

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

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

+44 1235 239670

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 exposure, Category 3, Central nervous system H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :  

Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing mist or vapours.

Response:

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.

Storage:

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

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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. 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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
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.

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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.

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 stability : No decomposition if stored and applied as directed.

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	Control parameters	Basis
------------	---------	------------------	--------------------	-------

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0

SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021

Print Date 20.05.2025

		of exposure)		
2-methoxy-1-methylethyl acetate	108-65-6	TWA	50 ppm 275 mg/m ³	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	100 ppm 550 mg/m ³	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	50 ppm 275 mg/m ³	CH SUVA
	Further information: Harm to the unborn child is not to be expected when the OEL-value is respected			
		STEL	50 ppm 275 mg/m ³	CH SUVA
	Further information: Harm to the unborn child is not to be expected when the OEL-value is respected			
aluminium oxide	1344-28-1	TWA (alveolate fume)	3 mg/m ³	CH SUVA
	Further information: National Institute for Occupational Safety and Health			
		STEL (alveolate fume)	24 mg/m ³	CH SUVA
	Further information: National Institute for Occupational Safety and Health			

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
aluminium oxide	1344-28-1	Aluminium (Aluminium): 50 µg/g creatinine (Urine)	In case of long-term exposure: after more than one shift	CH BAT
		Aluminium (Aluminium): 0.21 micromoles per millimole creatinine (Urine)	In case of long-term exposure: after more than one shift	CH BAT

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 ³
	Consumers	Skin contact	Long-term systemic effects	320 mg/kg
	Consumers	Inhalation	Long-term systemic effects	33 mg/m ³
	Consumers	Ingestion	Long-term systemic effects	36 mg/kg
	Workers	Inhalation	Acute local effects	550 mg/m ³
	Consumers	Inhalation	Acute local effects	33 mg/m ³

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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

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)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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
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 ³ (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

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.

NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

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

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents
Metals

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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
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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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

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

NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

Application Route : Oral
Method : OECD Test Guideline 407
GLP : yes

Aspiration toxicity

Product:

No data available

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.

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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.
- : 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
-

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.
-

SECTION 14: Transport information

14.1 UN number or ID number

- ADR : UN 3272
RID : UN 3272
IMDG : UN 3272
-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0

SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021

Print Date 20.05.2025

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.
(1-Methoxy-2-propanol acetate)

IATA : 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

NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

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 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

Volatile organic compounds : Law on the incentive tax for volatile organic compounds (VOCV)
Volatile organic compounds (VOC) content: 59,2 %

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

	list of indicative occupational exposure limit values
CH BAT	: Switzerland. List of BAT-values
CH SUVA	: Switzerland. Limit values at the work place
2000/39/EC / TWA	: Limit Value - eight hours
2000/39/EC / STEL	: Short term exposure limit
CH SUVA / TWA	: Time Weighted Average
CH SUVA / 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; AIIIC - 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 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; TECI - 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.

NANOBYK-3611

Version 3.0
SDB_CH

Revision Date: 21.04.2023

Date of last issue: 14.12.2021
Print Date 20.05.2025

CH / EN