

**DISPERBYK-109**

Product code: 00000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

Print Date 09.08.2023

**SECTION 1: Identification of the hazardous chemical and of the supplier****Product identifier**

Product name : DISPERBYK-109

Recommended use : Wetting & Dispersing Additive

**Manufacturer or supplier's details**

Company : BYK-Chemie GmbH

Address : Abelstrasse 45  
46483 Wesel

Telephone : +49 281 670-23532

Telefax : +49 281 670-23533

E-mail address : GHS.BYK@altana.com

Emergency telephone number : +60 3 6207 4347 (Malay and English)  
+65 3158 1074 (All languages)

**SECTION 2: Hazards identification****Classification of the hazardous chemical**

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 1

Specific target organ toxicity - repeated exposure (Oral) : Category 2 (Gastrointestinal tract, Stomach)

Hazardous to the aquatic environment - acute hazard : Category 1

Hazardous to the aquatic environment - chronic hazard : Category 1

**Label elements**

Hazard pictograms : 

Signal word : Danger

Hazard statements : H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H373 May cause damage to organs (Gastrointestinal tract, Stomach) through prolonged or repeated exposure if swallowed.  
H410 Very toxic to aquatic life with long lasting effects.

**DISPERBYK-109**

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Version 4.0 SDS\_APJ\_MY

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Precautionary statements : **Prevention:**  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face protection.

**Response:**  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.  
P391 Collect spillage.

**Other hazards which do not result in classification**

None known.

**SECTION 3: Composition and information of the ingredients of the hazardous chemical**

Substance / Mixture : Substance

Chemical nature : High molecular weight Alkylolamino amide

**Components**

Chemical name	CAS-No.	Concentration (% w/w)
Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol	68919-76-6	>= 50 -<= 100

**SECTION 4: First aid measures**

General advice : Move out of dangerous area.  
Consult a physician.  
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 skin irritation persists, call a physician.  
If on skin, rinse well with water.  
If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Continue rinsing eyes during transport to hospital.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.

**DISPERBYK-109**

Product code: 00000000000107046

Version 4.0 SDS\_APJ\_MY

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- If swallowed : Keep respiratory tract clear.  
Do NOT induce vomiting.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : None known.

**SECTION 5: Firefighting measures****Extinguishing media**

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

**Physicochemical hazards arising from the chemical**

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

**Special protective equipment and precautions for fire-fighters**

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

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- 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.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

**DISPERBYK-109**

Product code: 000000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

Print Date 09.08.2023

**SECTION 7: Handling and storage****Handling****Precautions for safe handling**

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

Advice on safe handling : 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.  
To avoid spills during handling keep bottle on a metal tray.  
Dispose of rinse water in accordance with local and national regulations.

**Storage****Conditions for safe storage, including any incompatibilities**

Conditions for safe storage : 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.

**SECTION 8: Exposure controls and personal protection****Control parameters**

Contains no substances with occupational exposure limit values.

**Individual protection measures, such as personal protective equipment**

Eye/face protection : Eye wash bottle with pure water  
Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

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

Hand protection  
Material : Protective gloves complying with EN 374.

Remarks : Wear suitable gloves.

Hygiene measures : When using do not eat or drink.  
When using do not smoke.

**DISPERBYK-109**

Product code: 00000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

Print Date 09.08.2023

Wash hands before breaks and at the end of workday.

**SECTION 9: Physical and chemical properties**

Appearance	:	liquid
Colour	:	yellow - brown
Odour	:	amine-like
Odour Threshold	:	No data available
pH	:	9 (20 °C) Concentration: 1 % Method: Universal pH-value indicator
Pour point	:	< -21 °C (1,013 hPa) Method: OECD Test Guideline 102 GLP: yes
Boiling point/boiling range	:	> 400 °C (1,013 hPa) Method: OECD Test Guideline 103 GLP: yes
Flash point	:	> 100.00 °C  Method: 49 (Pensky-Martens)
Evaporation rate	:	No data available
Flammability (liquids)	:	Sustains combustion
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	<b>0.0000107 Pa (25.00 °C)</b> Method: <b>OECD Test Guideline 104</b> GLP: <b>yes</b>
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0.939 g/cm <sup>3</sup> (20 °C, 1,013 hPa) Method: 4 (20°C oscillating U-tube) GLP: yes

**DISPERBYK-109**

Product code: 000000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

Print Date 09.08.2023

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Bulk density	:	Not applicable
Solubility(ies)	:	
Water solubility	:	0.0102 g/l (20 °C, 1,013 hPa) Method: OECD Test Guideline 105 GLP: yes
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	> 200 °C Method: DIN 51794
Decomposition temperature	:	No data available
Viscosity	:	
Viscosity, dynamic	:	No data available

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**SECTION 10: Stability and reactivity**

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	No data available
Incompatible materials	:	Acids Strong oxidizing agents

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**SECTION 11: Toxicological information**

Information on likely routes of exposure : None known.

**Acute toxicity****Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Acute oral toxicity	:	LD50 Oral (Rat, female): 2,500 mg/kg Method: OECD Test Guideline 423 GLP: yes
Acute dermal toxicity	:	LD50 Dermal (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

**DISPERBYK-109**

Product code: 00000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

Print Date 09.08.2023

**Skin corrosion/irritation****Product:**

Remarks : May irritate skin.  
May cause skin irritation in susceptible persons.

**Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Species : EPISKIN human epidermis skin constructs  
Assessment : Irritating to skin.  
Method : OECD Test Guideline 439  
Result : Skin irritation  
GLP : yes

Species : EPISKIN human epidermis skin constructs  
Assessment : not corrosive  
Method : OECD Test Guideline 431  
Result : not corrosive  
GLP : yes

**Serious eye damage/eye irritation****Product:**

Remarks : Causes serious eye damage.

Remarks : May cause irreversible eye damage.

**Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Species : Rabbit  
Result : Risk of serious damage to eyes.  
Assessment : Risk of serious damage to eyes.  
Method : OECD Test Guideline 405  
GLP : yes

Species : Bovine corneal opacity and permeability assay (BCOP)  
Result : No eye irritation  
Method : OECD Test Guideline 437  
GLP : yes

**Respiratory or skin sensitisation****Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Test Type : Mouse Local Lymph Node assay (LLNA)  
Species : Mouse  
Method : OECD Test Guideline 429  
Result : Does not cause skin sensitisation.  
GLP : yes

**DISPERBYK-109**

Product code: 000000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

Print Date 09.08.2023

**Germ cell mutagenicity****Product:**

Genotoxicity in vivo : Remarks: No data available

**Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Genotoxicity in vitro : Test Type: Ames test  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative  
GLP: yes

Test Type: In vitro mammalian cell gene mutation test (mouse lymphoma)

Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative  
GLP: yes

Test Type: In Vitro Mammalian Cell Micronucleus Test (MNvit)  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 487  
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

**STOT - repeated exposure****Product:**

Remarks : No data available

**DISPERBYK-109**

Product code: 00000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

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**Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

**Repeated dose toxicity****Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Species : Rat, male and female  
NOAEL : 20 mg/kg  
Application Route : Oral  
Method : OECD Test Guideline 422  
GLP : No information available.

Species : Rat, male and female  
NOAEL : 15 mg/kg  
Application Route : Oral  
Method : OECD Test Guideline 408  
GLP : yes

**Aspiration toxicity****Product:**

No data available

**Further information****Product:**

Remarks : No data available

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**SECTION 12: Ecological information****Ecotoxicity****Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Toxicity to fish : LC50 (Brachydanio rerio (Zebrafisch)): 0.3 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: No information available.

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.37 mg/l  
aquatic invertebrates : Exposure time: 24 h  
Test Type: static test  
Method: OECD Test Guideline 202  
GLP: No information available.

Toxicity to algae/aquatic : ErC50 (Desmodesmus subspicatus (green algae)): 0.03 mg/l

**DISPERBYK-109**

Product code: 000000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

Print Date 09.08.2023

plants		Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: No information available.
M-Factor (Acute aquatic toxicity)	: 10	
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (Daphnia magna (Water flea)): 0.13 mg/l End point: Reproduction Exposure time: 21 d Method: OECD Test Guideline 211 GLP: yes	
M-Factor (Chronic aquatic toxicity)	: 1	
Toxicity to soil dwelling organisms	: NOEC (Eisenia fetida (earthworms)): > 1,000 mg/kg Exposure time: 8 Weeks End point: Reproduction Method: OECD Test Guideline 222 GLP: yes	

**Persistence and degradability****Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Biodegradability : Result: Not readily biodegradable.  
Method: OECD Test Guideline 301B  
GLP: yes

**Bioaccumulative potential****Components:****Fatty acids, tall-oil, reaction products with 2-[(2-aminoethyl)amino]ethanol:**

Partition coefficient: n-octanol/water : Remarks: Not applicable

**Mobility in soil**

No data available

**Other adverse effects****Product:**

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

**DISPERBYK-109**

Product code: 000000000000107046

Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

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**SECTION 13: Disposal information****Disposal methods**

- Waste from residues : 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****International Regulations****IATA-DGR**

- UN/ID No. : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(Hydroxyalkylethenyl imidazoline)  
Class : 9  
Packing group : III  
Labels : Miscellaneous  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964

**IMDG-Code**

- UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(Hydroxyalkylethenyl imidazoline)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F  
Marine pollutant : yes  
Remarks : IMDG Code segregation group - none

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**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.

**SECTION 15: Regulatory information**

**DISPERBYK-109**

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Version 4.0 SDS\_APJ\_MY

Revision Date 26.11.2022

Print Date 09.08.2023

**Safety, health, and environmental regulations specific for the hazardous chemical**

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

**SECTION 16: Other information**

Date format : dd.mm.yyyy

**Full text of other abbreviations**

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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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