BYK GS-47

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

SECTION 1. IDENTIFICATION

Product name : BYK GS-47

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 : oilfield
Restrictions on use : Refer to Section 15 for any restrictions that may apply

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 4

Skin irritation : Category 2

Eye irritation : Category 2A

Skin sensitisation : Category 1

Carcinogenicity : Category 1A

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H227 Combustible liquid.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H350 May cause cancer.

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.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash 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 + 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 : phenol-formaldehyde resin
Hazardous components

Component	CAS-No.	Concentration (%)
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	>= 5 - < 10
Naphthalene	91-20-3	>= 1 - < 5
Formaldehyde	50-00-0	>= 0.1 - < 1

SECTION 4. 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 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 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	:	Induce vomiting immediately and call a physician. 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. Take victim immediately to hospital.
Notes to physician	:	No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray Dry powder Foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Handle as an industrial chemical. 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 monoxide, carbon dioxide and unburned hydrocarbons (smoke).
Further information	:	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.

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).
Keep in suitable, closed containers for disposal.

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.
Provide sufficient air exchange and/or exhaust in work rooms.
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.

Conditions for safe storage : No smoking.
Keep in a well-ventilated place.
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
Naphthalene	91-20-3	TWA	10 ppm	ACGIH
Naphthalene		TWA	10 ppm 50 mg/m3	OSHA Z-1
Naphthalene		TWA	10 ppm 50 mg/m3	OSHA P0
Naphthalene		STEL	15 ppm 75 mg/m3	OSHA P0
Formaldehyde	50-00-0	C	0.3 ppm	ACGIH

Formaldehyde		TWA	0.75 ppm	OSHA Z-1
Formaldehyde		STEL	2 ppm	OSHA Z-2

Hazardous components without workplace control parameters

Engineering measures : Use with local exhaust ventilation.

Personal protective equipment

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

Hand protection

Material : Impervious gloves

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	:	viscous liquid
Colour	:	amber
Odour	:	aromatic
Odour Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	469 °F (243 °C)
Vapour pressure	:	No data available
Flash point	:	193.1 °F (89.5 °C) Method: Tag closed cup
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Relative Density/Specific	:	No data available

Gravity		
Density	:	1.0335 g/cm3 (68 °F (20 °C))
Solubility(ies)		
Water solubility	:	negligible
Solubility in other solvents	:	No data available
Ignition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	2,000 mPa.s (77 °F (25 °C))

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	The product is chemically stable. 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	:	Incompatible with strong bases and oxidizing agents.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

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:

64742-94-5 Solvent naphtha (petroleum), heavy aromatic:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 100 mg/l
Acute dermal toxicity	:	LD50 (Rabbit): > 2,500 mg/kg

91-20-3 Naphthalene:

Acute oral toxicity	:	LD50 (Mouse): 316 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 340 ppm Exposure time: 1.00 h
Acute dermal toxicity	:	LD50 (Rat): > 2,500 mg/kg

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Components:

91-20-3 Naphthalene:
Species: Rabbit
Method: Draize Test
Result: Severe skin irritation

Serious eye damage/eye irritation

Product:

Remarks: Causes serious eye irritation.

Components:

91-20-3 Naphthalene:
Species: Rabbit
Result: Mild eye irritation
Method: Draize Test

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Components:

64742-94-5 Solvent naphtha (petroleum), heavy aromatic:
Test Type: Maximisation Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Not a skin sensitizer.

GLP: No information available.

Carcinogenicity

IARC	Group 2B: Possibly carcinogenic to humans	
	Naphthalene	91-20-3
	Group 1: Carcinogenic to humans	
	Formaldehyde	50-00-0
OSHA	OSHA specifically regulated carcinogen	
	Formaldehyde	50-00-0
NTP	Reasonably anticipated to be a human carcinogen	
	Naphthalene	91-20-3
	Known to be human carcinogen	
	Formaldehyde	50-00-0

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

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)	:	Not applicable.
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 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (Alkyl (C3-C5) benzenes, naphthalene)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous Dangerous Goods
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. (Alkyl (C3-C5) benzenes, naphthalene)
Marine Pollutant	:	(naphthalene)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

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	:	NA 1993
Proper shipping name	:	Combustible liquid, n.o.s. (Alkyl (C3-C5) benzenes, naphthalene)
Class	:	CBL
Packing group	:	III
Labels	:	Combustible liquid
Marine pollutant	:	yes (naphthalene)

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)
Naphthalene	91-20-3	100	10000

SARA 304 - Emergency Release Notification

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Formaldehyde	50-00-0	100	33333

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

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Formaldehyde	50-00-0	100	33333

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 : The following components are subject to reporting levels established by SARA Title III, Section 302:

Formaldehyde 50-00-0 .3 %

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.

Naphthalene	91-20-3	1 %
Formaldehyde	50-00-0	.3 %

Clean Air Act

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

Naphthalene	91-20-3	1 %

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).

Massachusetts Right To Know

Naphthalene	91-20-3
Formaldehyde	50-00-0

Pennsylvania Right To Know

Phenolic Resin	-
Solvent naphtha (petroleum), heavy aromatic	64742-94-5
Naphthalene	91-20-3
Formaldehyde	50-00-0

New Jersey Right To Know

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : 800963-5015

California Prop. 65

⚠ WARNING: This product can expose you to chemicals including Naphthalene, Formaldehyde, which is/are known to the State of California to cause cancer. 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.