

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

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

#### 1.1 Product identifier

Trade name : BYK-MAX HS 4350

UFI : V1A2-Y0SJ-U002-176S

Product code : 000000000000132685

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

Use of the Sub-  
stance/Mixture : Stabilizer for automotive products

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

Company : BYK Netherlands BV  
Danzigweg 23  
7418 EN Deventer

Telephone : +31 881 220 300

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)

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

#### 2.2 Label elements

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

Hazard pictograms :



Signal word : Warning

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention:**

P261 Avoid breathing dust.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves.

**Response:**

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

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

- 108-31-6 maleic anhydride

### 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 : Organic heat stabilizer and coupling agent composition in a polypropylene carrier

#### Components

| Chemical name    | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification                                                                                                                                                   | Concentration<br>(% w/w) |
|------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| maleic anhydride | 108-31-6<br>203-571-6<br>01-2119472428-31             | Acute Tox. 4; H302<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318<br>Resp. Sens. 1; H334<br>Skin Sens. 1A; H317<br>STOT RE 1; H372<br>(Respiratory system)<br>EUH071 | >= 0,001 - <<br>0,1      |

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

|  |  |                                                                     |  |
|--|--|---------------------------------------------------------------------|--|
|  |  | specific concentration<br>limit<br>Skin Sens. 1A; H317<br>≥ 0,001 % |  |
|--|--|---------------------------------------------------------------------|--|

For explanation of abbreviations see section 16.

### 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 : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water.
- 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.

#### 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 : Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

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

Specific hazards during fire-fighting : Fire will produce dense black smoke containing hazardous combustion products (see section 10).

### 5.3 Advice for firefighters

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

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

---

## SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Avoid dust formation.  
Avoid breathing dust.

### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.

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

Methods for cleaning up : 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.

---

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.  
Do not breathe vapours/dust.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

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

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. 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

Contains no substances with occupational exposure limit values.

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

| Substance name   | End Use | Exposure routes | Potential health effects                            | Value                   |
|------------------|---------|-----------------|-----------------------------------------------------|-------------------------|
| maleic anhydride | Workers | Inhalation      | Long-term systemic effects, Long-term local effects | 0,081 mg/m <sup>3</sup> |
|                  | Workers | Inhalation      | Systemic effects, Acute effects, Local effects      | 0,2 mg/m <sup>3</sup>   |

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

| Substance name   | Environmental Compartment | Value        |
|------------------|---------------------------|--------------|
| maleic anhydride | Fresh water               | 0,038 mg/l   |
|                  | Marine water              | 0,0038 mg/l  |
|                  | Intermittent releases     | 0,379 mg/l   |
|                  | Soil                      | 0,037 mg/kg  |
|                  | Fresh water sediment      | 0,296 mg/kg  |
|                  | Marine sediment           | 0,0296 mg/kg |
|                  | Sewage treatment plant    | 44,6 mg/l    |

### 8.2 Exposure controls

#### Personal protective equipment

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

Hand protection

Material : Nitrile rubber

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Environmental exposure controls

General advice : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

### SECTION 9: Physical and chemical properties

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

|                                                  |                                                                    |
|--------------------------------------------------|--------------------------------------------------------------------|
| Physical state                                   | : pellet                                                           |
| Colour                                           | : off-white                                                        |
| Odour                                            | : slight                                                           |
| Melting point/ range                             | : No data available                                                |
| Boiling point/boiling range                      | : Not applicable                                                   |
| Flammability                                     | : <b>Combustible Solids</b>                                        |
| Upper explosion limit / Upper flammability limit | : No data available                                                |
| Lower explosion limit / Lower flammability limit | : No data available                                                |
| Flash point                                      | : Not applicable                                                   |
| Auto-ignition temperature                        | : No data available                                                |
| Decomposition temperature                        | : No data available                                                |
| pH                                               | : 7 (20 °C)<br>Concentration: 1 %                                  |
| Viscosity                                        |                                                                    |
| Viscosity, dynamic                               | : Not applicable                                                   |
| Solubility(ies)                                  |                                                                    |
| Water solubility                                 | : insoluble                                                        |
| Partition coefficient: n-octanol/water           | : No data available                                                |
| Vapour pressure                                  | : Not applicable                                                   |
| Density                                          | : <b>0,90 g/cm3 (20 °C, 1.013 hPa)</b><br>Method: <b>estimated</b> |
| Bulk density                                     | : No data available                                                |

#### 9.2 Other information

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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.  
Dust can form an explosive mixture in air.

### 10.4 Conditions to avoid

Conditions to avoid : No data available

### 10.5 Incompatible materials

Materials to avoid : None known.

### 10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

## 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:

##### **maleic anhydride:**

Acute oral toxicity : LD50 (Rat, male and female): 1.090 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit, female): 2.620 mg/kg  
GLP: No information available.

#### Skin corrosion/irritation

##### Product:

Remarks : May cause skin irritation and/or dermatitis.

##### Components:

##### **maleic anhydride:**

Species : Rabbit  
Method : No information available.  
Result : Corrosive to skin  
GLP : no

#### Serious eye damage/eye irritation

##### Product:

Remarks : Product dust may be irritating to eyes, skin and respiratory system.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

### Components:

#### maleic anhydride:

Species : Rabbit  
Result : Corrosive to eyes  
GLP : yes

### Respiratory or skin sensitisation

#### Product:

Remarks : Causes sensitisation.

### Components:

#### maleic anhydride:

Test Type : Buehler Test  
Exposure routes : Skin contact  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : Causes sensitisation.  
GLP : yes

### Repeated dose toxicity

#### Product:

Remarks : 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 : No data available

---

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product:

Toxicity to fish : Remarks: No data available



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

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

### Components:

#### **maleic anhydride:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 75 mg/l  
Exposure time: 96 h  
Test Type: static test  
GLP: no

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 42,81 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202  
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata): 74,35 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 10 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
GLP: no

## 12.2 Persistence and degradability

### Product:

Biodegradability : Remarks: No data available

### Components:

#### **maleic anhydride:**

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

## 12.3 Bioaccumulative potential

### Product:

Bioaccumulation : Remarks: No data available

### Components:

#### **maleic anhydride:**

Partition coefficient: n-octanol/water : log Pow: -2,61 (19,8 °C)  
pH: 4 - 9  
Method: OECD Test Guideline 107  
GLP: yes

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

### 12.4 Mobility in soil

#### Components:

##### maleic anhydride:

Distribution among environmental compartments : Koc: 42, log Koc: 1,63

### 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:

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.

## 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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

### 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 - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)              | : | Not applicable                                                                                                    |
| 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. | : | Not applicable                                                                                                    |

### 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

|        |   |                                                                            |
|--------|---|----------------------------------------------------------------------------|
| H302   | : | Harmful if swallowed.                                                      |
| H314   | : | Causes severe skin burns and eye damage.                                   |
| H317   | : | May cause an allergic skin reaction.                                       |
| H318   | : | Causes serious eye damage.                                                 |
| H334   | : | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H372   | : | Causes damage to organs through prolonged or repeated exposure if inhaled. |
| EUH071 | : | Corrosive to the respiratory tract.                                        |

### Full text of other abbreviations

|            |   |                    |
|------------|---|--------------------|
| Acute Tox. | : | Acute toxicity     |
| Eye Dam.   | : | Serious eye damage |

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



## BYK-MAX HS 4350

Version 3.0

SDB\_LI

Revision Date: 16.08.2024

Date of last issue: 05.09.2023

Print Date 09.05.2025

|             |                                                      |
|-------------|------------------------------------------------------|
| Resp. Sens. | : Respiratory sensitisation                          |
| Skin Corr.  | : Skin corrosion                                     |
| Skin Sens.  | : Skin sensitisation                                 |
| STOT RE     | : Specific target organ toxicity - repeated exposure |

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:

Skin Sens. 1

H317

#### Classification procedure:

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.

REG\_EU / EN