

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## BYK-016

Version 4.2  
SDB\_MT

Revision Date: 17.03.2023

Date of last issue: 24.02.2023  
Print Date 27.03.2023

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

#### 1.1 Product identifier

Trade name : BYK-016  
Product code : 000000000000141368

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 : Defoamer

#### 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

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Not a hazardous substance or mixture.

#### 2.2 Label elements

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

Not a hazardous substance or mixture.

##### Additional Labelling

EUH210 Safety data sheet available on request.

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### 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.

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 : Compound of foam-destroying polymers and hydrophobic particles

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Substances with a workplace exposure limit :			
Silicon dioxide	7631-86-9 231-545-4 01-2119379499-16		>= 1 - < 3

For explanation of abbreviations see section 16.

This substance/ mixture contains nanoforms

#### Components:

##### **Silicon dioxide:**

#### Particle characteristics

Assessment : Assessment: This substance/ mixture contains nanoforms

Shape : Shape: spheres

Crystallinity : Crystallinity: amorphous

Surface treatment /Coatings : Surface treatment /Coatings: yes  
Properties of Coated Particle: hydrophobic

##### **Silicon dioxide:**

Assessment : Assessment: This substance/ mixture contains nanoforms

Shape : Shape: spheres

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Crystallinity : Crystallinity: amorphous  
Surface treatment /Coatings : Surface treatment /Coatings: no

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### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.

In case of eye contact : Remove contact lenses.  
Protect unharmed eye.  
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.

#### 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 : 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

Hazardous combustion products : Carbon oxides  
Sulphur oxides

#### 5.3 Advice for firefighters

Special protective equipment : Wear self-contained breathing apparatus for firefighting if nec-

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for firefighters

essary.

Further information

: Standard procedure for chemical fires.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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### SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
No further information is available.

#### 6.2 Environmental precautions

Environmental precautions : No further information is available.

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

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Keep in suitable, closed containers for disposal.

#### 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 : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : General industrial hygiene practice.

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

Requirements for storage areas and containers : Electrical installations / working materials must comply with the technological safety standards.

Advice on common storage : No materials to be especially mentioned.

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

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Silicon dioxide	7631-86-9	TWA (Respirable dust)	0,1 mg/m <sup>3</sup>	2004/37/EC
Further information: Carcinogens or mutagens				

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Silicon dioxide	Workers	Inhalation	Long-term systemic effects	4 mg/m <sup>3</sup>

#### 8.2 Exposure controls

##### Personal protective equipment

- Eye protection : Safety glasses
- Hand protection  
Material : PVC disposable gloves  
Break through time : 120,00 min
- Skin and body protection : Protective suit
- Respiratory protection : No personal respiratory protective equipment normally required.

##### Environmental exposure controls

- General advice : No further information is available.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

- Physical state : liquid
- Colour : amber
- Odour : not significant
- Odour Threshold : No data available
- Melting point/range : < 0 °C  
Method: derived
- Initial boiling point : > 188 °C  
Method: derived
- Upper explosion limit / Upper flammability limit : No data available

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Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	> 100,00 °C Method: 49 (Pensky-Martens)
Auto-ignition temperature	:	> 200 °C Method: DIN 51794
Decomposition temperature	:	No data available
pH	:	6 (20 °C) Concentration: 1 % Method: Universal pH-value indicator
Viscosity		
Viscosity, kinematic	:	No data available
Solubility(ies)		
Water solubility	:	immiscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	< 0,1 hPa Method: derived
Relative density	:	No data available
Density	:	1,0010 g/cm <sup>3</sup> (20,00 °C, 1.013,000000 hPa) Method: 4 deaerated (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 : Stable under recommended storage conditions.  
No hazards to be specially mentioned.

#### 10.4 Conditions to avoid

Conditions to avoid : No data available

#### 10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

#### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

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### 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:

##### Silicon dioxide:

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

Acute inhalation toxicity : LC50 (Rat, male and female): 58,8 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
GLP: yes

##### Skin corrosion/irritation

###### Product:

Remarks : No data available

##### Serious eye damage/eye irritation

###### Product:

Remarks : No data available

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### Respiratory or skin sensitisation

**Product:**

Remarks : No data available

### Germ cell mutagenicity

**Product:**

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

### 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

### STOT - repeated exposure

**Product:**

Remarks : No data available

### Repeated dose toxicity

**Product:**

Remarks : No data available

### Aspiration toxicity

**Product:**

No data available

## 11.2 Information on other hazards

### Endocrine disrupting properties

**Product:**

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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 : No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product:

Toxicity to fish : Remarks: No data available

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

### 12.3 Bioaccumulative potential

#### Product:

Bioaccumulation : Remarks: No data available

### 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.

### 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:

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Additional ecological information : No data available

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

### SECTION 14: Transport information

#### 14.1 UN number or ID number

Not regulated as a dangerous good

#### 14.2 UN proper shipping name

Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

#### 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

Fire Hazard Class : -:-

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

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### 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

#### Full text of other abbreviations

2004/37/EC : Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work

2004/37/EC / TWA : Long 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

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

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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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