

Special-Filling-Oil Version 3.0

Effective Date 04.12.2012

Regulation 1907/2006 EC

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SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Produktidentifikator

Material Name Special-Filling-Oil

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

- Product Use Filling Oil for Manometers
- **Uses Advised Against** This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier.
- 1.3 Details of the Supplier of the safety data sheet

Manufacturer/Supplier	BRIGON Messtechnik GmbH Kronberger Str. 11 D-63110 Rodgau
Telephone	+49 6106 8207-0
Fax	+49 6106 8207-40
Email Contact for	If you have any enquiries about the content of this SDS please
Safety Data Sheet	info@brigon.de

1.4 Emergency Telephone Number

(+49) 30 3068 6790 (Giftnotruf Berlin)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of substances or mixture

1999/45/EC	
Hazard characteristics	R-phrase(s)
Dangerous for the environment;	R52/53

2.2 Label Elements



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2.3 Other Hazards

Health Hazards	Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. Used oil may contain harmful impurities.
Safety Hazards	Not classified as flammable but will burn.
Environmental Hazards	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance	
Material Name	Not applicable.
3.2 Mixtures	
Mixture Description	Highly refined mineral oils and additives.
Hazardous Components	

Classification of components according to Regulation (EC) No 1272/2008

Chemical Name			REACH-Registration	
	CAS-No.	EC-Number	No.	Conz.
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6	01-2119480375-34	95,00 - 100,00%
Gas oils (petroleum) hydrodesulfurized	64742-79-6	265-182-8	012119471311-49	1,00-5,00%
Butylated hydroxytoluene	128-37-0	204-881-4	01-2119565113 46	0,25 – 0,50%

Chemical Name	Hazard Class & Category	Hazard Statement
Destillates(petroleum), hydrotreated light naphthenic	ASP. Tox., 1	H304;



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Gas Oils (petroleum),	Asp. Tox., 1; Acute Tox., 4;Skin Corr.,	H304, H332;H315, H411;
hydrodesulfurized	2; Aquatic Chronic, 2;	
Butylated	Aquatic Cronic, 1;	H410;
hydroxytoluene		

Classification of components according to 67/548/EEC

Chemical Name	CAS-No.	EC- Nummer	REACH Registation No	Symbol(s)	R-Phrase(s)	Conc
Gas Oils (petroleum), hydrodesulfurized	64742-79-6	265-182-8	01- 2119471311- 49	N, Xn	R20; R38; R51/53; R65	1,00- 5,00%
Butyliertes Hydroxytoluol	128-37-0	204-881-4	01- 2119565113 46-	N	R50/53	0,25 – 0,50%

Additional Information

The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

Refer to Ch 16 for full text of R- and H- phrases.

This mixture does not contain any REACH registered substances that are assessed to be a PBT or a vPvB.

SECTION 4. FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation	No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
Skin Contact	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
Eye Contact	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.



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Self-protection of the first aider	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
4.2 Most important symptoms and effects, both acute and delayed	If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.
4.3 Indication of any	Notes to doctor/physician:
immediate medical	Treat symptomatically
attention and special treatment needed	Call a doctor or poison control center for guidance.

SECTION 5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

5.1 Extinguishing Media	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing Media	Do not use water in a jet.
5.2 Special hazards arising from the substance or mixture	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
5.3 Advice for firefighters	Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Observe the relevant local and international regulations.

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

6.1.1 For non emergency personnel: Avoid contact with skin and eyes



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6.2 Environmental Precautions	 6.1.2 For emergency responders: Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
6.3 Methods and Material for Containment and Cleaning Up	Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
Additional Advice	Local authorities should be advised if significant spillages cannot be contained.
6.4 Reference to other sections	For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet.

SECTION 7. HANDLING AND STORAGE

General Precautions	Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
7.1 Precautions for Safe Handling	Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers.
Product Transfer	This material has the potential to be a static accumulator. Proper grounding and bonding procedures should be used during all bulk transfer operations.
7.2 Conditions for safe storage, including any incompatibilities	Store at ambient temperature
	Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.
Recommended Materials	For containers or container linings, use mild steel or high density polyethylene.
Unsuitable Materials 7.3 Specific end use(s)	PVC. Please refer to Ch16 and/or the annexes for the registered



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Additional Information	uses under REACH.
Additional Information	Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.
	Storage class according to TRGS 510: 10
	Fire hazard classification: B

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

8.1 Control Parameters

Occupational Exposure Limits

Material	Source	Туре	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA (inhala Ble fraction)		5 mg/m3	
Gas oils (petroleum) hydrodesulfurized	DFG MAK				Included in the regulation but with no data values. See regulation for further details

Biological Exposure Index (BEI)

No biological limit allocated.

- **PNEC related information** Data not available
- Monitoring Methods Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory. Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.



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	National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/
	Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://osha.gov/
	Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/
	Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany. http://www.dguv.de/inhalt/index.jsp
	L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil
8.2 Exposure Controls General Information	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
	Define procedures for safe handling and maintenance of controls. Educate and train workers in the hazards and control measures relevant to normal activities associated with this product. Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation. Drain down system prior to equipment break-in or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle. Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.



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Occupational Exposure Controls

Personal Protective Equipment	The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards. Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Eye Protection	Wear safety glasses or full face shield if splashes are likely to occur. Approved to EU Standard EN166.
Hand Protection	Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognise that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time may be acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material.
Body protection	Skin protection is not required under normal conditions of use. It is good practice to wear chemical resistant gloves.
Respiratory Protection	No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point



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>65 °C (149 °F)] meeting EN14387.

Environmental Exposure C Environmental exposure control measures	Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation. Take appropriate measures to fulfil the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water.
	Waste water should be treated in a municipal or industrial waste water.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Odour Odour threshold pH Initial Boiling Point and Boiling Range	Colour red or blue. Liquid at room temperature. Slight hydrocarbon. Data not available Not applicable. > 280 °C / 536 °F estimated value(s)
Pour point	Typical -60 °C / -76 °F
Flash point	Typical 138 °C / 280 °F (PMCC / ASTM D93)
Upper / lower Flammability or Explosion limits	Typical 1 - 10 %(V) (based on mineral oil)
Auto-ignition temperature	> 320 °C / 608 °F
Vapour pressure	< 0,5 Pa at 20 °C / 68 °F (estimated value(s))
Relative Density	Typical 0,881 at 15 °C / 59 °F
Density	Typical 881 kg/m3 at 15 °C / 59 °F
Water solubility	Negligible.
Solubility in other solvents	Data not available
n-octanol/water partition coefficient (log Pow)	> 6 (based on information on similar products)
Dynamic viscosity	Data not available
Kinematic viscosity	Typical 8 mm2/s at 40 °C / 104 °F
Vapour density (air=1)	> 1 (estimated value(s))
Evaporation rate (nBuAc=1)	Data not available
Decomposition Temperature	Data not available
Flammability	Data not available
Oxidizing Properties	Data not available
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Explosive Properties	Not classified
9.2 Other Information Electrical conductivity	This material is not expected to be a static accumulator.
Other Information Volatile organic compound	not a VOC 0 %

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity 10.2 Chemical stability	The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph. No hazardous reaction is expected when handled and stored according to provisions.
10.3 Possibility of Hazardous Reactions 10.4 Conditions to Avoid 10.5 Incompatible Materials	Reacts with strong oxidising agents. Extremes of temperature and direct sunlight. Strong oxidising agents.
10.6 Hazardous Decomposition Products	Hazardous decomposition products are not expected to form during normal storage.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological effects

Basis for Assessment	Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).
Likely Routes of	Skin and eye contact are the primary routes of exposure
Exposure	although exposure may occur following accidental ingestion.
Acute Oral Toxicity	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat
	Aspiration into the lungs may cause chemical pneumonitis which can be fatal.
Acute Dermal Toxicity :	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rabbit
Acute Inhalation Toxicity	Not considered to be an inhalation hazard under normal conditions of use.
Skin corrosion/irritation	Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.



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Serious eye damage/irritation	Expected to be slightly irritating.
Respiratory Irritation Respiratory or skin Sensitisation Aspiration Hazard :	Inhalation of vapours or mists may cause irritation. For respiratory and skin sensitisation: Not expected to be a sensitiser. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Germ cell mutagenicity Carcinogenicity :	Not considered a mutagenic hazard. Not expected to be carcinogenic. Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

Material :	Carcinogenicity Classification
Butylated hydroxytoluene	ACGIH Group A4: Not classifiable as a human carcinogen.
Butylated hydroxytoluene	IARC 3: Not classifiable as to carcinogenicity to humans.
Butylated hydroxytoluene	GHS / CLP: No carcinogenicity classification
Highly refined mineral oil (IP346 <3%)	ACGIH Group A4: Not classifiable as a human carcinogen.
Highly refined mineral oil (IP346 <3%)	IARC 3: Not classifiable as to carcinogenicity to humans.
Highly refined mineral oil (IP346 <3%)	GHS / CLP: No carcinogenicity classification
Gas oils (petroleum) Hydrodesulfurized	GHS / CLP: No carcinogenicity classification

Reproductive and Developmental Toxicity	Not expected to be a hazard
Summary on evaluation of	the CMR properties
Carcinogenicity	This product does not meet the criteria for classification in categories 1A/1B.,
Mutagenicity	This product does not meet the criteria for classification in categories 1A/1B.
Reproductive Toxicity (fertility)	This product does not meet the criteria for classification in categories 1A/1B.
Specific target organ toxicity - single exposure	Not expected to be a hazard
Specific target organ toxicity - repeated exposure	Not expected to be a hazard



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Additional Information Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. Classifications by other authorities under varying regulatory frameworks may exist.

SECTION 12. ECOLOGICAL INFORMATION

Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).
12.1 Toxicity Acute Toxicity	Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be harmful: LL/EL/IL50 10-100 mg/l (to aquatic organisms) LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract.
12.2 Persistence and degradability	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
12.3 Bioaccumulative Potential	Contains components with the potential to bioaccumulate.
12.4 Mobility in Soil	Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile. Floats on water.
12.5 Result of PBT and vPvB assesment	This mixture does not contain any REACH registered substances that are assessed to be a PBT or a vPvB.
12.6 Other Adverse Effects	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods



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Material Disposal Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses. **Container Disposal** Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand. Local Legislation Disposal should be in accordance with applicable regional, national, and local laws and regulations. EU Waste Disposal Code (EWC): 13 03 07 mineral-based nonchlorinated insulating and heat transmission oils. Classification of waste is always the responsibility of the end user.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

ADR

This product is not classified as dangerous for this mode of transport. Therefore 14.1 UN Number, 14.2 UN Proper Shipping name, 14.3 Transport hazard class(es), 14.4 Packing group, 14.5 Environmental hazards, 14.6 Special precautions for user do not apply.

RID

This product is not classified as dangerous for this mode of transport. Therefore 14.1 UN Number, 14.2 UN Proper Shipping name, 14.3 Transport hazard class(es), 14.4 Packing group, 14.5 Environmental hazards, 14.6 Special precautions for user do not apply.

Inland waterways transport (ADN)

This product is not classified as dangerous for this mode of transport. Therefore 14.1 UN Number, 14.2 UN Proper Shipping name, 14.3 Transport hazard class(es), 14.4 Packing group, 14.5 Environmental hazards, 14.6 Special precautions for user do not apply. CDNI Inland Water Waste NST 3411 Mineral Lubricanting Oils Agreement

Sea transport (IMDG Code)

This product is not classified as dangerous for this mode of transport. Therefore 14.1 UN Number, 14.2 UN Proper Shipping name, 14.3 Transport hazard class(es), 14.4 Packing group, 14.5 Environmental hazards, 14.6 Special precautions for user do not apply.

Air transport (IATA)



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This product is not classified as dangerous for this mode of transport. Therefore 14.1 UN Number, 14.2 UN Proper Shipping name, 14.3 Transport hazard class(es), 14.4 Packing group, 14.5 Environmental hazards, 14.6 Special precautions for user do not apply.

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

Pollution Category	Not applicable.
Ship Type	Not applicable.
Product Name	Not applicable.
Special Precaution	Not applicable.
Additional Information	MARPOL Annex 1 rules apply for bulk shipments by sea. ADN - Classified ID9006 only when carried in tank vessels.

SECTION 15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

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

_	Other regulatory Information Authorisations and/or restrictions on use	n Product is not subject to Authorisation under REACh.
-	Recommended Restrictions on Use (Advice Against)	This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier.
	Chemical Inventory Status	
	EINECS :	All components listed or polymer exempt.
	TSCA :	All components listed.

National Legislation

2

Water Pollution Class :	WGK 1 - low hazard to waters (appendix 4, VwVwS, preparations).
Other Information :	Technische Anleitung Luft: Product not listed by name.



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	Observe section 5.2.5 in connection with section 5.4.9
15.2 Chemical Safety	Contains component(s) which are restricted for use with young people.
Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION

R-	ph	ras	e(s	5)

R20	Harmful by inhalation.
R38	Irritating to skin.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.

CLP Hazard Statements

H304 May be fatal if swallowed and enters airways.

H315	Causes skin irritation.
H332	Harmful if inhaled.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Other Information

Abbreviations and Acronyms	Acute Tox. = Acute toxicity Acute Tox. = Acute toxicity Asp. Tox. = Aspiration hazard Aquatic Acute = Acute hazards to the aquatic environment Aquatic Chronic = Hazardous to the aquatic environment - Long-term Hazard Eye Dam. = Serious eye damage/eye irritation Flam. Liq. = Flammable liquids Skin Corr. = Skin corrosion/irritation Skin Sens. = Skin sensitizer STOT SE = Specific target organ toxicity - single exposure STOT RE = Specific target organ toxicity - repeated exposure
	The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g.



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scientific dictionaries) and/or websites.

ADN = European Agreement concerning the international carriage of dangerous goods by inland waterways (ADN) DFG = Federal Institute of Hydrology EG = European Community EN = European Norm IBC = Intermediate Bulk Container ISO = International Standards Organisation MAK = Maximum workplace concentration OECD = Organisation for economic cooperation and development OEL = Occupational Exposure Limits PSA = Personal protective equipment TRGS = Technical rules for hazardous substances VO = Regulation VOC = Volatile Organic Compounds VwVwS = Water administrative pollutants WGK = Water Hazard Class
ACGIH = American Conference of Governmental Industrial Hygienists ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road AICS = Australian Inventory of Chemical Substances ASTM = American Society for Testing and Materials BEL = Biological exposure limits BTEX = Benzene, Toluene, Ethylbenzene, Xylenes CAS = Chemical Abstracts Service CEFIC = European Chemical Industry Council CLP = Classification Packaging and Labelling COC = Cleveland Open-Cup DIN = Deutsches Institut fur Normung DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level DSL = Canada Domestic Substance List EC = European Commission EC50 = Effective Concentration fifty ECETOC = European Chemicals Agency EINECS = The European Inventory of Existing Commercial Chemical Substances EL50 = Effective Loading fifty



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	ENCS = Japanese Existing and New Chemical Substances Inventory EWC = European Waste Code GHS = Globally Harmonised System of Classification and Labelling of Chemicals IARC = International Agency for Research on Cancer IATA = International Maritime Dangerous Goods INV = Chinese Chemicals Inventory IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables KECI = Korea Existing Chemicals Inventory LC50 = Lethal Concentration fifty LD50 = Lethal Concentration fifty LD50 = Lethal Concentration fifty MARPOL = International Gonvention for the Prevention of Pollution From Ships NOEC/NOEL = No Observed Effect Concentration / No Observed Effect Level OE_HPV = Occupational Exposure - High Production Volume PBT = Persistent, Bioaccumulative and Toxic PICCS = Philippine Inventory of Chemicals and Chemical Substances PNEC = Predicted No Effect Concentration REACH = Registration Evaluation And Authorisation Of Chemicals RID = Regulations Relating to International Carriage of Dangerous Goods by Rail SKIN_DES = Skin Designation STEL = Short term exposure limit TRA = Targeted Risk Assessment TSCA = US Toxic Substances Control Act TWA = Time-Weighted Average vPvB = very Persistent and very Bioaccumulative
SDS Distribution	The information in this document should be made available to all who may handle the product.
SDS Version Number	3.0
SDS Effective Date	04.12.2012



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SDS Revisions :	A vertical bar () in the left margin indicates an amendment from the previous version.
SDS Regulation	Regulation 1907/2006/EC as amended by Regulation (EU) 453/2010
Disclaimer :	This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.