RHEOBYK-405 SG

Version 1 | Revision Date 05/17/2026 | Print Date 08/06/2026

SECTION 1. IDENTIFICATION

Product name : RHEOBYK-405 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 number : 203-265-2086; CHEMTREC 1-800-424-9300 / +1 703-527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Rheology 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 irritation : Category 2

Serious eye damage : Category 1

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

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

Specific target organ toxicity - repeated exposure : Category 2 (Kidney, Liver)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H318 Causes serious eye damage.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs (Kidney, Liver) through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
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.
P260 Do not breathe 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:
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 + 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.
P332 + P313 If skin irritation occurs: 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 polyhydroxycarboxylic acid amides
Hazardous components

Component	CAS-No.	Concentration (%)
Xylene	1330-20-7	>= 10 - < 20
Solvent naphtha, petroleum, light aromatic	64742-95-6	>= 10 - < 20
Isobutanol	78-83-1	>= 5 - < 10
Ethyl benzene	100-41-4	>= 1 - < 5
Cumene	98-82-8	>= 0.1 - < 1
Toluene	108-88-3	>= 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 : 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.

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

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

Conditions for safe storage : 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Xylene	1330-20-7	TWA	100 ppm 435 mg/m3	OSHA Z-1
Xylene		STEL	150 ppm 655 mg/m3	OSHA P0
Xylene		TWA	100 ppm 435 mg/m3	OSHA P0
Xylene		TWA	20 ppm	ACGIH
Isobutanol	78-83-1	TWA	50 ppm	ACGIH
Isobutanol		TWA	100 ppm 300 mg/m3	OSHA Z-1
Ethyl benzene	100-41-4	TWA	20 ppm	ACGIH
Ethyl benzene		TWA	100 ppm 435 mg/m3	OSHA Z-1
Ethyl benzene		TWA	100 ppm 435 mg/m3	OSHA P0
Ethyl benzene		STEL	125 ppm 545 mg/m3	OSHA P0
Ethyl benzene		ST	125 ppm 545 mg/m3	NIOSH REL
Cumene	98-82-8	TWA	5 ppm	ACGIH
Cumene		TWA	50 ppm 245 mg/m3	OSHA Z-1
Cumene		TWA	50 ppm 245 mg/m3	OSHA P0
Toluene	108-88-3	TWA	20 ppm	ACGIH
Toluene		TWA	200 ppm	OSHA Z-2
Toluene		CEIL	300 ppm	OSHA Z-2
Toluene		Peak	500 ppm	OSHA Z-2
Toluene		TWA	100 ppm 375 mg/m3	OSHA P0

Toluene		STEL	150 ppm 560 mg/m3	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

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

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

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.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : light brown

Odour : not significant

Odour Threshold : No data available

pH : 6, Concentration: 1 % (68 °F (20 °C)) Method: Universal pH-value indicator

Melting point/ range : < 32 °F (< 0 °C)
Method: estimated

Initial boiling point : 222.80 °F (106.00 °C)
Method: estimated

Vapour pressure : < 7 hPa (68.00 °F (20.00 °C))
Method: calculated

Flash point : 84.20 °F (29.00 °C)
Method: 48 (Abel-Pensky) DIN 51755

Upper explosion limit : 10.70 %(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	:	0.9250 g/cm3 (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	:	> 392.00 °F (> 200.00 °C) Method: DIN 51794
Thermal decomposition	:	No data available
Viscosity		
Viscosity, kinematic	:	228 mm2/s (104.00 °F (40.00 °C))
Surface tension	:	No data available

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.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Acids Strong oxidizing agents
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 inhalation toxicity	:	Acute toxicity estimate : 47.18 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate : 4,816 mg/kg Method: Calculation method

Components:

1330-20-7 Xylene:

Acute oral toxicity	:	LD50 (Rat): 4,300 mg/kg Method: EC Directive 92/69/EEC B.1 Acute Toxicity (Oral) GLP: no
Acute inhalation toxicity	:	LC50 (Rat): 5000 ppm Exposure time: 4 h
Acute dermal toxicity	:	LD50 (Rabbit): 1,700 mg/kg LD50 (Rabbit): > 4,200 mg/kg GLP: No information available.

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

78-83-1 Isobutanol:

Acute oral toxicity	:	LD50 (Rat): 2,500 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 8000 ppm Exposure time: 4 h
Acute dermal toxicity	:	LD50 (Rabbit): 2,460 mg/kg

100-41-4 Ethyl benzene:

Acute oral toxicity	:	LD50 (Rat): 3,500 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): 5,510 mg/kg

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

108-88-3 Toluene:

Acute oral toxicity	:	LD50 (Rat): 2,600 mg/kg

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Components:

1330-20-7 Xylene:
Species: Rabbit
Result: Moderate skin irritation

64742-95-6 Solvent naphtha, petroleum, light aromatic:
Species: Rabbit
Result: Moderate skin irritation

78-83-1 Isobutanol:
Species: Rabbit
Result: Moderate skin irritation

100-41-4 Ethyl benzene:
Species: Rabbit
Result: Moderate skin irritation

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

1330-20-7 Xylene:
Species: Rabbit
Result: Eye irritation

64742-95-6 Solvent naphtha, petroleum, light aromatic:
Species: Rabbit
Result: Eye irritation

78-83-1 Isobutanol:
Species: Rabbit
Result: Eye irritation
Method: OECD Test Guideline 405
GLP: yes

100-41-4 Ethyl benzene:
Species: Rabbit
Result: Moderate eye irritation

Respiratory or skin sensitisation

Product:

Remarks: No data available

Components:

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.

78-83-1 Isobutanol:
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

Carcinogenicity

Product:

Remarks: No data available

IARC	Group 2B: Possibly carcinogenic to humans	
	Ethyl benzene	100-41-4
	Cumene	98-82-8

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

Product:

Remarks: No data available

STOT - repeated exposure

Product:

Remarks: No data available

Repeated dose toxicity

Product:

Remarks: No data available

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.
78-83-1 Isobutanol:
No aspiration toxicity classification

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: Contact will probably cause irritation.

Eye contact:

Symptoms: Contact will probably cause irritation.

Ingestion:

Symptoms: May irritate the digestive tract and cause same symptoms as inhalation; high dosages may result in unconsciousness.

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

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 1993
Proper shipping name	:	Flammable liquid, n.o.s. (Xylene, Isobutanol)
Class	:	3
Packing group	:	III
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	366
Packing instruction (passenger aircraft)	:	355

IMDG-Code

UN number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (XYLENE, Isobutanol)
	:	)
Class	:	3
Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E
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 1993
Proper shipping name	:	Flammable liquids, n.o.s. (Xylene, Isobutanol)
Class	:	3
Packing group	:	III
Labels	:	FLAMMABLE LIQUID
ERG Code	:	128
Marine pollutant	:	no

SECTION 15. REGULATORY INFORMATION

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

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Xylene	1330-20-7	100	532

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 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.

Xylene	1330-20-7	18.8 %
Ethyl benzene	100-41-4	4.5 %

Cumene	98-82-8	.6 %
1,2,4-Trimethylbenzene	95-63-6	6.2 %

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

Xylene	1330-20-7	18.8 %
Ethyl benzene	100-41-4	4.5 %

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).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

Xylene	1330-20-7	18.8 %
Isobutanol	78-83-1	6.9 %
Ethyl benzene	100-41-4	4.5 %

Non-volatile (Wt) : 50 - 54 %
Method: 23 (20min/150°C)
DIN EN ISO 3251
Non-volatile information is not a specification.

Massachusetts Right To Know

Xylene	1330-20-7
Isobutanol	78-83-1
1,2,4-Trimethylbenzene	95-63-6
Ethyl benzene	100-41-4
Benzene	71-43-2

Pennsylvania Right To Know

Polyhydroxycarboxylic acid amides	-
Xylene	1330-20-7
Solvent naphtha, petroleum, light aromatic	64742-95-6
Isobutanol	78-83-1
1,2,4-Trimethylbenzene	95-63-6
Ethyl benzene	100-41-4
Cumene	98-82-8
Toluene	108-88-3

New Jersey Right To Know

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : 800963-6451

California Prop. 65

⚠ WARNING: This product can expose you to chemicals including Ethyl benzene, Cumene,

Naphthalene, 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.

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 : 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.