

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

SECTION 1. IDENTIFICATION

Product name : DISPERBYK-110 SG

Manufacturer or supplier's details

Company : BYK USA LLC
524 South Cherry Street
Wallingford CT 06492

Telephone : (203) 265-2086
Visit our web site : www.byk.com
E-mail address : BRIEF.BYK.NAFTA@altana.com

Emergency telephone : 203-265-2086; CHEMTREC 1-800-424-9300 / +1
number 703-527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Wetting & Dispersing Additive
Restrictions on use : Refer to Section 15 for any restrictions that may apply

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 3

Skin corrosion : Category 1B

Serious eye damage : Category 1

Carcinogenicity : Category 2

Specific target organ toxicity : Category 3 (Respiratory system, Central nervous system)
- single exposure

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
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/ doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
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.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

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

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : solution of polymeric phosphoric acid ester

Hazardous components

HMIRA# 3493489 Filing Date 22.02.2024

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Component	CAS-No.	Concentration (%)
Phosphoric acid polyester	-	>= 30 - < 60
1-Methoxy-2-propanol acetate	108-65-6	>= 20 - < 30
Solvent naphtha, petroleum, light aromatic	64742-95-6	>= 20 - < 30
Phosphoric acid (residual)	7664-38-2	>= 1 - < 3
Cumene	98-82-8	>= 0.1 - < 1

The specific chemical identity/weight percent of proprietary ingredient(s) is a trade secret

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 : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
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.
- 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.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Specific hazards during firefighting	: 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 Sulphur oxides Oxides of phosphorus
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.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
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	: Neutralize with chalk, alkali solution or ammonia. 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).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: Avoid formation of aerosol. 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. 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.
-------------------------	--

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Conditions for safe storage : To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.
: 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.
Store in original container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
1-Methoxy-2-propanol acetate	108-65-6	TWA	50 ppm	US WEEL
Phosphoric acid (residual)	7664-38-2	TWA	1 mg/m ³	ACGIH
Phosphoric acid (residual)		STEL	3 mg/m ³	ACGIH
Phosphoric acid (residual)		TWA	1 mg/m ³	OSHA Z-1
Phosphoric acid (residual)		TWA	1 mg/m ³	OSHA P0
Phosphoric acid (residual)		STEL	3 mg/m ³	OSHA P0
Phosphoric acid (residual)		TWA	1 mg/m ³	NIOSH REL
Phosphoric acid (residual)		ST	3 mg/m ³	NIOSH REL
Cumene	98-82-8	TWA	50 ppm	ACGIH
Cumene		TWA	50 ppm 245 mg/m ³	OSHA Z-1
Cumene		TWA	50 ppm 245 mg/m ³	OSHA P0

Hazardous components without workplace control parameters

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

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

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

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

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

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: light yellow
Odour Threshold	: No data available
pH	: 3, Concentration: 1 % (68 °F (20 °C)) Method: Universal pH-value indicator
Melting point/freezing point	: < 32 °F (< 0 °C) Method: derived
Initial boiling point and boiling range	: 294.80 °F (146.00 °C) Method: derived
Vapour pressure	: 5 hPa (68.00 °F (20.00 °C)) Method: derived
Flash point	: 107.60 °F (42.00 °C) Method: 48 (Abel-Pensky) DIN 51755
Upper explosion limit	: 10.80 %(V)
Lower explosion limit	: 1.00 %(V)
Evaporation rate	: No data available
Relative vapour density	: No data available
Relative Density/Specific Gravity	: No data available
Density	: 1.0250 g/cm ³ (68.00 °F (20.00 °C)) Method: 4 (20°C oscillating U-tube)
Bulk density	: Not applicable
Solubility(ies)	
Water solubility	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: > 392 °F (> 200 °C) Method: DIN 51794

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : > 20.000 mm²/s (68.00 °F (20.00 °C))

27.000 mm²/s (104.00 °F (40.00 °C))

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.

Vapours may form explosive mixture with air.

Gives off hydrogen by reaction with metals.

Conditions to avoid : Heat, flames and sparks.

Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents

Metals

Hazardous decomposition products : None expected

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation

Ingestion

Eye contact

Skin contact

Acute toxicity**Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Components:

- Phosphoric acid polyester:

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

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

108-65-6 1-Methoxy-2-propanol acetate:

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 100 ppm
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

64742-95-6 Solvent naphtha, petroleum, light aromatic:

Acute oral toxicity : LD50 (Rat): > 4,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 3670 ppm
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): > 3,480 mg/kg

7664-38-2 Phosphoric acid (residual):

Acute oral toxicity : LD50 (Rat): 1,530 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

98-82-8 Cumene:

Acute oral toxicity : LD50 (Rat): 1,400 mg/kg

Acute inhalation toxicity : LC50 : Remarks: No data available

Acute dermal toxicity : LD50 : Remarks: No data available

Skin corrosion/irritation**Product:**

Species: EPISKIN human epidermis skin constructs

Assessment: Causes burns.

Method: OECD Test Guideline 431

Result: Causes burns.

GLP: yes

Remarks: Extremely corrosive and destructive to tissue.

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Components:**- Phosphoric acid polyester:**

Species: Rabbit

Assessment: No skin irritation

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

108-65-6 1-Methoxy-2-propanol acetate:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

64742-95-6 Solvent naphtha, petroleum, light aromatic:

Species: Rabbit

Result: Moderate skin irritation

7664-38-2 Phosphoric acid (residual):

Remarks: No data available

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

Remarks: Causes serious eye irritation.

Remarks: May cause irreversible eye damage.

Components:**- Phosphoric acid polyester:**

Species: Rabbit

Result: Eye irritation

Assessment: Irritating to eyes.

GLP: yes

108-65-6 1-Methoxy-2-propanol acetate:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

64742-95-6 Solvent naphtha, petroleum, light aromatic:

Species: Rabbit

Result: Eye irritation

7664-38-2 Phosphoric acid (residual):

Remarks: No data available

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Respiratory or skin sensitisation**Product:**

Remarks: No data available

Components:**108-65-6 1-Methoxy-2-propanol acetate:**

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Not a skin sensitizer.

GLP: yes

64742-95-6 Solvent naphtha, petroleum, light aromatic:

Test Type: Maximisation Test

Exposure routes: Dermal

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

Germ cell mutagenicity**Product:**

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

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
Test species: Mouse (male and female)
Method: Mutagenicity (micronucleus test)
Result: negative
GLP: yes

Carcinogenicity**Product:**

Remarks: No data available

IARC

Group 2B: Possibly carcinogenic to humans

Cumene

98-82-8

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

Reasonably anticipated to be a human carcinogen

Cumene

98-82-8

Reproductive toxicity**Product:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

STOT - single exposure**Components:****108-65-6 1-Methoxy-2-propanol 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

Application Route: Oral

Method: OECD Test Guideline 407

GLP: yes

Aspiration toxicity**Product:**

No data available

Components:**64742-95-6 Solvent naphtha, petroleum, light aromatic:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Experience with human exposure**Product:**

Inhalation:

Symptoms:

High concentrations of vapors may be irritating to the respiratory tract. May cause headaches, dizziness, nausea and vomiting. May cause CNS depression (drowsiness, loss of coordination and fatigue).

Skin contact:

Symptoms:

Skin contact may provoke the following symptoms:, Burn

Ingestion:

Symptoms:

Ingestion will probably irritate the digestive tract; high dosages may cause CNS depression.

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**Ecotoxicity****Product:**

Toxicity to daphnia and other :
aquatic invertebrates

Remarks: No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

Bioaccumulation

: Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

EPA Hazardous Waste Code(s) : D018: Benzene
D001: Ignitable

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

UN/ID No. : UN 2920
Proper shipping name : Corrosive liquid, flammable, n.o.s.
(Orthophosphoric acid, 1-Methoxy-2-propanol acetate)

Class : 8
Subsidiary risk : 3
Packing group : II
Labels : Corrosive, Flammable Liquids
Packing instruction (cargo aircraft) : 855
Packing instruction (passenger aircraft) : 851

IMDG-Code

UN number : UN 2920
Proper shipping name : CORROSIVE LIQUID, FLAMMABLE, N.O.S.
(Orthophosphoric acid, 1-Methoxy-2-propanol acetate)
:)
Class : 8

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

Subsidiary risk : 3
Packing group : II
Labels : 8 (3)
EmS Code : F-E, S-C
Marine pollutant : no
Remarks : IMDG Code segregation group 1 - Acids

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

Not applicable for product as supplied.

National Regulations**49 CFR**

UN/ID/NA number : UN 2920
Proper shipping name : Corrosive liquid, flammable, n.o.s.
(Orthophosphoric acid, 1-Methoxy-2-propanol acetate)
Class : 8
Subsidiary risk : 3
Packing group : II
Labels : CORROSIVE, FLAMMABLE LIQUID
ERG Code : 132
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****US. EPA CERCLA Hazardous Substances (40 CFR 302)**

Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 - Emergency Release Notification

This material does not contain any components with a section 304 EHS RQ.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

This material does not contain any components with a SARA 302 RQ.

SARA 311/312 Hazards : Per the June 13, 2016 Federal Register notice, EPA harmonized the EPCRA 311/312 hazard categories with the 2012 OSHA hazard communication standard for classifying and labeling of chemicals (i.e. GHS). Please refer to Section 2 of the SDS to identify the appropriate hazard categories for reporting purposes.

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

SARA 313

: This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

1,2,4-Trimethylbenzene	95-63-6	7.9 %
Cumene	98-82-8	.5 %

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Non-volatile (Wt) : 50 - 54 %
Method: 22 (10min/150°C)
DIN EN ISO 3251
Non-volatile information is not a specification.

US State Regulations**Massachusetts Right To Know**

Phosphoric acid (residual)	7664-38-2
----------------------------	-----------

Pennsylvania Right To Know

Phosphoric acid polyester	-
1-Methoxy-2-propanol acetate	108-65-6
Solvent naphtha, petroleum, light aromatic	64742-95-6
Phosphoric acid (residual)	7664-38-2
Cumene	98-82-8
Naphthalene	91-20-3

New Jersey Right To Know

New Jersey Trade Secret : 800963-6449
Registry Number for the product (NJ TSRN)

California Prop. 65

 **WARNING:** This product can expose you to chemicals including Cumene, Naphthalene, Ethyl benzene, Benzene, which is/are known to the State of California to cause cancer, and Toluene, Benzene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

DISPERBYK-110 SG

Version 1

Revision Date 08/08/2023

Print Date 01/06/2026

The components of this product are reported in the following inventories:

TSCA	: All substances listed as active on the TSCA inventory
Section 5a	: No substances are subject to a Significant New Use Rule.
Section 4 / 12(b)	: No substances are subject to TSCA 12(b) export notification requirements.
DSL	: We certify that all of the components of this product are listed on the DSL.

SECTION 16. OTHER INFORMATION

Revision Date : 08/08/2023

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.