Version	Revision Date:	SDS Number:	Date of last issue: 11/29/2017
4.6	10/18/2018	646859-00008	Date of first issue: 04/08/2011

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

1.1 Product identifier

Trade name : WURTH TEFLON SPRAY 300ML

Product code : 00893 550

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

Use of the Substance/Mixture : Dry lubricant
Professional use product

1.3 Details of the supplier of the safety data sheet

Company : Würth SA (Pty) Ltd
G1 Isando Industrial Park
Gewel Street, Isando Ext. 3
1600 Gauteng

Telephone : +27 11 281-1000

Telefax : +27 11 974-9711

E-mail address of person responsible for the SDS : prodsafe@wuerth.com

1.4 Emergency telephone number

Advisory office in case of poisoning: +27 11 922-1164. Telephone number of the company in case of emergencies: +27 11 281-1000 (08:00-16:30 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1	H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P273 Avoid release to the environment.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

2.3 Other hazards

May displace oxygen and cause rapid suffocation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	Not Assigned 649-328-00-1 01-2119473851-33	Flam. Liq.2; H225 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic2; H411	>= 10 - < 20
Propan-2-ol	67-63-0 200-661-7 603-117-00-0 01-2119457558-25	Flam. Liq.2; H225 Eye Irrit.2; H319 STOT SE3; H336	>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact	:	In case of contact, immediately flush skin with plenty of water. Get medical attention if symptoms occur.
In case of eye contact	:	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	:	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting	:	Flash back possible over considerable distance. Vapours may form explosive mixtures with air. Exposure to combustion products may be a hazard to health. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
Hazardous combustion products	:	Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.
Remove all sources of ignition.
Ventilate the area.
Use personal protective equipment.
Follow safe handling advice and personal protective equipment recommendations.

6.2 Environmental precautions

Environmental precautions : Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapours/mists with a water spray jet.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.
Use only in an area equipped with explosion-proof exhaust ventilation if advised by assessment of the local exposure potential

Advice on safe handling : Do not breathe vapours or spray mist.

Do not swallow.
Avoid contact with eyes.
Avoid prolonged or repeated contact with skin.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
Take care to prevent spills, waste and minimize release to the environment.

Do not spray on an open flame or other ignition source.

Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store locked up. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Do not pierce or burn, even after use. Keep cool. Protect from sunlight.

Advice on common storage : Do not store with the following product types:
Self-reactive substances and mixtures
Organic peroxides
Oxidizing agents
Flammable solids
Pyrophoric liquids
Pyrophoric solids
Self-heating substances and mixtures
Substances and mixtures, which in contact with water, emit flammable gases
Explosives

Storage period : >= 24 Months

Recommended storage temperature : 15 - 35 °C

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Butane	106-97-8	TWA OEL-RL	600 ppm 1.430 mg/m3	ZA OEL

Further information	Recommended Limit			
		STEL OEL-RL	750 ppm 1.780 mg/m3	ZA OEL
Further information	Recommended Limit			
Propan-2-ol	67-63-0	STEL OEL-RL	500 ppm 1.225 mg/m3	ZA OEL
Further information	Absorption through the skin, Recommended Limit			
		TWA OEL-RL	400 ppm 960 mg/m3	ZA OEL
Further information	Absorption through the skin, Recommended Limit			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	Workers	Inhalation	Long-term systemic effects	2035 mg/m3
	Workers	Skin contact	Long-term systemic effects	773 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	608 mg/m3
	Consumers	Skin contact	Long-term systemic effects	699 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	699 mg/kg bw/day
Propan-2-ol	Workers	Inhalation	Long-term systemic effects	500 mg/m3
	Workers	Skin contact	Long-term systemic effects	888 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	89 mg/m3
	Consumers	Skin contact	Long-term systemic effects	319 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	26 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Propan-2-ol	Fresh water	140,9 mg/l
	Marine water	140,9 mg/l
	Intermittent use/release	140,9 mg/l
	Sewage treatment plant	2251 mg/l
	Fresh water sediment	552 mg/kg dry weight (d.w.)
	Marine sediment	552 mg/kg dry weight (d.w.)
	Soil	28 mg/kg dry weight (d.w.)
	Oral (Secondary Poisoning)	160 mg/kg food

8.2 Exposure controls

Engineering measures

Minimize workplace exposure concentrations.

Use only in an area equipped with explosion-proof exhaust ventilation if advised by assessment of the local exposure potential
Use with local exhaust ventilation.

Personal protective equipment

Eye protection : Wear the following personal protective equipment:
Safety glasses
Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Please follow all applicable local/national requirements when selecting protective measures for a specific workplace.

Hand protection

Material	:	Nitrile rubber
Break through time	:	> 480 min
Glove thickness	:	0,7 mm
Directive	:	DIN EN 374

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Wear the following personal protective equipment:
Flame retardant antistatic protective clothing, unless assessment demonstrates that the risk of explosive atmospheres or flash fires is low

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Self-contained breathing apparatus

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	Aerosol containing a liquefied gas
Propellant	:	Butane, Isobutane, Propane
Colour	:	colourless
Odour	:	very faint
Odour Threshold	:	No data available
pH	:	No data available

Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	Not applicable
Flash point	:	-7,5 °C
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Extremely flammable aerosol.
Upper explosion limit / Upper flammability limit	:	10,9 %(V)
Lower explosion limit / Lower flammability limit	:	0,7 %(V)
Vapour pressure	:	7.500 hPa (50 °C)
Relative vapour density	:	Not applicable
Density	:	0,6 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	immiscible
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	275 °C
Decomposition temperature	:	No data available
Viscosity		
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

9.2 Other information

Heat of combustion	:	> 30 kJ/g
Particle size	:	Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Extremely flammable aerosol.
Vapours may form explosive mixture with air.
If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 23,3 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rat): > 2.800 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Propan-2-ol:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 25 mg/l
Exposure time: 6 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
Assessment	:	Repeated exposure may cause skin dryness or cracking.

Propan-2-ol:

Species	:	Rabbit
Result	:	No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Species	:	Rabbit
Result	:	No eye irritation

Propan-2-ol:

Species	:	Rabbit
Result	:	Irritation to eyes, reversing within 21 days

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Test Type	:	Maximisation Test
Exposure routes	:	Skin contact
Species	:	Guinea pig
Result	:	negative

Propan-2-ol:

Test Type	:	Buehler Test
Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative

Germ cell mutagenicity

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Ingestion Result: negative
Germ cell mutagenicity- Assessment	:	Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

Propan-2-ol:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative Test Type: In vitro mammalian cell gene mutation test Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Carcinogenicity - Assessment	:	Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

Propan-2-ol:

Species	:	Rat
Application Route	:	inhalation (vapour)
Exposure time	:	104 weeks
Method	:	OECD Test Guideline 451
Result	:	negative

Reproductive toxicity

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Effects on fertility	:	Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: inhalation (vapour) Result: negative Remarks: Based on data from similar materials
Effects on foetal development	:	Test Type: Embryo-foetal development Species: Rat Application Route: inhalation (vapour) Result: negative Remarks: Based on data from similar materials

Propan-2-ol:

Effects on fertility	:	Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Ingestion Result: negative
Effects on foetal development	:	Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Result: negative

STOT - single exposure

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Assessment	:	May cause drowsiness or dizziness.

Propan-2-ol:

Assessment	:	May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Species	:	Rat
NOAEL	:	5,8 mg/l
Application Route	:	inhalation (vapour)
Exposure time	:	13 Weeks

Propan-2-ol:

Species	:	Rat
NOAEL	:	12,5 mg/l
Application Route	:	inhalation (vapour)
Exposure time	:	104 Weeks

Aspiration toxicity

Not classified based on available information.

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Toxicity to fish	:	LL50 (Oncorhynchus mykiss (rainbow trout)): 3 - 10 mg/l Exposure time: 96 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia magna (Water flea)): 4,6 - 10 mg/l Exposure time: 48 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 202
Toxicity to algae	:	EL50 (Pseudokirchneriella subcapitata (green algae)): 10 - 30 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOELR (Pseudokirchneriella subcapitata (green algae)): 10 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,17 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test substance: Water Accommodated Fraction Method: OECD Test Guideline 211

Propan-2-ol:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 9.640 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10.000 mg/l Exposure time: 24 h
Toxicity to microorganisms	:	EC50 (Pseudomonas putida): > 1.050 mg/l Exposure time: 16 h

12.2 Persistence and degradability

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 81 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

Propan-2-ol:

Biodegradability : Result: rapidly degradable

12.3 Bioaccumulative potential

Components:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Partition coefficient: n-octanol/water : log Pow: > 4
Remarks: Expert judgement

Propan-2-ol:

Partition coefficient: n-octanol/water : log Pow: 0,05

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.
If not otherwise specified: Dispose of as unused product.
Please ensure aerosol cans are sprayed completely empty

(including propellant)

SECTION 14: Transport information

14.1 UN number

ADN	:	UN 1950
ADR	:	UN 1950
RID	:	UN 1950
IMDG	:	UN 1950
IATA	:	UN 1950

14.2 UN proper shipping name

ADN	:	AEROSOLS
ADR	:	AEROSOLS
RID	:	AEROSOLS
IMDG	:	AEROSOLS
IATA	:	Aerosols, flammable

14.3 Transport hazard class(es)

ADN	:	2
ADR	:	2
RID	:	2
IMDG	:	2.1
IATA	:	2.1

14.4 Packing group

ADN

Packing group	:	Not assigned by regulation
Classification Code	:	5F
Labels	:	2.1

ADR

Packing group	:	Not assigned by regulation
Classification Code	:	5F
Labels	:	2.1
Tunnel restriction code	:	(D)

RID

Packing group	:	Not assigned by regulation
Classification Code	:	5F
Hazard Identification Number	:	23
Labels	:	2.1

IMDG

Packing group	:	Not assigned by regulation
Labels	:	2.1
EmS Code	:	F-D, S-U

IATA (Cargo)

Packing instruction (cargo aircraft)	:	203
Packing instruction (LQ)	:	Y203
Packing group	:	Not assigned by regulation
Labels	:	Flammable Gas

IATA (Passenger)

Packing instruction (passenger aircraft)	:	203
Packing instruction (LQ)	:	Y203
Packing group	:	Not assigned by regulation
Labels	:	Flammable Gas

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Other information : Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Full text of H-Statements

H225	:	Highly flammable liquid and vapour.
H304	:	May be fatal if swallowed and enters airways.
H319	:	Causes serious eye irritation.
H336	:	May cause drowsiness or dizziness.

H411	:	Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
STOT SE	:	Specific target organ toxicity - single exposure
ZA OEL	:	South Africa. Hazardous Chemical Substances Regulations, Occupational Exposure Limits
ZA OEL / TWA OEL-RL	:	Long term occupational exposure limits - recommended limit
ZA OEL / STEL OEL-RL	:	Short term occupational exposure limits - recommended limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/

Classification of the mixture:		**Classification procedure:**
Aerosol 1	H222, H229	Based on product data or assessment
Aquatic Chronic 3	H412	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

ZA / EN