

**BYKETOL-WA**

Product code: 00000000000129288

Version 4.0 SDS\_APJ\_MY

Revision Date 07.11.2023

Print Date 29.11.2023

**SECTION 1: Identification of the hazardous chemical and of the supplier****Product identifier**

Product name : BYKETOL-WA

Recommended use : Defoamer

**Manufacturer or supplier's details**

Company : BYK-Chemie GmbH

Address : Abelstrasse 45  
46483 Wesel

Telephone : +49 281 670-23532

Telefax : +49 281 670-23533

E-mail address : GHS.BYK@altana.com

Emergency telephone number : +60 3 6207 4347 (Malay and English)  
+65 3158 1074 (All languages)**SECTION 2: Hazards identification****Classification of the hazardous chemical**

Aspiration hazard : Category 1

**Label elements**

Hazard pictograms :



Signal word : Danger

Hazard statements : H304 May be fatal if swallowed and enters airways.

Precautionary statements :

**Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P331 Do NOT induce vomiting.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards which do not result in classification**

None known.

**SECTION 3: Composition and information of the ingredients of the hazardous chemical**

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Substance / Mixture : Mixture  
 Chemical nature : Mixture of high-boiling solvents and foam destroying substances

### Components

| Chemical name                       | CAS-No.    | Concentration (% w/w) |
|-------------------------------------|------------|-----------------------|
| Paraffins (petroleum), normal C5-20 | 64771-72-8 | >= 50 -<= 100         |
| 2-butoxyethanol                     | 111-76-2   | >= 7 -< 10            |

### 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 : If unconscious, place in recovery position and seek medical advice.  
 If symptoms persist, call a physician.

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 : 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.

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

Notes to physician : No information available.

### SECTION 5: Firefighting measures

#### Extinguishing media

Suitable extinguishing media : Foam  
 Carbon dioxide (CO<sub>2</sub>)  
 Dry chemical

Unsuitable extinguishing media : High volume water jet

#### Physicochemical hazards arising from the chemical

Hazardous combustion products : Carbon oxides

#### Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Specific extinguishing methods : Standard procedure for chemical fires.  
 Use extinguishing measures that are appropriate to local

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circumstances and the surrounding environment.

### SECTION 6: Accidental release measures

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.
- 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 : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

### SECTION 7: Handling and storage

#### Handling

##### Precautions for safe handling

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapours/dust.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.

#### Storage

##### Conditions for safe storage, including any incompatibilities

- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage stability : No decomposition if stored and applied as directed.

### SECTION 8: Exposure controls and personal protection

#### Control parameters

| Components      | CAS-No.                   | Value type<br>(Form of exposure) | Control parameters /<br>Permissible concentration | Basis  |
|-----------------|---------------------------|----------------------------------|---|--------|
| 2-butoxyethanol | 111-76-2                  | TWA                              | 20 ppm<br>96.7 mg/m <sup>3</sup>                  | MY PEL |
|                 | Further information: Skin |                                  |   |        |
|                 |                           | TWA                              | 20 ppm  | ACGIH  |

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**Biological occupational exposure limits**

| Components      | CAS-No.  | Control parameters      | Biological specimen | Sampling time  | Permissible concentration | Basis     |
|-----------------|----------|-------------------------|---------------------|--|---------------------------|-----------|
| 2-butoxyethanol | 111-76-2 | Butoxyacetic acid (BAA) | Urine               | End of shift (As soon as possible after exposure ceases) | 200 mg/g creatinine       | ACGIH BEI |

**Individual protection measures, such as personal protective equipment**

- Eye/face protection : Eye wash bottle with pure water  
Tightly fitting safety goggles
- Skin protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hand protection  
Material : butyl-rubber  
Break through time : > 120 min
- Remarks : Wear suitable gloves.
- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- Filter type : Type A
- 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 : not significant
- Odour Threshold : No data available
- pH : 7 (20 °C)  
Concentration: 1 %  
Method: Universal pH-value indicator
- Solidification / Setting point : < -10 °C  
Method: derived
- Initial boiling point : > 170 °C  
Method: derived
- Flash point : 67 °C  
Method: 49 (Pensky-Martens)

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|  |   |  |
|--|---|--|
| Evaporation rate                                 | : | No data available  |
| Flammability (liquids)                           | : | Sustains combustion  |
| Upper explosion limit / Upper flammability limit | : | No data available  |
| Lower explosion limit / Lower flammability limit | : | No data available  |
| Vapour pressure                                  | : | 1 hPa (20 °C)<br>Method: derived   |
| Relative vapour density                          | : | No data available  |
| Relative density                                 | : | No data available  |
| Density  | : | 0.761 g/cm <sup>3</sup> (20 °C)<br>Method: 4 (20°C oscillating U-tube)<br><br>0.748 g/cm <sup>3</sup> (40 °C)<br>Method: 5 (40°C oscillating U-tube) |
| Solubility(ies)                                  |   |  |
| Water solubility                                 | : | insoluble, partly miscible   |
| Solubility in other solvents                     | : | No data available  |
| Partition coefficient: n-octanol/water           | : | No data available  |
| Auto-ignition temperature                        | : | > 200 °C<br>Method: DIN 51794  |
| Decomposition temperature                        | : | No data available  |
| Viscosity  |   |  |
| Viscosity, dynamic                               | : | 2 mPa.s ( 40 °C)<br>Method: P/K 40°C   |
| Surface tension                                  | : | Not applicable   |

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**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 | : | No decomposition if stored and applied as directed. |
| Conditions to avoid                | : | No data available                                   |
| Incompatible materials             | : | Strong oxidizing agents                             |
| Hazardous decomposition products   | : | No decomposition if stored and applied as directed. |

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**SECTION 11: Toxicological information**

Information on likely routes of : None known.

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exposure

**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: Calculation method

**Components:****2-butoxyethanol:**

Acute inhalation toxicity : LC50 (Guinea pig): 11 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour

**Skin corrosion/irritation****Product:**

Remarks : No data available

**Components:****2-butoxyethanol:**

Species : Rabbit  
Result : Skin irritation

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

Remarks : No data available

**Components:****2-butoxyethanol:**

Species : Rabbit  
Result : Eye irritation  
Method : OECD Test Guideline 405  
GLP : yes

**Respiratory or skin sensitisation****Product:**

Remarks : No data available

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**Components:****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

**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 : No data available

**Aspiration toxicity****Product:**

No data available

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**Further information****Product:**

Remarks : Solvents may degrease the skin.

**SECTION 12: Ecological information****Ecotoxicity****Product:**Toxicity to fish :  
Remarks: No data availableToxicity to daphnia and other :  
aquatic invertebrates Remarks: No data available**Components:****2-butoxyethanol:**Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,474 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 1,550 mg/l  
aquatic invertebrates Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202Toxicity to algae/aquatic : ErC50 (Pseudokirchneriella subcapitata (green algae)): 1,840  
plants mg/l  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201Toxicity to fish (Chronic : NOEC: > 100 mg/l  
toxicity) Exposure time: 21 d  
Method: OECD Test Guideline 204Toxicity to daphnia and other : NOEC (Daphnia magna (Water flea)): 100 mg/l  
aquatic invertebrates Exposure time: 21 d  
(Chronic toxicity) Test Type: semi-static test  
Method: OECD Test Guideline 211**Persistence and degradability****Product:**

Biodegradability : Remarks: No data available

**Components:****2-butoxyethanol:**

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Biodegradability : aerobic  
Result: Readily biodegradable.  
Method: OECD Test Guideline 301B

**Bioaccumulative potential****Product:**

Bioaccumulation : Remarks: No data available

**Components:****2-butoxyethanol:**

Partition coefficient: n-  
octanol/water : log Pow: 0.81 (25 °C)  
pH: 7

**Mobility in soil**

No data available

**Other adverse effects****Product:**

Additional ecological information : No data available

**SECTION 13: Disposal information****Disposal methods**

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.

**SECTION 14: Transport information****International Regulations****UNRTDG**

UN number : Not applicable  
Proper shipping name : Not applicable  
Class : Not applicable  
Subsidiary risk : Not applicable  
Packing group : Not applicable  
Labels : Not applicable

**IATA-DGR**

UN/ID No. : Not applicable  
Proper shipping name : Not applicable  
Class : Not applicable  
Subsidiary risk : Not applicable  
Packing group : Not applicable  
Labels : Not applicable

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Packing instruction (cargo aircraft) : Not applicable  
 Packing instruction (passenger aircraft) : Not applicable

### IMDG-Code

UN number : Not applicable  
 Proper shipping name : Not applicable  
 Class : Not applicable  
 Subsidiary risk : Not applicable  
 Packing group : Not applicable  
 Labels : Not applicable  
 EmS Code : Not applicable  
 Marine pollutant : Not applicable

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### Special precautions for user

Not applicable

## SECTION 15: Regulatory information

### Safety, health, and environmental regulations specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

## SECTION 16: Other information

Date format : dd.mm.yyyy

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
 ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)  
 MY PEL : Malaysia. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

ACGIH / TWA : 8-hour, time-weighted average

MY PEL / TWA : Eight-hour time-weighted average airborne concentration

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory

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concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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.

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