

BYK-077

Version 8

Revision Date 07/18/2019

Print Date 09/29/2022

SECTION 1. IDENTIFICATION

Product name : BYK-077

Manufacturer or supplier's details

Company : BYK USA Inc.
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 : Leveling Additive

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

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 3

Carcinogenicity : Category 2

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

Aspiration hazard : Category 1

GHS label elementsHazard pictograms : 

Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
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.
P202 Do not handle until all safety precautions have been read

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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.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.
P281 Use personal protective equipment as required.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P331 Do NOT induce vomiting.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

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 a polymethylalkylsiloxane

Hazardous components

Cumene is a component of Solvent naphtha, petroleum, light aromatic

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Component	CAS-No.	Concentration (%)
Solvent naphtha, petroleum, light aromatic	64742-95-6	>= 45 - < 46
Cumene	98-82-8	>= 1 - < 2
1-Octene	111-66-0	>= 1 - < 2

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove to fresh air. Administer artificial respiration if necessary. Get medical aid as soon as possible.
- In case of skin contact : Remove contaminated clothing. Wash thoroughly with soap and water.
- In case of eye contact : Immediately flush with plenty of water for at least 20 minutes. Get medical aid.
- 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.
- 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
- Unsuitable extinguishing media : No information available.
- Specific hazards during firefighting : Cool closed containers exposed to fire with water spray.
Will not explode on mechanical impact.
- Hazardous combustion products : Carbon oxides
silicone compounds
formaldehyde
- Further information : Keep away from heat and sources of ignition.
Keep away from oxidizing agents.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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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.
- Environmental precautions : Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.
- Methods and materials for containment and cleaning up : Stop leak. Dike and contain spill. Pump into salvage tanks and/or absorb with suitable material. Use sparkless shovels to remove material.

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. Handle as an industrial chemical. Keep container tightly closed.
- Conditions for safe storage : 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.
- Materials to avoid : Keep away from strong acids. 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
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
1-Octene	111-66-0	TWA	75 ppm	US WEEL

Engineering measures : Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection : Unless air monitoring demonstrates vapor/mist/dust levels

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are below the PEL/TLV wear a properly fitted respirator (NIOSH approved) or dust mask during exposure.

Hand protection

Material : Viton
Break through time : 120.00 min
Nitrile rubber

Eye protection

: Safety Glasses
Goggles

Skin and body protection

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

Hygiene measures

: Clean long legged, long sleeved work clothes.
Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : light brown

Odour : solvent-like

Odour Threshold : No data available

pH : No data available

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

Initial boiling point : 320.00 °F (160.00 °C)

Vapour pressure : 5.0000000 hPa (68.00 °F (20.00 °C))
Method: calculated

Flash point : 113.00 °F (45.00 °C)
Method: 48 (Abel-Pensky)

Upper explosion limit : 7.50 %(V)

Lower explosion limit : 1.00 %(V)

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Relative vapour density : No data available

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Relative Density/Specific Gravity	: No data available
Density	: 0.8850 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
Thermal decomposition	: No data available
Viscosity Viscosity, dynamic	: No data available
Viscosity, kinematic	: 21.000 mm ² /s (68.00 °F (20.00 °C)) 12.400 mm ² /s (104.00 °F (40.00 °C))
Surface tension	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable; polymerization will not occur
Possibility of hazardous reactions	: No data available
Conditions to avoid	: None known.
Incompatible materials	: Acids Strong oxidizing agents

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Hazardous decomposition : None expected
products

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

Skin contact
Skin Absorption
Inhalation
Eyes
Ingestion

Acute toxicity**Product:**

Acute oral toxicity : LD50 (Rat): 5,580.000000 mg/kg

Components:**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

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

111-66-0 1-Octene:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 40.2 mg/l
Method: OECD Test Guideline 403
GLP: no

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation**Product:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

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

Species: Rabbit

Result: Moderate skin irritation

111-66-0 1-Octene:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Repeated exposure may cause skin dryness or cracking.

GLP: yes

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

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

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

Species: Rabbit

Result: Eye irritation

111-66-0 1-Octene:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

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.

Carcinogenicity

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IARC	Group 2B: Possibly carcinogenic to humans	
	Cumene	98-82-8
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.	
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

Repeated dose toxicity**Product:**

Remarks: Absorption of ingredients (solvents) by inhalation and/or repeated skin contact may cause injury to the liver/kidney.

Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage.

Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.

Inhalation of Naphtha has caused fetotoxic effects at maternally toxic doses in laboratory animals.

Cumene is an IARC 2B and NTP Group 2 Carcinogen. Cumene has caused tumors in rats and mice (lung, liver and kidney). Proposed cancer causing mechanisms for lung and liver tumors are similar to human metabolic pathways. The relevance of kidney tumors in humans is uncertain.

Aspiration toxicity**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.

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:

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	Symptoms:	Contact may cause irritation.
Eye contact:	Symptoms:	Contact may cause irritation.
Ingestion:	Symptoms:	Ingestion may irritate the digestive tract; high dosages may cause CNS depression.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish :
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 : There is no data available for this product.

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

EPA Hazardous Waste Code(s) : D001: Ignitable

D018: Benzene

Waste from residues : Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.

SECTION 14. TRANSPORT INFORMATION**International Regulations****IATA-DGR**

UN/ID No. : UN 1268
Proper shipping name : Petroleum distillates, n.o.s.
Class : 3
Packing group : III
Labels : Flammable liquid
Packing instruction (cargo aircraft) : 366
Packing instruction (passenger aircraft) : 355

IMDG-Code

UN number : UN 1268
Proper shipping name : PETROLEUM DISTILLATES, N.O.S.
Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-E
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.

National Regulations**49 CFR**

UN/ID/NA number : UN 1268
Proper shipping name : Petroleum distillates, n.o.s.
Class : 3
Packing group : III
Labels : Flammable liquid
ERG Code : 128

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Marine pollutant : yes (Solvent naphtha)
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)**

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.

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	15.7 %
Cumene	98-82-8	1.1 %

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Cumene	98-82-8	1.1 %
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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).

Non-volatile (Wt) : 50 - 54 %
Method: 22 (10min/150°C)

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DIN EN ISO 3251

Non-volatile information is not a specification.

Massachusetts Right To Know

Cumene	98-82-8
1-Octene	111-66-0

Pennsylvania Right To Know


Polymethylalkylsiloxane	-
Solvent naphtha, petroleum, light aromatic	64742-95-6
Cumene	98-82-8
1-Octene	111-66-0
Naphthalene	91-20-3
Ethyl benzene	100-41-4

New Jersey Right To Know

Polymethylalkylsiloxane	-
Solvent naphtha, petroleum, light aromatic	64742-95-6
Cumene	98-82-8
1-Octene	111-66-0

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : 800963-5200

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.

CONEG Heavy Metal: We confirm that we use packaging and/or packaging components in which the sum of the incidental concentration levels of lead, mercury, cadmium and hexavalent chromium do not exceed 100 parts per million by weight.

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

TSCA	: We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements per 40 CFR 720 30(h).
Section 4 / 12(b)	: Not applicable
TSCA Inventory Active List	All components of this product are listed active and/or are exempt
DSL	: We certify that all of the components of this product are listed on the DSL.

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SECTION 16. OTHER INFORMATION

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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.