

# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

#### **SECTION 1. IDENTIFICATION**

Product name : BYK-1798

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 : 203-265-2086; CHEMTREC 1-800-424-9300 / +1

number 703-527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Defoamer

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

## **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Acute toxicity (Dermal) : Category 4

Skin irritation : Category 2

Eye irritation : Category 2A

Specific target organ toxicity

- single exposure

: Category 3 (Respiratory system, Central nervous system)

Specific target organ toxicity

- repeated exposure

: Category 2 (Kidney)

Aspiration hazard : Category 1

**GHS** label elements



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

Hazard pictograms







Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.

H302 + H312 + H332 Harmful if swallowed, in contact with skin

or if inhaled.

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.

H373 May cause damage to organs (Kidney) through prolonged

or repeated exposure.

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.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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.

P314 Get medical advice/ attention if you feel unwell.

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



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

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 a modified polysiloxane copolymer

**Hazardous components** 

Component	CAS-No.	Concentration (%)	
2-Butoxyethanol	111-76-2	>= 59 -< 60	
2-Ethyl-1-hexanol	104-76-7	>= 20 -< 21	
Naphtha, petroleum, hydrodesulfurized heavy	64742-82-1	>= 10 -< 11	

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. Symptoms of poisoning may appear several hours later.

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 : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.



**BYK-1798** 

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

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.

Most important symptoms and effects, both acute and

delayed

: No information available.

**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

: Handle as an industrial chemical.

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

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

: Use personal protective equipment.

Ensure adequate ventilation.



**BYK-1798** 

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

emergency procedures 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 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 : 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 strong acids.

Keep away from strong bases. Keep away from oxidizing agents.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

		exposure)	Permissible concentration	
2-Butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
2-Butoxyethanol		TWA	50 ppm 240 mg/m3	OSHA Z-1

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 : Silver Shield 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**

Appearance : liquid

Colour : colourless

Odour : solvent-like

Odour Threshold : No data available

pH : 7, Concentration: 1 % (68 °F (20 °C)) Method: Universal pH-

value indicator

Melting point/range :  $< 32 \, ^{\circ}F \, (< 0 \, ^{\circ}C)$ 

Method: derived



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

Initial boiling point : ca. 356 °F (180 °C)

Method: derived

Vapour pressure : < 1 hPa (68 °F (20 °C))

Method: derived

Flash point : 127 °F (53 °C)

Method: 48 (Abel-Pensky)

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 : 0.885 g/cm3 (68 °F (20 °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 : No data available

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No decomposition if stored and applied as directed.



**BYK-1798** 

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

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 and bases

Strong oxidizing agents

Hazardous decomposition

products

: No data available

## **SECTION 11. TOXICOLOGICAL INFORMATION**

## Information on likely routes of exposure

Inhalation

Eves

Skin contact

Skin Absorption

Ingestion

#### **Acute toxicity**

**Product:** 

Acute oral toxicity : Acute toxicity estimate : 772.97 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 13.78 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : 1,714 mg/kg

Method: Calculation method

**Components:** 

111-76-2 2-Butoxyethanol:

Acute inhalation toxicity : LC50 (Guinea pig): 11 mg/l

Exposure time: 4 h
Test atmosphere: vapour

104-76-7 2-Ethyl-1-hexanol:

Acute oral toxicity : LD50 (Rat): ca. 2,047 mg/kg

Method: OECD Test Guideline 401

GLP: no



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

Acute inhalation toxicity : LC50 (Rat): > 1 mg/l

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Acute dermal toxicity : LD50 (Rabbit): 1,970 mg/kg

**64742-82-1 Naphtha, petroleum, hydrodesulfurized heavy:** Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 11.6 mg/l

Acute dermal toxicity : LD50 (Rabbit): > 3,000 mg/kg

#### Skin corrosion/irritation

#### **Product:**

Remarks: May cause skin irritation in susceptible persons.

#### **Components:**

### 111-76-2 2-Butoxyethanol:

Species: Rabbit Result: Skin irritation

## 104-76-7 2-Ethyl-1-hexanol:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Severe skin irritation

GLP: no

# 64742-82-1 Naphtha, petroleum, hydrodesulfurized heavy:

Species: Rabbit

Result: Moderate skin irritation

## Serious eye damage/eye irritation

#### **Product:**

Remarks: Causes serious eye irritation.

#### **Components:**

## **111-76-2 2-Butoxyethanol:**

Species: Rabbit Result: Eye irritation

Method: OECD Test Guideline 405

GLP: yes

#### 104-76-7 2-Ethyl-1-hexanol:

Species: Rabbit Result: Eye irritation



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

Method: OECD Test Guideline 405

GLP: no

64742-82-1 Naphtha, petroleum, hydrodesulfurized heavy:

Species: Rabbit Result: Eye irritation

Respiratory or skin sensitisation

**Product:** 

Remarks: No data available

**Components:** 

**111-76-2 2-Butoxyethanol:** Test Type: Maximisation Test Exposure routes: Dermal

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

egual 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



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

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: Absorption of 2-Butoxyethanol by inhalation and/or repeated skin contact may cause injury to liver, kidney and blood damage.

2-Butoxyethanol is considered fetotoxic; has caused toxic reproductive effects in laboratory animals at maternally toxic doses.

2-Butoxyethanol had both positive and negative results in in vitro mutagenicity studies.

In a 2 yr. cancer study, the NTP has determined 2-butoxyethanol has a potential to cause cancer (potentially carcinogenic to mice) but there is not enough evidence to list 2-butoxyethanol as a carcinogen. The relevance to humans is unknown.

Absorption of 2-Ethylhexanol by inhalation and/or repeated skin contact has caused injury to the liver/kidney.

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.

### **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:



**BYK-1798** 

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

> 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: Absorption of 2-Butoxyethanol may cause acute red blood cell damage and kidney effects. Inhalation of 2-Butoxyethanol has damaged the kidneys of laboratory animals. OSHA PEL-TWA for 2-butoxyethanol = 50 ppm (skin)

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



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

#### Other adverse effects

**Product:** 

Results of PBT and vPvB

assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

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 D018: Benzene

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 1268

Proper shipping name : Petroleum distillates, n.o.s.

Class : 3 Packing group : III

Labels : Flammable Liquids

Packing instruction (cargo

aircraft)

: 366

Packing instruction

: 355

(passenger aircraft)



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

**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 : 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 1268

Proper shipping name : Petroleum distillates, n.o.s.

Class : 3 Packing group : III

Labels : FLAMMABLE LIQUID

ERG Code : 128 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.



59.8 %

BYK-1798			
Version 11	Revision Date 05/06/2022	Print Date 09/29/2022	
SARA 302		No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.	
SARA 313	to the reporting requirements of Sect	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.	

#### 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).

2-Butoxyethanol

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):

2-Butoxyethanol	111-76-2	59.8 %
2-Ethyl-1-hexanol	104-76-7	20 %

111-76-2

## **Massachusetts Right To Know**

2-Butoxyethanol	111-76-2
2-Ethyl-1-hexanol	104-76-7

## Pennsylvania Right To Know

2-Butoxyethanol	111-76-2
2-Ethyl-1-hexanol	104-76-7
Modified polysiloxane copolymer	-

Naphtha, petroleum, hydrodesulfurized 64742-82-1

heavy

 Cumene
 98-82-8

 Ethyl benzene
 100-41-4

# **New Jersey Right To Know**

 2-Butoxyethanol
 111-76-2

 2-Ethyl-1-hexanol
 104-76-7

Modified polysiloxane copolymer -

Naphtha, petroleum, hydrodesulfurized 64742-82-1

heavy

New Jersey Trade Secret : 800963-5289

Registry Number for the product (NJ TSRN)

#### California Prop. 65

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



# **BYK-1798**

Version 11 Revision Date 05/06/2022 Print Date 09/29/2022

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** : 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).

SNUR 40 CFR 721.10396. New Uses: Exceeding the Section 5:

> Mfg/Import volume limitation; exceeding the maximum concentration of certain impurities; and not reporting impurity levels to EPA. Our additive is compliant with these terms.

Section 12(b) Export Dimethyl siloxy-polyfluoro methyl siloxy-poly(oxyalkylenediyl)

methyl siloxy-copolymer. Section 5 (P-10-470). Notification:

TSCA Inventory Active List All components of this product are listed active and/or are

exempt

DSL The following component(s) is/are not listed on the DSL:

**CEPA Category** Polymer Weight percent 10.0 % NSN Filed : None

Max. NSN Required : Schedule 10

## **SECTION 16. OTHER INFORMATION**

Revision Date : 05/06/2022

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.