	

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Heating up for more than 600 °C could lead to decomposing into carbon monoxide (CO) and carbon dioxide (CO2).

10.4. Conditions to avoid

Exposure to air.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Not toxic

Skin corrosion/irritation

Causes mild skin irritation.

Serious eye damage/eye irritation

At high concentrations product causes severe inflammation of conjunctiva and cornea.



Respiratory or skin sensitisation

Does not cause skin sensitisation.

Germ cell mutagenicity

Contains no ingredient listed as a mutagen

Carcinogenicity

Not classifiable as a human carcinogen.

Reproductive toxicity

No effects on fertility
Based on Human Evidence

STOT - single exposure

No data available

STOT - repeated exposure

Inhalation of dust causes discomfort to the upper respiratory tract. Irritant to the respiratory tract in high concentration of dust.

Aspiration hazard

The product is not known to present an aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

12.1.1. Toxicity to fish	Not applicable
12.1.2. Toxicity to aquatic	Not applicable
invertebrates	
12.1.3. Toxicity to aquatic plants	Not applicable
12.1.4. Toxicity to microorganisms /	Not applicable
Toxicity to bacteria	
12.1.5. Toxicity to daphnia and other	Not applicable
aquatic invertebrates	
12.1.6. Toxicity to soil dwelling	Not applicable
organisms	
12.1.7. Toxicity to terrestrial plants	Not applicable
12.1.8. Other effects	Natural product
12.1.9. Other information	Not applicable

12.2. Persistence and degradability

Not applicable

12.3. Bioaccumulative potential

Not applicable



12.4. Mobility in soil

Not applicable

12.5. Results of PBT and vPvB assessment

The substance does not meet the criteria for PBT or vPvB substance.

12.6. Other adverse effects

No other adverse effects are identified.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Reuse or recycle whenever possible.

If the reuse or recycling is not possible, disposal must be made according to local and national regulation.

Processing, use or contamination of this product may change the waste management options. Waste classification code must be determined at the point of waste generation.

Dispose of container and unused contents in accordance with applicable member state and local requirements.

The used packaging is only meant for packing this product; it should not be reused for other purposes.

SECTION 14: Transport information

The product is not classified as hazardous for transport (ADR (Road), RID (Rail), IMDG / GGVSea (Sea)).

14.1. UN number

not regulated



14.3. Transport hazard class(es) 14.4. Packing group 14.5. Environmental hazards None 14.6. Special precautions for user Avoid any release of dust during transportation, by using air-tight tanks. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not regulated SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations None Other regulations (European Union) Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VWVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	14.2. UN proper shipping name		
14.4. Packing group 14.5. Environmental hazards None 14.6. Special precautions for user Avoid any release of dust during transportation, by using air-tight tanks. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not regulated SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Restrictions on use Other regulations (European Union) Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	not regulated		
None 14.6. Special precautions for user Avoid any release of dust during transportation, by using air-tight tanks. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not regulated SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Not required Authorisations None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VWVWS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	14.3. Transport hazard class(es)		
None 14.6. Special precautions for user Avoid any release of dust during transportation, by using air-tight tanks. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not regulated SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Not required Authorisations None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VWVWS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.			
None 14.6. Special precautions for user Avoid any release of dust during transportation, by using air-tight tanks. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not regulated SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Not required Authorisations None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	14.4. Packing group		
Avoid any release of dust during transportation, by using air-tight tanks. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not regulated SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Restrictions on use Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	14.5. Environmental hazards		
Avoid any release of dust during transportation, by using air-tight tanks. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not regulated SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Not required Restrictions on use None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	None		
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not regulated SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Not required Restrictions on use None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	14.6. Special precautions for user		
SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Not required Restrictions on use None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	Avoid any release of dust during transportation, by using air-tight tanks.		
SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Authorisations Restrictions on use None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VWVWS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		
Authorisations Not required Restrictions on use None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	not regulated		
Authorisations Not required Restrictions on use None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	SECTION 15: Pagulatory information		
Authorisations Not required Restrictions on use None Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.			
Restrictions on use Other regulations (European Union) Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level			
Other regulations (European Union) The product is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.			
ozone depleting substance and not a persistent organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	Restrictions on use	None	
organic pollutant. National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	Other regulations (European Union)	•	
National regulatory information German legislation on water endangering substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level			
substances VwVwS not water endangering (nwg) 15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	Notice all acquilate activities and acceptance		
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	National regulatory information		
15.2. Chemical safety assessment A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level			
A Chemical Safety Assessment is not required for this substance. SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	45.2 Chamical actaty accoment	not water endangering (ning)	
SECTION 16: Other information Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	13.2. Chemical Safety assessment		
Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	A Chemical Safety Assessment is not required for this substance.		
product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	SECTION 16: Other information		
product features and do not establish a legally valid contractual relationship. 16.1. Hazard statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level			
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level			
to Regulation (EC) No. 1272/2008. 16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level	16.1. Hazard statements		
16.2. Precautionary statements Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level		Not a hazardous substance or mixture according	
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level		to Regulation (EC) No. 1272/2008.	
to Regulation (EC) No. 1272/2008. 16.3. Abbreviations DNEL: Derived no effect level			
DNEL: Derived no effect level			
DNEL: Derived no effect level	16.3. Abbreviations		
EC50: median effective concentration		DNEL: Derived no effect level	
		EC50: median effective concentration	



LC50: median lethal concentration

LD50: median lethal dose

NOEC: no observable effect concentration

OEL: occupational exposure limit

PBT: persistent, bioaccumulative, toxic chemical

PNEC: predicted no-effect concentration

SDS: Safety data sheet

STEL: short-term exposure limit STOT: specific target organ toxicity

TWA: time weighted average

vPvB: very persistent, very bioaccumulative

chemical

16.4. Literary reference

Data sheet prepared in accordance with:

Annex II of the REACH Regulation (EC) 1907/2006.

References:

- 1.Council Directive 90/269/EEC
- 2.Booklet L64 Safety Signs and Signals. The Health and Safety (Safety Signs and Signals) Regulations 1996 Guidance on Regulations (HSE) ISBN 978 0 7176 6359 0
- 3. http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances
- 4. The Merck Index (Ed. Merck & Co, Rahway, USA)

16.5. Additions, Deletions, Revisions

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Disclaimer

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation (EC 1907/2006; article 31 and Annex II), as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.

End of Safety Data Sheet