

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



BYK-MAX HS 4316

Version: 2.0
SDB_IS

Revision Date: 21.09.2026

Date of last issue: 27.08.2026
Print Date: 22.09.2026

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

1.1 Product identifier

Trade name : BYK-MAX HS 4316

UFI : RQGE-R0WJ-M00D-4Q89

Product code : 000000000000138143

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

Use of the Substance/Mixture : Additive for plastics

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.
Long-term (chronic) aquatic hazard, Category 4	H413: May cause long lasting harmful effects to aquatic life.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	H317 May cause an allergic skin reaction. H413 May cause long lasting harmful effects to aquatic life.
Precautionary statements	:	Prevention: P261 Avoid breathing dust. P273 Avoid release to the environment. 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:

- 10081-67-1 4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline

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 composition

Components

Chemical name	CAS-No. EC-No. Index-No.	Classification	Concentration (% w/w)

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	Registration number		
4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline	10081-67-1 233-215-5	Skin Sens. 1; H317 Aquatic Chronic 4; H413	$\geq 30 - < 50$
vinyl acetate	108-05-4 203-545-4	Flam. Liq. 2; H225 Acute Tox. 4; H332 Carc. 2; H351 STOT SE 3; H335 (Respiratory system) Aquatic Chronic 3; H412	$\geq 0,1 - < 0,25$

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 : May cause an allergic skin reaction.

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 (CO₂)
Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

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.

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.
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 : 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.

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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.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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 of exposure)	Control parameters	Basis
vinyl acetate	108-05-4	TWA	5 ppm 17,6 mg/m ³	2009/161/EU
Further information: Indicative				
		STEL	10 ppm 35,2 mg/m ³	2009/161/EU
Further information: Indicative				

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

Substance name	End Use	Exposure routes	Potential health effects	Value
vinyl acetate	Workers	Inhalation	Acute systemic effects	35,2 mg/m ³
	Workers	Inhalation	Acute local effects	35,2 mg/m ³
	Workers	Dermal	Long-term systemic effects	0,42 mg/kg
	Workers	Inhalation	Long-term systemic	17,6 mg/m ³

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			effects	
	Workers	Inhalation	Long-term local effects	17,6 mg/m3

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

Substance name	Environmental Compartment	Value
vinyl acetate	Fresh water	0,016 mg/l
	Marine water	0,0016 mg/l
	Intermittent releases	0,126 mg/l
	Fresh water sediment	0,067 mg/kg
	Marine sediment	0,0067 mg/kg
	Soil	0,0035 mg/kg
	Sewage treatment plant	6 mg/l

8.2 Exposure controls

Personal protective equipment

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

Hand protection

Material : Nitrile rubber
Break through time : > 120 min

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.
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 : pellet

Colour : colourless - light yellow

Odour : characteristic

Melting point/ range : No data available

Initial boiling point and boiling range : No data available

Flammability : May form combustible dust concentrations in air during processing, handling or other means.

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Combustible Solids

Upper explosion limit / Upper flammability limit : Upper explosion limit
No data available

Lower explosion limit / Lower flammability limit : Lower explosion limit
No data available

Flash point : Not applicable

Auto-ignition temperature : No data available

pH : insoluble

Viscosity

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : Not applicable

Vapour pressure : No data available

Density : 0,48 g/cm³ (20 °C, 1.013 hPa)

Bulk density : 0,5 g/cm³ (20 °C)
Method: 34 (bulk density)

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.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

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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

Not classified due to lack of data.

Product:

Acute oral toxicity : Remarks: No data available

Components:

vinyl acetate:

Acute dermal toxicity : LD50 (Rabbit): 7.440 mg/kg
GLP: no

Skin corrosion/irritation

Not classified due to lack of data.

Product:

Remarks : May cause skin irritation and/or dermatitis.

Components:

vinyl acetate:

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

Serious eye damage/eye irritation

Not classified due to lack of data.

Product:

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

Components:

vinyl acetate:

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

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Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified due to lack of data.

Product:

Remarks : Causes sensitisation.

Components:

vinyl acetate:

Test Type	:	Mouse Local Lymph Node assay (LLNA)
Exposure routes	:	Skin contact
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Not a skin sensitizer.
GLP	:	yes

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

Reproductive toxicity

Not classified due to lack of data.

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Repeated dose toxicity

Product:

Remarks : No data available

Aspiration toxicity

Not classified due to lack of data.

11.2 Information on other hazards

Endocrine disrupting properties

Not classified due to lack of data.

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according

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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

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

Components:

vinyl acetate:

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 12,6 mg/l
aquatic invertebrates
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic : (Pseudokirchneriella subcapitata (green algae)): 12,7 mg/l
plants
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

vinyl acetate:

Partition coefficient: n- : log Pow: 0,73 (20 °C)
octanol/water
pH: 7
GLP: No information available.

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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:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
May cause long lasting harmful effects to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
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

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

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14.2 UN proper shipping name

ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : 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) : Conditions of restriction for the following entries must be considered::
Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.

Number on list: 78:
Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers in primary forms,
Polymers of ethylene, in primary forms
synthetic polymer microparticles (SPM) content: 55 - 65%
The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to

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Regulation (EC) No 1907/2006 of
the European Parliament and of the
Council

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

H225	: Highly flammable liquid and vapour.
H317	: May cause an allergic skin reaction.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H351	: Suspected of causing cancer.
H412	: Harmful to aquatic life with long lasting effects.
H413	: May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Carc.	: Carcinogenicity
Flam. Liq.	: Flammable liquids
Skin Sens.	: Skin sensitisation
STOT SE	: Specific target organ toxicity - single exposure
2009/161/EU	: Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
2009/161/EU / TWA	: Limit Value - eight hours
2009/161/EU / STEL	: Short term exposure limit

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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; BGW - Biological Limit Values; 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 Harmonised 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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); LSPN - List of Hazardous Notified Substances (Chile); 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 - Organisation 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
Aquatic Chronic 4	H413

Classification procedure:

Calculation method
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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