

# **BYKETOL-SPEZIAL**

Version 9 Revision Date 07/13/2020 Print Date 09/29/2022

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

Product name : BYKETOL-SPEZIAL

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 : 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

Reproductive toxicity : Category 2

Specific target organ toxicity

- single exposure

: Category 3 (Respiratory system, Central nervous system)

Aspiration hazard : Category 1

**GHS label elements** 

Hazard 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.

H361 Suspected of damaging fertility or the unborn child.



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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. 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 : Combination of high boiling aromatics, ketones, esters and a

polydimethylsiloxane

**Hazardous components** 



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

Component	CAS-No.	Concentration (%)
Solvent naphtha, petroleum, light aromatic	64742-95-6	>= 78 - < 79
2,6-Dimethylheptan-4-one	108-83-8	>= 10 - < 11
4,6-Dimethyl-2-heptanone	19549-80-5	>= 4 - < 5
Ethyl lactate	97-64-3	>= 2 -< 3
Hydroxy acetic acid butyl ester (Butyl glycolate)	7397-62-8	>= 2 -< 3
Cumene	98-82-8	>= 2 -< 3

#### **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

Nitrogen oxides (NOx) silicone compounds



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formaldehyde

Further information : Keep away from heat and sources of ignition.

Keep away from oxidizing agents.

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

#### **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

clothina.

**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. Containers should be grounded when being emptied.

Ensure all equipment is electrically grounded before beginning

transfer operations.

Vapours may travel to areas away from work site before

igniting/flashing back to Vapour source. 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 oxidizing agents.

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

#### Components with workplace control parameters

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



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			concentration	
2,6-Dimethylheptan-4-one	108-83-8	TWA	25 ppm	ACGIH
2,6-Dimethylheptan-4-one		TWA	50 ppm 290 mg/m3	OSHA Z-1
Cumene	98-82-8	TWA	50 ppm	ACGIH
Cumene		TWA	50 ppm 245 mg/m3	OSHA Z-1
Cumene		TWA	50 ppm 245 mg/m3	OSHA P0

**Engineering measures** : Use with local exhaust ventilation.

Personal protective equipment

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

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

Hand protection

Material : Silver Shield gloves

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 : colourless

Odour : not significant

Odour Threshold : No data available

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

value indicator

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

Initial boiling point and boiling : 309.20 °F (154.00 °C)

range



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

Method: calculated

Flash point : 109.40 °F (43.00 °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

Relative Density/Specific

Gravity

: No data available

Density : 0.8700 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 :  $> 392 \,^{\circ}\text{F} \, (> 200 \,^{\circ}\text{C})$ 

Method: DIN 51794

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : 1.000 mm2/s (68.00 °F (20.00 °C))

1.000 mm2/s (104.00 °F (40.00 °C))

Surface tension : < 25.00 mN/m, ring dynamometer



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#### **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 : Strong oxidizing agents

Hazardous decomposition

products

: None expected

#### **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): 3,990.000000 mg/kg

Method: OECD Test Guideline 401

#### **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

# 108-83-8 2,6-Dimethylheptan-4-one:

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

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 14 mg/l

Method: OECD Test Guideline 403

GLP: no



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

Method: OECD Test Guideline 402

GLP: yes

97-64-3 Ethyl lactate:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4900 ppm

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

7397-62-8 Hydroxy acetic acid butyl ester (Butyl glycolate):

Acute oral toxicity : LD50 (Rat): 4,595 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

#### Skin corrosion/irritation

#### **Product:**

Species: Rabbit

Assessment: No skin irritation Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

#### **Components:**

## 64742-95-6 Solvent naphtha, petroleum, light aromatic:

Species: Rabbit

Result: Moderate skin irritation

#### 108-83-8 2,6-Dimethylheptan-4-one:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

#### 97-64-3 Ethyl lactate:

Species: Rabbit

Result: Moderate skin irritation

## 7397-62-8 Hydroxy acetic acid butyl ester (Butyl glycolate):

Species: Rabbit

Result: Moderate skin irritation



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#### Serious eye damage/eye irritation

## **Product:**

Species: Rabbit

Result: No eye irritation Assessment: No eye irritation Method: OECD Test Guideline 405

#### **Components:**

## 64742-95-6 Solvent naphtha, petroleum, light aromatic:

Species: Rabbit Result: Eye irritation

#### 108-83-8 2,6-Dimethylheptan-4-one:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: no

## 97-64-3 Ethyl lactate:

Species: Rabbit Result: Eye irritation

## 7397-62-8 Hydroxy acetic acid butyl ester (Butyl glycolate):

Species: Rabbit

Result: Corrosive to eyes

## 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.

## 108-83-8 2,6-Dimethylheptan-4-one:

Test Type: Maximisation Test Exposure routes: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406 Result: Not a skin sensitizer.

GLP: yes



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#### 7397-62-8 Hydroxy acetic acid butyl ester (Butyl glycolate):

Test Type: Maximisation Test

Species: Guinea pig

Method: OECD Test Guideline 406 Result: Does not cause skin sensitisation.

GLP: yes

## Carcinogenicity

IARC Group 2B: Possibly carcinogenic to humans

Cumene 98-82-8

Group 2B: Possibly carcinogenic to humans

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.

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

Reasonably anticipated to be a human carcinogen

## 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.



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## **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:

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.

## **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



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## Mobility in soil

No data available

#### 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

: There is no data available for this product.

#### **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 1993

Proper shipping name : Flammable liquid, n.o.s.

(Solvent naphtha, Diisobutyl ketone)

Class : 3 Packing group : III

Labels : Flammable Liquids

Packing instruction (cargo

aircraft)

: 366

Packing instruction

(passenger aircraft)

: 355

**IMDG-Code** 



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UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(SOLVENT NAPHTHA, Diisobutyl ketone)

: )

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 1993

Proper shipping name : Flammable liquids, n.o.s.

(Solvent naphtha, Diisobutyl ketone)

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)

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.



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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 28 %

Cumene 98-82-8 2.0 %

## Clean Air Act

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

Cumene 98-82-8 2.0 %

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) : 0 - 1 %

Method: 22 (10min/150°C)

**DIN EN ISO 3251** 

Non-volatile information is not a specification.

#### Massachusetts Right To Know

2,6-Dimethylheptan-4-one	108-83-8
Ethyl lactate	97-64-3
Cumene	98-82-8

## Pennsylvania Right To Know

Solvent naphtha, petroleum, light aromatic	64742-95-6
2,6-Dimethylheptan-4-one	108-83-8
4,6-Dimethyl-2-heptanone	19549-80-5
Ethyl lactate	97-64-3
Cumene	98-82-8
Naphthalene	91-20-3
Ethyl benzene	100-41-4

## **New Jersey Right To Know**

Solvent naphtha, petroleum, light aromatic	64742-95-6
2,6-Dimethylheptan-4-one	108-83-8
4,6-Dimethyl-2-heptanone	19549-80-5
Ethyl lactate	97-64-3
Hydroxy acetic acid butyl ester (Butyl	7397-62-8

glycolate)



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Cumene 98-82-8

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : Not applicable

## California Prop. 65

MARNING: 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.

#### 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.