

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NANOBYK-3611

Version 3.0  
SDB\_REG\_EU

Revision Date: 21.04.2023

Date of last issue: 14.12.2021  
Print Date 20.05.2025

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

#### 1.1 Product identifier

Trade name : NANOBYK-3611  
Product code : 000000000000133337

This substance/ mixture contains nanoforms

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

Use of the Sub-  
stance/Mixture : Additive to Improve Mechanical Properties

#### 1.3 Details of the supplier of the safety data sheet

Company : BYK-Chemie GmbH  
Abelstrasse 45  
46483 Wesel  
Telephone : +49 281 670-0  
Telefax : +49 281 65735  
  
Information : Regulatory Affairs  
Telephone : +49 281 670-23532  
Telefax : +49 281 670-23533  
E-mail address : GHS.BYK@altana.com

#### 1.4 Emergency telephone number

Europe +44 1235 239670  
Middle East/Africa +44 1235 239671  
Americas +1 215 207 0061  
East/South East Asia +65 3158 1074  
(Local India: 000 800 100 7479)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.  
Specific target organ toxicity - single ex- H336: May cause drowsiness or dizziness.  
posure, Category 3, Central nervous  
system

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms	:	 
Signal word	:	Warning
Hazard statements	:	H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness.
Precautionary statements	:	<b>Prevention:</b> P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing mist or vapours. <b>Response:</b> P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. <b>Storage:</b> P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

### Hazardous components which must be listed on the label:

- 108-65-6 2-methoxy-1-methylethyl acetate

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

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

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Dispersion of alumina nanoparticles

### Components

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Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
2-methoxy-1-methylethyl acetate	108-65-6 203-603-9 01-2119475791-29	Flam. Liq. 3; H226 STOT SE 3; H336	>= 50 - <= 100
Phosphoric acid polyester	-	Eye Irrit. 2; H319	>= 3 - < 5

For explanation of abbreviations see section 16.

This substance/ mixture contains nanoforms

### **Components:**

#### **aluminium oxide:**

#### Particle characteristics

Particle Size Distribution	:	D50 = 40 nm ± 10 nm Measurement technique: Transmission Electron Microscopy / Electron Microscopy (TEM/EM) calculation
Assessment	:	Assessment: This substance/ mixture contains nanoforms
Shape	:	Shape: spheres Measurement technique: TEM
Surface treatment /Coatings	:	Surface treatment /Coatings: no

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice	:	Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	:	Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	:	If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

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If symptoms persist, call a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : No information available.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

Unsuitable extinguishing media : High volume water jet

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Cool closed containers exposed to fire with water spray.  
Will not explode on mechanical impact.

Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon oxides  
chlorinated compounds  
formaldehyde  
silicone compounds  
Oxides of phosphorus  
Sulphur oxides

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
For safety reasons in case of fire, cans should be stored separately in closed containments.  
Use a water spray to cool fully closed containers.

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### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### 6.4 Reference to other sections

For disposal considerations see section 13., For personal protection see section 8.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.  
Do not breathe vapours/dust.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Open drum carefully as content may be under pressure.  
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.  
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : Wash hands before breaks and at the end of workday.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage : No decomposition if stored and applied as directed.

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age stability

### 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
2-methoxy-1-methylethyl acetate	108-65-6	TWA	50 ppm 275 mg/m <sup>3</sup>	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	100 ppm 550 mg/m <sup>3</sup>	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			

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

Substance name	End Use	Exposure routes	Potential health effects	Value
2-methoxy-1-methylethyl acetate	Workers	Skin contact	Long-term systemic effects	796 mg/kg
	Workers	Inhalation	Long-term systemic effects	275 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	320 mg/kg
	Consumers	Inhalation	Long-term systemic effects	33 mg/m <sup>3</sup>
	Consumers	Ingestion	Long-term systemic effects	36 mg/kg
	Workers	Inhalation	Acute local effects	550 mg/m <sup>3</sup>
	Consumers	Inhalation	Acute local effects	33 mg/m <sup>3</sup>

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

Substance name	Environmental Compartment	Value
2-methoxy-1-methylethyl acetate	Fresh water	0,635 mg/l
	Marine water	0,0635 mg/l
	Intermittent releases	6,35 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	3,29 mg/kg
	Marine sediment	0,329 mg/kg
	Soil	0,29 mg/kg

### 8.2 Exposure controls

#### Personal protective equipment

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles

Hand protection

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Material : butyl-rubber  
Break through time : < 480 min

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.  
Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

### Environmental exposure controls

General advice : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state : dispersion  
Colour : off-white  
Odour : solvent-like  
Odour Threshold : No data available  
Melting point/range : < -65 °C (1.013 hPa)  
Method: derived  
Boiling point/boiling range : 146 °C (1.013 hPa)  
Method: derived  
Upper explosion limit / Upper flammability limit : 10,8 %(V)  
Lower explosion limit / Lower flammability limit : 1,5 %(V)  
Flash point : 46 °C  
Method: DIN 13736 (Abel)  
Auto-ignition temperature : > 200 °C  
Method: M0062 (Analytics Wesel)  
Decomposition temperature : No data available  
pH : 6 (20 °C)  
Concentration: 10 %  
Method: Universal pH-value indicator  
Viscosity  
Viscosity, dynamic : 14 mPa.s  
Method: P/K 20°C  
Viscosity, kinematic : No data available

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Solubility(ies)	
Water solubility	: 190,00000 g/l (1.013 hPa) partly miscible
Solubility in other solvents	: No data available
Vapour pressure	: 4,6 hPa (20 °C) Method: derived
Relative density	: No data available
Density	: 1,255 g/cm <sup>3</sup> (20 °C, 1.013 hPa) Method: 4 (20°C oscillating U-tube)
Bulk density	: Not applicable
Relative vapour density	: No data available
Particle characteristics	
Assessment	: Assessment: This substance/ mixture contains nanoforms
Particle size	: Further particle properties for nanomaterials see section 3

### 9.2 Other information

Flammability (liquids)	: Sustains combustion
Evaporation rate	: No data available
Surface tension	: No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions	: No decomposition if stored and applied as directed.
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Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Conditions to avoid	: Prolonged heat/light/air exposure
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Heat, flames and sparks.

### 10.5 Incompatible materials

Materials to avoid	: Strong oxidizing agents Metals
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### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

##### Product:

Acute oral toxicity : Remarks: No data available

##### Components:

##### **2-methoxy-1-methylethyl acetate:**

Acute oral toxicity : LD50 (Rat, female): > 5.000 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

##### **Phosphoric acid polyester:**

Acute oral toxicity : LD50 Oral (Rat, male and female): > 5.000 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

#### Skin corrosion/irritation

##### Product:

Remarks : No data available

##### Components:

##### **2-methoxy-1-methylethyl acetate:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation  
GLP : yes

##### **Phosphoric acid polyester:**

Species : Rabbit  
Assessment : No skin irritation  
Method : OECD Test Guideline 404  
Result : No skin irritation

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GLP : yes

### Serious eye damage/eye irritation

#### Components:

##### 2-methoxy-1-methylethyl acetate:

Species : Rabbit  
Method : OECD Test Guideline 405  
Result : No eye irritation  
GLP : yes

##### Phosphoric acid polyester:

Species : Rabbit  
Assessment : Irritating to eyes.  
Result : Eye irritation  
GLP : yes

### Respiratory or skin sensitisation

#### Product:

Remarks : No data available

#### Components:

##### 2-methoxy-1-methylethyl acetate:

Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : Not a skin sensitizer.  
GLP : yes

### Germ cell mutagenicity

#### Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

#### Components:

##### Phosphoric acid polyester:

Genotoxicity in vitro : Test Type: Ames test  
Metabolic activation: with and without metabolic activation  
Result: negative  
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
Species: Mouse (male and female)  
Method: Mutagenicity (micronucleus test)  
Result: negative  
GLP: yes

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### Carcinogenicity

**Product:**

Remarks : No data available

### Reproductive toxicity

**Product:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

### STOT - single exposure

**Product:**

Remarks : No data available

### Components:

**2-methoxy-1-methylethyl acetate:**

Assessment : May cause drowsiness or dizziness.

### STOT - repeated exposure

**Product:**

Remarks : No data available

### Repeated dose toxicity

**Product:**

Remarks : No data available

### Components:

**Phosphoric acid polyester:**

Species : Rat, male and female  
LOAEL : 4.000 mg/kg  
Application Route : Oral  
Method : OECD Test Guideline 407  
GLP : yes

### Aspiration toxicity

**Product:**

No data available

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### 11.2 Information on other hazards

#### Endocrine disrupting properties

**Product:**

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

#### Further information

**Product:**

Remarks : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.  
Concentrations substantially above the TLV value may cause narcotic effects.  
Solvents may degrease the skin.

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## SECTION 12: Ecological information

### 12.1 Toxicity

**Product:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

**Components:**

**2-methoxy-1-methylethyl acetate:**

Toxicity to fish : LC50 (Fish): 100 - 180 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: no

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 201  
GLP: no

**Phosphoric acid polyester:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 770 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: DIN 38412  
GLP: no

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- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 130 mg/l  
Exposure time: 72 h  
GLP: yes
- Toxicity to microorganisms : EC50 (Pseudomonas putida): > 500 mg/l  
Exposure time: 16 h  
Test Type: Cell multiplication inhibition test  
Method: DIN 38412, L 8  
GLP: no

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

#### Components:

##### **2-methoxy-1-methylethyl acetate:**

Biodegradability : Result: Readily biodegradable.  
Method: OECD Test Guideline 301F  
GLP: yes

##### **Phosphoric acid polyester:**

Biodegradability : Result: Not readily biodegradable.  
Exposure time: 28 d  
Method: OECD Test Guideline 301  
GLP: no

### 12.3 Bioaccumulative potential

#### Product:

Bioaccumulation : Remarks: No data available

#### Components:

##### **2-methoxy-1-methylethyl acetate:**

Partition coefficient: n-octanol/water : log Pow: 1,2 (20 °C)  
pH: 6,8  
Method: OECD Test Guideline 117  
GLP: yes

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

**Product:**

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

### 12.7 Other adverse effects

**Product:**

Additional ecological information : No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

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## SECTION 14: Transport information

### 14.1 UN number or ID number

ADR : UN 3272  
RID : UN 3272  
IMDG : UN 3272  
IATA : UN 3272

### 14.2 UN proper shipping name

ADR : ESTERS, N.O.S.  
(1-Methoxy-2-propanol acetate)  
RID : ESTERS, N.O.S.  
(1-Methoxy-2-propanol acetate)  
IMDG : ESTERS, N.O.S.

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**IATA** : (1-Methoxy-2-propanol acetate)  
: Esters, n.o.s.  
: (1-Methoxy-2-propanol acetate)

### 14.3 Transport hazard class(es)

**ADR** : 3  
**RID** : 3  
**IMDG** : 3  
**IATA** : 3

### 14.4 Packing group

**ADR**  
Packing group : III  
Classification Code : F1  
Hazard Identification Number : 30  
Labels : 3  
Tunnel restriction code : D/E

**RID**  
Packing group : III  
Classification Code : F1  
Hazard Identification Number : 30  
Labels : 3

**IMDG**  
Packing group : III  
Labels : 3  
EmS Code : F-E, S-D  
Remarks : IMDG Code segregation group - none

**IATA (Cargo)**  
Packing instruction (cargo aircraft) : 366  
Packing group : III  
Labels : Flammable Liquids

**IATA (Passenger)**  
Packing instruction (passenger aircraft) : 355  
Packing instruction (LQ) : Y344  
Packing group : III  
Labels : Flammable Liquids

### 14.5 Environmental hazards

**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

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Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. P5c FLAMMABLE LIQUIDS

### 15.2 Chemical safety assessment

Not applicable

## SECTION 16: Other information

Items where relevant 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

H226 : Flammable liquid and vapour.  
H319 : Causes serious eye irritation.  
H336 : May cause drowsiness or dizziness.

### Full text of other abbreviations

Eye Irrit. : Eye irritation  
Flam. Liq. : Flammable liquids  
STOT SE : Specific target organ toxicity - single exposure  
2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values  
2000/39/EC / TWA : Limit Value - eight hours  
2000/39/EC / STEL : Short term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; 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 as-

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



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sociated 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; TECl - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

#### Classification of the mixture:

Flam. Liq. 3	H226
STOT SE 3	H336

#### Classification procedure:

Based on product data or assessment
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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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