

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

SECTION 1: Identification

1.1 Product identifier 20967, 21083

Trade name Muc-Off Ceramic Coating

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

Relevant identified uses general use

1.3 Details of the supplier of the safety data sheet

Muc-Off Ltd

UK - Muc-Off Ltd, Unit 23 Branksome Business Park, Bourne Valley Road, Poole, Dorset, BH12 1DW

EU- Muc-Off Ltd, Unit 3D North Point House, North Point Business Park, New Mallow Road, Cork, Ireland, T23 AT2P

Tel: +44(0)1202 307790 Email: info@muc-off.com

1.4 Emergency telephone number CHEMTREC: 1-800-424-9300 24HR

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and cat- egory	Hazard state- ment
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.10	0 aspiration hazard		Asp. Tox. 1	H304
B.6	flammable liquid		Flam. Liq. 4	H227

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word **DANGER**

- Pictograms

GHS05, GHS08



- Hazard statements

H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

- Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P280 Wear protective gloves/eye protection/face protection. P301+P310 If swallowed: Immediately call a poison center/doctor.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container to industrial combustion plant.

United States: en Page: 1 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

- Hazardous ingredients for labelling

Soltrol 170, Bis(trimethoxysilylpropyl)amine

2.3 Other hazards

This material is combustible, but will not ignite readily.

Hazards not otherwise classified

May be harmful in contact with skin (GHS category 5: acutely toxic - dermal).

Very toxic to aquatic life (GHS category 1: aquatic toxicity - acute).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%
Soltrol 170	CAS No 68551-19-9	75 – < 90
2,2,4,4,6,6-hexamethylcyclotrisilazane	CAS No 1009-93-4	1 – < 5
Bis(trimethoxysilylpropyl)amine	CAS No 82985-35-1	1-<5

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

United States: en Page: 2 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

United States: en Page: 3 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits) this information is not available

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Bis(trimethoxysilyl- propyl)amine	82985-35-1	PNEC	0.036 ^{mg} / _l	aquatic organisms	freshwater	short-term (single in- stance)
Bis(trimethoxysilyl- propyl)amine	82985-35-1	PNEC	0.004 ^{mg} / _l	aquatic organisms	marine water	short-term (single in- stance)
Bis(trimethoxysilyl- propyl)amine	82985-35-1	PNEC	27 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single in- stance)

United States: en Page: 4 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Bis(trimethoxysilyl- propyl)amine	82985-35-1	PNEC	0.14 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single in- stance)
Bis(trimethoxysilyl- propyl)amine	82985-35-1	PNEC	0.014 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single in- stance)
Bis(trimethoxysilyl- propyl)amine	82985-35-1	PNEC	0.007 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single in- stance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	clear
Particle	not relevant (liquid)
Odor	characteristic

United States: en Page: 5 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

Other safety parameters

pH (value)	11
Melting point/freezing point	not determined
Initial boiling point and boiling range	187.7 °C at 1,013 hPa
Flash point	79.4 °C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	35 Pa at 25 °C
Density	0.78 ^g / _{cm³}
Vapor density	this information is not available
Solubility(ies)	not determined

Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	>200 °C
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

9.2 Other information

Solvent content	100 %
Solid content	0 %
Temperature class (USA, acc. to NEC 500)	T3 (maximum permissible surface temperature on the equipment: 200°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

United States: en Page: 6 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful in contact with skin.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
2,2,4,4,6,6-hexamethylcyclotrisilazane	1009-93-4	oral	1,700 ^{mg} / _{kg}

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

United States: en Page: 7 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Soltrol 170	68551-19-9	LL50	>100 ^{mg} / _l	fish	96 h
Soltrol 170	68551-19-9	EL50	>100 ^{mg} / _l	aquatic invertebrates	48 h
Soltrol 170	68551-19-9	LC50	>0.004 ^{mg} / _I	aquatic invertebrates	96 h
Soltrol 170	68551-19-9	EC50	>0.004 ^{mg} / _I	aquatic invertebrates	48 h
2,2,4,4,6,6-hexamethyl- cyclotrisilazane	1009-93-4	EC50	>117 ^{mg} / _l	aquatic invertebrates	48 h
Bis(trimethoxysilylpropyl)amine 82985-35-1 LC50 57 ^{mg} / _I fish		fish	96 h		
Bis(trimethoxysilylpro- pyl)amine	82985-35-1	EC50	>100 ^{mg} / _l	aquatic invertebrates	48 h
Bis(trimethoxysilylpro- pyl)amine	82985-35-1	ErC50	31 ^{mg} / _l	algae	72 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

United States: en Page: 8 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number

DOT UN 2810 IMDG-Code UN 2810 ICAO-TI UN 2810

14.2 UN proper shipping name

DOT Toxic liquid, organic, n.o.s.

IMDG-Code TOXIC LIQUID, ORGANIC, N.O.S.

ICAO-TI Toxic liquid, organic, n.o.s.

Technical name (hazardous ingredients) 2,2,4,4,6,6-hexamethylcyclotrisilazane

14.3 Transport hazard class(es)

DOT 6.1 IMDG-Code 6.1 ICAO-TI 6.1

14.4 Packing group

DOT III IMDG-Code III ICAO-TI III

14.5 Environmental hazards hazardous to the aquatic environment

Environmentally hazardous substance (aquatic soltrol 170 environment)

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

United States: en Page: 9 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Particulars in the shipper's declaration UN2810, Toxic liquid, organic, n.o.s., (contains:

2,2,4,4,6,6-hexamethylcyclotrisilazane), 6.1, III,

environmentally hazardous

Danger label(s) 6.1, fish and tree



Environmental hazards yes (hazardous to the aquatic environment)

Special provisions (SP) IB3, T7, TP1, TP28

ERG No 153

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant yes (hazardous to the aquatic environment) (Soltrol 170)

Danger label(s) 6.1, fish and tree



Special provisions (SP) 223, 274
Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

EmS F-A, S-A

Stowage category A

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Environmental hazards yes (hazardous to the aquatic environment)

Danger label(s) 6.1



Special provisions (SP) A3, A4, A137

Excepted quantities (EQ) E1
Limited quantities (LQ) 2 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question National regulations (United States)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313) none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4) none of the ingredients are listed

United States: en Page: 10 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK) none of the ingredients are listed
- Toxic or Hazardous Substance List (MA-TURA) none of the ingredients are listed
- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
Soltrol 170		N	

Legend

N

National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer

- Hazardous Substance List (NJ-RTK) none of the ingredients are listed
- Hazardous Substance List (Chapter 323) (PA-RTK) none of the ingredients are listed
- Hazardous Substance List (RI-RTK) none of the ingredients are listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

Industry or sector specific available guidance(s)

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient tem- peratures before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
AU	AIIC	all ingredients are listed
CA	DSL	not all ingredients are listed
CA	NDSL	not all ingredients are listed
CN	IECSC	all ingredients are listed

United States: en Page: 11 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

Country	Inventory	Status
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
NZ	NZIoC	not all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	not all ingredients are listed

Legend

Australian Inventory of Industrial Chemicals Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) AIIC CICR CSCL-ENCS

DSL Domestic Substances List (DSL)

EC Substance Inventory (EINECS, ELINCS, NLP) **ECSI**

IECSC Inventory of Existing Chemical Substances Produced or Imported in China ISHA-ENCS Inventory of Existing and New Chemical Substances (ISHA-ENCS)

Korea Existing Chemicals Inventory Non-domestic Substances List (NDSL) KECI NDSL NZIoC New Zealand Inventory of Chemicals

Philippine Inventory of Chemicals and Chemical Substances (PICCS) PICCS

REACH Reg. TCSI TSCA REACH registered substances Taiwan Chemical Substance Inventory Toxic Substance Control Act

Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule

United States: en Page: 12 / 13

acc. to 29 CFR 1910.1200 App D

Muc-Off Ceramic Coating

Version number: 1.0 Date of compilation: 01/13/2023

Abbr.	Descriptions of used abbreviations
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
ERG No	Emergency Response Guidebook - Number
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
NLP	No-Longer Polymer
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H227	Combustible liquid.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

United States: en Page: 13 / 13