# BYK-342



## SECTION 1. IDENTIFICATION

Product name : BYK-342

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

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**

Flammable liquids : Category 4

Reproductive toxicity : Category 2

**GHS label elements**

Hazard pictograms :



Signal word : Warning

Hazard statements : H227 Combustible liquid.
H361f Suspected of damaging fertility.

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.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
**Response:**
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
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 : Solution of a polyether modified polydimethylsiloxane
**Hazardous components**

| Component | CAS-No. | Concentration (%) |
|---|---|---|
| 2-Methoxymethylethoxypropanol [DPM] | 34590-94-8 | >= 30 - < 60 |
| Octamethylcyclotetrasiloxane | 556-67-2 | >= 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.
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 on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution.
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.

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

delayed
Notes to physician : Treat symptomatically.

## SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media : 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
silicone compounds
Nitrogen oxides (NOx)
formaldehyde

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.

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.<br>Do not breathe vapours/dust.<br>Avoid contact with skin and eyes.<br>For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in the application area.<br>Provide sufficient air exchange and/or exhaust in work rooms.<br>Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage | : | No smoking.<br>Keep in a well-ventilated place.<br>Observe label precautions.<br>Electrical installations / working materials must comply with the technological safety standards. |
| Materials to avoid | : | Keep away from strong acids.<br>Keep away from strong bases.<br>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 |
|---|---|---|---|---|
| 2-Methoxymethylethoxypropanol [DPM] | 34590-94-8 | TWA | 100 ppm<br>600 mg/m3 | OSHA Z-1 |
| 2-Methoxymethylethoxypropanol [DPM] | | TWA | 50 ppm | ACGIH |
| Octamethylcyclotetrasiloxane | 556-67-2 | TWA | 10 ppm | US WEEL |

**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<br>Tightly fitting safety goggles |
| Skin and body protection | : | Impervious clothing<br>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 | : | colourless |
| Odour | : | not significant |
| Odour Threshold | : | No data available |
| pH | : | 7, Concentration: 10 % (68 °F (20 °C)) Method: Universal pH-value indicator |
| Melting point/ range | : | < 32 °F (< 0 °C)<br>Method: derived |
| Initial boiling point | : | ca. 374 °F (190 °C)<br>Method: derived |
| Vapour pressure | : | < 1 hPa (68 °F (20 °C))<br>Method: derived |
| Flash point | : | 169 °F (76 °C)<br>Method: 49 (Pensky-Martens) |
| 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 | : | 0.99 g/cm3 (68 °F (20 °C))<br>Method: 4 (20°C oscillating U-tube) |
| Solubility(ies) | | |
| Water solubility | : | completely miscible |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Ignition temperature | : | > 392 °F (> 200 °C)<br>Method: DIN 51794 |

Thermal decomposition : No data available

Viscosity
Viscosity, dynamic : 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 : DPM may form peroxides of unknown stability.

No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.

Conditions to avoid : 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
Eyes
Skin contact
Skin Absorption

**Acute toxicity**

**Product:**

Acute oral toxicity : Remarks: No data available

Acute toxicity (other routes of administration) :

Remarks: Skin absorption of 10-20 ml/kg of DPM has caused CNS depression (in rabbits). ACGIH-TLV-TWA for DPM = 100 ppm (skin)

**Components:**

**34590-94-8 2-Methoxymethylethoxypropanol [DPM]:**
Acute oral toxicity : LD50 (Rat): 5,200 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 50 mg/l

Acute dermal toxicity : LD50 (Rabbit): 9,500 mg/kg

**Skin corrosion/irritation**

**Product:**

Remarks: No data available

**Components:**

**34590-94-8 2-Methoxymethylethoxypropanol [DPM]:**
Species: Rabbit
Result: slight irritation

**556-67-2 Octamethylcyclotetrasiloxane:**
Species: Rabbit
Result: slight irritation

**Serious eye damage/eye irritation**

**Components:**

**34590-94-8 2-Methoxymethylethoxypropanol [DPM]:**
Species: Rabbit
Result: Mild eye irritation

**556-67-2 Octamethylcyclotetrasiloxane:**
Species: Rabbit
Result: Mild eye irritation

**Respiratory or skin sensitisation**

**Product:**

Remarks: No data available

**Components:**

**34590-94-8 2-Methoxymethylethoxypropanol [DPM]:**
Result: Does not cause skin sensitisation.

**556-67-2 Octamethylcyclotetrasiloxane:**
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
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: Prolonged exposure to respirable aerosols (mists) of polyalkylene glycol has caused lung damage in rats (90 days; 0.3 mg/m3).
Inhalation (300 ppm)/ingestion (1600 mg/kg) dosages of Octamethylcyclotetrasiloxane has caused liver weight increases in laboratory animals. Liver weight changes via inhalation were reversible. A reproductive study (rats, inhalation: 700 ppm/70 days) showed a statistically significant reduction in mean litter size and implantation sites. The relevance of this data to humans is uncertain.

**Aspiration toxicity**

**Product:**

No data available

**Components:**

**34590-94-8 2-Methoxymethylethoxypropanol [DPM]:**
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 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 may cause irritation. |

Eye contact:

| | |
|---|---|
| Symptoms: | Contact may cause irritation. |

Ingestion:

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

**Further information**

**Product:**

Remarks: No data available

## 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) | : | Not applicable. |
| Waste from residues | : | Do not dispose of waste into sewer.<br>Do not contaminate ponds, waterways or ditches with chemical or used container.<br>Send to a licensed waste management company. |
| Contaminated packaging | : | Empty remaining contents.<br>Dispose of as unused product.<br>Do not re-use empty containers.<br>Do not burn, or use a cutting torch on, the empty drum. |

## SECTION 14. TRANSPORT INFORMATION

**International Regulations**

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**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**
Not regulated as a dangerous good

## 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**

Calculated RQ exceeds reasonably attainable upper limit.

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

Calculated RQ exceeds reasonably attainable upper limit.

**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) : 52.4 %
Method: 22 (10min/150°C)
DIN EN ISO 3251
Non-volatile information is not a specification.

**Massachusetts Right To Know**

| | |
|---|---|
| 2-Methoxymethylethoxypropanol [DPM] | 34590-94-8 |
| Propylene oxide | 75-56-9 |
| Hydrogen Chloride | 7647-01-0 |
| Acetaldehyde | 75-07-0 |
| Formaldehyde | 50-00-0 |
| Ethylene oxide | 75-21-8 |

**Pennsylvania Right To Know**

| | |
|---|---|
| 2-Methoxymethylethoxypropanol [DPM] | 34590-94-8 |
| Oxirane, Me, polymer with oxirane monobutyl ether (polyalkylene glycol) | 9038-95-3 |
| Polysiloxanes | - |
| Polyglycol | - |

**New Jersey Right To Know**

**New Jersey Trade Secret Registry Number for the product (NJ TSRN)** : 800963-5193

**California Prop. 65**

⚠ WARNING: This product can expose you to chemicals including Propylene oxide, Acetaldehyde, Formaldehyde, Ethylene oxide, 1,4-Dioxane, which is/are known to the State of California to cause cancer, and Ethylene oxide, Methanol, Chloromethane, 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.