BYK-4512

SECTION 1. IDENTIFICATION

Product name : BYK-4512

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

Recommended use of the chemical and restrictions on use

Recommended use : Adhesion Promoter
Restrictions on use : Refer to Section 15 for any restrictions that may apply

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Skin irritation : Category 2

Eye irritation : Category 2A

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

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**

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/ eye protection/ face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash 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 aminofunctional polyether

Hazardous components

Component	CAS-No.	Concentration (%)
1-Methoxy-2-propanol acetate	108-65-6	>= 30 - < 60

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

If inhaled : Remove to fresh air. Get medical aid as soon as possible. If breathing has stopped, trained personnel should administer rescue breathing, and CPR if the heart has stopped.
Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.

In case of skin contact : Remove contaminated clothing. Wash thoroughly with soap and water. If irritation develops, get medical aid.
If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Immediately flush with plenty of water for at least 20 minutes.
Get medical aid.
Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Do not induce vomiting; aspiration hazard. Dilute with 1-2 glasses of water. Get medical aid. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.
Never give anything by mouth to an unconscious person.
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.

Most important symptoms and effects, both acute and delayed : No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Foam
Carbon dioxide (CO2)
Dry chemical
Alcohol-resistant foam

Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media : No information available.

High volume water jet

Specific hazards during firefighting : Will not explode on mechanical impact.
Cool closed containers exposed to fire with water spray.

Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon oxides
Nitrogen oxides (NOx)
chlorinated compounds

Further information : Keep away from heat and sources of ignition.
Keep away from oxidizing agents.
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 : In the event of fire, wear self-contained breathing apparatus.

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Eliminate all sources of ignition. Ventilate area if indoors.
Wear self-contained breathing apparatus and full protective clothing.

: Use personal protective equipment.
Ensure adequate ventilation.
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 spilled material from entering the ground, water and/or air by using appropriate containment methods.

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 : Stop leak. Dike and contain spill.

containment and cleaning up	Absorb with suitable material and remove with sparkless shovel and/or scoop. 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	:	Harmful in contact with skin. Avoid contact with skin and eyes. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Ensure all equipment is electrically grounded before beginning transfer operations. Containers should be grounded when being emptied. Vapours may travel to areas away from work site before igniting/flashing back to Vapour source. Keep container closed when not in use. Handle as an industrial chemical. Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. 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. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	Avoid exposure to excessive heat, light, and air for prolonged periods of time. Keep in a dry, cool and well-ventilated place. Keep product and empty container away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge. 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.
Materials to avoid	:	Keep away from oxidizing agents.

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

Engineering measures : Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection : Unless air monitoring demonstrates dusts/mists/vapors are below the recommended exposure levels and/or WEEL, wear a properly fitted respirator (NIOSH) or dust mask during exposure.
In the case of vapour formation use a respirator with an approved filter.

Hand protection

Material : Nitrile rubber

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

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

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

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Clean long legged, long sleeved work clothes.
If splashing is possible, wear chemically resistant protective clothing.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : viscous
Colour : yellow
Odour : characteristic, ester-like
Odour Threshold : No data available

pH	:	7, Concentration: 1 % (68 °F (20 °C)) Method: derived
Melting point/ range	:	< 50 °F (< 10 °C) Method: derived
Initial boiling point	:	> 295 °F (> 146 °C) Method: derived
Vapour pressure	:	< 3.37 hPa (68 °F (20 °C)) Method: derived
Flash point	:	109 °F (43 °C) Method: 48 (Abel-Pensky) DIN 51755
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Evaporation rate	:	No data available
Relative vapour density	:	No data available
Relative Density/Specific Gravity	:	No data available
Density	:	1.102 g/cm3 (68 °F (20 °C)) Method: 4 (20°C oscillating U-tube)
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: M0062 (Analytics Wesel)
Thermal decomposition	:	No data available
Viscosity		
Viscosity, dynamic	:	579 mPa.s (140 °F (60 °C)) Method: P/K 60°C
Surface tension	:	No data available

Conductivity : Method: measured, method 61

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.
No decomposition if stored and applied as directed.

Chemical stability : Stable; polymerization will not occur
No decomposition if stored and applied as directed.

Possibility of hazardous reactions : 1-Methoxy-2-propanol acetate may form peroxides of unknown stability.

No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.

Conditions to avoid : Prolonged heat/light/air exposure
Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Inhalation
Ingestion
Eyes
Skin Absorption
Skin contact

Acute toxicity

Product:

Acute oral toxicity : Remarks: No data available

Components:

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

Skin corrosion/irritation

Product:

Remarks: No data available

Remarks: May cause skin irritation in susceptible persons.

Components:

108-65-6 1-Methoxy-2-propanol acetate:
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes

Serious eye damage/eye irritation

Product:

Remarks: No data available

Remarks: Causes serious eye irritation.

Components:

108-65-6 1-Methoxy-2-propanol acetate:
Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405
GLP: yes

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

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

Product:

Remarks: No data available

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
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	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

STOT - single exposure

Product:

Remarks: No data available

STOT - repeated exposure

Product:

Remarks: No data available

Repeated dose toxicity

Product:

Remarks: Solvent absorption by inhalation and/or repeated skin contact may cause injury to liver, kidney and respiratory system.
Studies suggest that 2-Methoxy-1-propanol acetate is teratogenic in animals. There is also evidence of fetotoxicity.

Aspiration toxicity

Product:

No data available

Experience with human exposure

Product:

Inhalation:

Symptoms: High concentrations are irritating to the respiratory tract. Has caused headaches, dizziness, nausea, vomiting and CNS depression (drowsiness, loss of coordination

and fatigue).

Skin contact:

Symptoms: Contact will probably cause irritation. Absorption has caused same symptoms as inhalation.

Eye contact:

Symptoms: Contact will probably cause irritation.

Ingestion:

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

Further information

Product:

Remarks: No data available

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 fish : Remarks: No data available

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

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

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) : D001: Ignitable

Waste from residues : Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.
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 3272
Proper shipping name	:	Esters, n.o.s. (1-Methoxy-2-propanol acetate)
Class	:	3
Packing group	:	III
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	366
Packing instruction (passenger aircraft)	:	355

IMDG-Code

UN number	:	UN 3272
Proper shipping name	:	ESTERS, N.O.S. (1-Methoxy-2-propanol acetate)
	:	)
Class	:	3
Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-D
Marine pollutant	:	no
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.

National Regulations

49 CFR

UN/ID/NA number	:	UN 3272
Proper shipping name	:	Esters, n.o.s. (1-Methoxy-2-propanol acetate)
Class	:	3
Packing group	:	III
Labels	:	FLAMMABLE LIQUID
ERG Code	:	127
Marine pollutant	:	no

Container sizes: 55 gallon drums, 5 or 6-gallon pails, 2oz/16oz samples

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

US. EPA CERCLA Hazardous Substances (40 CFR 302)

This material does not contain any components with a CERCLA RQ.

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.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Non-volatile (Wt) : 61.2 %
Method: 52 (20min/150°C + 1g Ethanol)
DIN EN ISO 3251
Non-volatile information is not a specification.

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

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

New Jersey Right To Know

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : 800963-5297

California Prop. 65

⚠ WARNING: This product can expose you to chemicals including Bisphenol A, 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.

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	:	The following component(s) is/are not listed on the DSL:
CEPA Category	:	Polymer
Weight percent	:	60 %
NSN Filed	:	Schedule 9
Max. NSN Required	:	Schedule 10

SECTION 16. OTHER INFORMATION

Revision Date : 05/17/2026

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.