



# SAFETY DATA SHEET

Revision date 30-Sep-2024

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** Part A:  
KX Flex 40, 60  
Simpact 60

### Other means of identification

**Product Code(s)** FG-2168A  
**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** Restricted to professional users.

**Restrictions on use** No information available.

### Details of the supplier of the safety data sheet

#### **Manufacturer**

Smooth-On, Inc, 5600 Lower Macungie Rd, Macungie, PA 18062, USA, Phone: +01.610.252.5800, www.smooth-on.com, sds@smooth-on.com

**E-mail** sds@smooth-on.com

### Emergency telephone number

**Emergency Telephone** CHEMTEL +01-813-248-0585

## 2. Hazard(s) identification

### Classification

|  |                      |
|--|----------------------|
| Acute toxicity - Dermal                            | Category 5 - (H313)  |
| Acute toxicity - Inhalation (Dusts/Mists)          | Category 4 - (H332)  |
| Skin corrosion/irritation                          | Category 2 - (H315)  |
| Serious eye damage/eye irritation                  | Category 2A - (H319) |
| Respiratory sensitization                          | Category 1 - (H334)  |
| Skin sensitization                                 | Category 1 - (H317)  |
| Carcinogenicity                                    | Category 2 - (H351)  |
| Specific target organ toxicity (single exposure)   | Category 3 - (H335)  |
| Specific target organ toxicity (repeated exposure) | Category 2 - (H373)  |

### Label elements

#### **Danger**

#### **Hazard statements**

H313 - May be harmful in contact with skin.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.  
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 - May cause respiratory irritation.  
 H351 - Suspected of causing cancer.  
 H373 - May cause damage to organs through prolonged or repeated exposure.



Exclamation mark  
 Health hazard

**Precautionary Statements - Prevention**

P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P264 - Wash face, hands and any exposed skin thoroughly after handling.  
 P284 - In case of inadequate ventilation wear respiratory protection.  
 P272 - Contaminated work clothing should not be allowed out of the workplace.  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
 P280 - Wear protective gloves.

**Precautionary Statements - Response**

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

**Eyes**

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

**Skin**

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap.  
 P362 + P364 - Take off contaminated clothing and wash it before reuse.  
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.

**Inhalation**

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

**Precautionary Statements - Storage**

P405 - Store locked up.  
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

**Precautionary Statements - Disposal**

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

**Other information**

May cause long lasting harmful effects to aquatic life.

**3. Composition/information on ingredients**

**Substance**

Not applicable.

**Mixture**

| Chemical name  | CAS No.   | Weight-% |
|--|-----------|----------|
| 4,4-Methylenediphenyl diisocyanate                       | 101-68-8  | 20 - 40  |
| Benzene,<br>1-isocyanato-2-[(4-isocyanatophenyl)methyl]- | 5873-54-1 | 1 - <3   |
| Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-             | 128-37-0  | 0.1 - <1 |

**4. First-aid measures**

**Description of first aid measures**

|   |   |
|---|---|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.   |
| <b>Inhalation</b>                         | May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.   |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.   |
| <b>Skin contact</b>                       | May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.  |
| <b>Ingestion</b>                          | May produce an allergic reaction. Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.  |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination Avoid contact with skin, eyes or clothing Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Use personal protective equipment as required See section 8 for more information Avoid breathing vapors or mists |

**Most important symptoms and effects, both acute and delayed**

|                            |  |
|----------------------------|--|
| <b>Symptoms</b>            | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation. Difficulty in breathing. |
| <b>Effects of Exposure</b> | May cause damage to organs through prolonged or repeated exposure.   |

**Indication of any immediate medical attention and special treatment needed**

|                           |  |
|---------------------------|--|
| <b>Note to physicians</b> | May cause sensitization in susceptible persons. Treat symptomatically. |
|---------------------------|--|

**5. Fire-fighting measures**

|   |  |
|---|--|
| <b>Suitable Extinguishing Media</b>                 | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                            |
| <b>Large Fire</b>                                   | CAUTION: Use of water spray when fighting fire may be inefficient.   |
| <b>Unsuitable extinguishing media</b>               | Do not scatter spilled material with high pressure water streams.  |
| <b>Specific hazards arising from the chemical</b>   | Product is or contains a sensitizer. May cause sensitization by inhalation. May cause sensitization by skin contact.               |
| <b>Explosion data</b>                               |  |
| <b>Sensitivity to mechanical impact</b>             | None.  |
| <b>Sensitivity to static discharge</b>              | None.  |
| <b>Special protective actions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. Handling and storage**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid breathing vapors or mists.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

**8. Exposure controls/personal protection**

**Control parameters**

**Exposure Limits** NOM-010-STPS-2014.

| Chemical name  | Mexico                       |
|--|------------------------------|
| 4,4-Methylenediphenyl diisocyanate<br>101-68-8           | VLE-PPT: 0.005 ppm           |
| Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-<br>128-37-0 | VLE-PPT: 2 mg/m <sup>3</sup> |

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering controls** Showers  
Eyewash stations

Ventilation systems.

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

|                                       |  |
|---------------------------------------|--|
| <b>Eye/face protection</b>            | Wear safety glasses with side shields (or goggles).  |
| <b>Hand protection</b>                | Wear suitable gloves Impervious gloves   |
| <b>Skin and body protection</b>       | Wear suitable protective clothing. Long sleeved clothing.  |
| <b>Respiratory protection</b>         | Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.            |
| <b>General hygiene considerations</b> | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product. |

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | Clear Liquid             |
| <b>Color</b>          | clear                    |
| <b>Odor</b>           | Mild                     |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                                | <u>Values</u>      | <u>Remarks • Method</u> |
|--|--------------------|-------------------------|
| <b>pH</b>                                      | No data available  | None known              |
| <b>Melting point / freezing point</b>          | No data available  | None known              |
| <b>Initial boiling point and boiling range</b> | No data available  | None known              |
| <b>Flash point</b>                             | No data available  | None known              |
| <b>Evaporation rate</b>                        | No data available  | None known              |
| <b>Flammability</b>                            | No data available  | None known              |
| <b>Flammability Limit in Air</b>               |                    | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available  |                         |
| <b>Lower flammability or explosive limits</b>  | No data available  |                         |
| <b>Vapor pressure</b>                          | No data available  | None known              |
| <b>Relative vapor density</b>                  | No data available  | None known              |
| <b>Relative density</b>                        | No data available  | None known              |
| <b>Water solubility</b>                        | Insoluble in water | None known              |
| <b>Solubility in other solvents</b>            | No data available  | None known              |
| <b>Partition coefficient</b>                   | No data available  | None known              |
| <b>Autoignition temperature</b>                | No data available  | None known              |
| <b>Decomposition temperature</b>               | No data available  | None known              |
| <b>Kinematic viscosity</b>                     | 1900 cPs           | None known              |
| <b>Dynamic viscosity</b>                       | No data available  | None known              |

### Other information

|                             |                           |
|-----------------------------|---------------------------|
| <b>Oxidizing properties</b> | No information available. |
| <b>Explosive properties</b> | No information available. |
| <b>Molecular weight</b>     | No information available  |
| <b>Liquid Density</b>       | No information available  |
| <b>Bulk density</b>         | No information available  |

## 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | No information available.                            |
| <b>Chemical stability</b>                 | Stable under normal conditions.                      |
| <b>Possibility of hazardous reactions</b> | None under normal processing.                        |
| <b>Conditions to avoid</b>                | Excessive heat.                                      |
| <b>Incompatible materials</b>             | Strong acids. Strong bases. Strong oxidizing agents. |
| <b>Hazardous decomposition products</b>   | None known based on information supplied.            |

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. May cause sensitization in susceptible persons. (based on components). May cause irritation of respiratory tract. Harmful by inhalation.  |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.   |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). May cause sensitization by skin contact. Causes skin irritation. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation". Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.  |

### Symptoms related to the physical, chemical and toxicological characteristics

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. |
|-----------------|--|

**Acute toxicity** Harmful by inhalation. May be harmful in contact with skin.

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

|                                      |                |
|--------------------------------------|----------------|
| <b>ATEmix (oral)</b>                 | 5,870.20 mg/kg |
| <b>ATEmix (dermal)</b>               | 3,068.40 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 1.50 mg/l      |

#### Unknown acute toxicity

##### Component Information

| Chemical name                                    | Oral LD50             | Dermal LD50              | Inhalation LC50                     |
|--|-----------------------|--------------------------|-------------------------------------|
| 4,4-Methylenediphenyl diisocyanate<br>101-68-8   | = 31600 mg/kg ( Rat ) | -                        | = 369 mg/m <sup>3</sup> ( Rat ) 4 h |
| Benzene,<br>1-isocyanato-2-[(4-isocyanatophenyl) | > 10000 mg/kg ( Rat ) | > 10000 mg/kg ( Rabbit ) | = 490 mg/m <sup>3</sup> ( Rat ) 4 h |

|   |                      |                      |   |
|---|----------------------|----------------------|---|
| methyl]-<br>5873-54-1                                       |                      |                      |   |
| Phenol,<br>2,6-bis(1,1-dimethylethyl)-4-methyl-<br>128-37-0 | > 2930 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | - |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

- Interactive effects** No information available.
- Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.
- Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.
- Respiratory or skin sensitization** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
- Germ cell mutagenicity** No information available.

**Carcinogenicity** Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name   | ACGIH | IARC    | NTP | Mexico |
|---|-------|---------|-----|--------|
| 4,4-Methylenediphenyl diisocyanate<br>101-68-8                        | -     | Group 3 | -   | -      |
| Benzene,<br>1-isocyanato-2-[(4-isocyanatophenyl)methyl]-<br>5873-54-1 | -     | Group 3 | -   | -      |
| Phenol,<br>2,6-bis(1,1-dimethylethyl)-4-methyl-<br>128-37-0           | -     | Group 3 | -   | -      |

**Legend**

**IARC (International Agency for Research on Cancer)**  
Group 3 - Not Classifiable as to Carcinogenicity in Humans

- Reproductive toxicity** No information available.
- STOT - single exposure** May cause respiratory irritation.
- STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure.
- Target organ effects** Respiratory system, Eyes.
- Aspiration hazard** No information available.
- Other information** No information available.

**12. Ecological information**

**Ecotoxicity** May cause long lasting harmful effects to aquatic life.

| Chemical name  | Algae/aquatic plants  | Fish | Toxicity to microorganisms | Crustacea |
|--|---|------|----------------------------|-----------|
| Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-128-37-0 | EC50: =6mg/L (72h, Pseudokirchneriella subcapitata)<br>EC50: >0.42mg/L (72h, Desmodesmus subspicatus) | -    | -                          | -         |

**Persistence and degradability** No information available.

#### Bioaccumulation

#### Component Information

| Chemical name  | Partition coefficient |
|--|-----------------------|
| 4,4-Methylenediphenyl diisocyanate<br>101-68-8                     | 4.51                  |
| Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]-<br>5873-54-1 | 4.5                   |
| Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-<br>128-37-0           | 5.1                   |

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Disposal methods

**Waste from residues/unused products** Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

**Contaminated packaging** Do not reuse empty containers.

### 14. Transport information

**MEX** Not regulated

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information available

**TDG**

**DOT**

**ICAO (air)**

**IATA** Not regulated

**IMDG** Not regulated

### 15. Regulatory information



**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**International Inventories**

|                      |   |
|----------------------|---|
| <b>TSCA</b>          | Contact supplier for inventory compliance status. |
| <b>DSL/NDSL</b>      | Contact supplier for inventory compliance status. |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECI</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AIIC</b>          | Contact supplier for inventory compliance status. |
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AIIC** - Australian Inventory of Industrial Chemicals

**NZIoC** - New Zealand Inventory of Chemicals

**16. Other information**

|             |                           |                       |                           |                              |
|-------------|---------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 3   | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 2 * | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

*Chronic Hazard Star Legend*

\* = Chronic Health Hazard

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

**Legend Section 8: Exposure controls/personal protection**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | Sk*  | Skin designation                 |
| +       | Sensitizers                 |      |                                  |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

Environmental Protection Agency

Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 30-Sep-2024

**Revision Note** No information available.

**NOM-018-STPS-2015**

The information is believed to be accurate, but it is not exhaustive and must be used only as guidance. It is based on the current state of knowledge of the chemical substance or mixture and is applicable to the appropriate safety precautions for the product.

**Disclaimer**

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.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Revision date 27-Mar-2025

Revision Number 2

## 1. Identification

### Product identifier

**Product Name** Part B: KX Flex 40, 60

### Other means of identification

**Product Code(s)** FG-2168B

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** Restricted to professional users.

**Restrictions on use** No information available.

### Details of the supplier of the safety data sheet

#### **Manufacturer**

Smooth-On, Inc, 5600 Lower Macungie Rd, Macungie, PA 18062, USA, Phone: +01.610.252.5800, www.smooth-on.com, sds@smooth-on.com

**E-mail** sds@smooth-on.com

### Emergency telephone number

**Emergency Telephone** CHEMTEL +01-813-248-0585

## 2. Hazard(s) identification

### Classification

Acute toxicity - Oral

Category 4 - (H302)

### Label elements

#### **Warning**

#### **Hazard statements**

H302 - Harmful if swallowed.



Exclamation mark

#### **Precautionary Statements - Prevention**

P264 - Wash face, hands and any exposed skin thoroughly after handling.

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

**Precautionary Statements - Response****Ingestion**

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P330 - Rinse mouth.

**Precautionary Statements - Disposal**

P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

**Other information**

No information available.

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Chemical name  | CAS No.  | Weight-% |
|----------------|----------|----------|
| 1,4-Butanediol | 110-63-4 | 5 - <10  |

**4. First-aid measures****Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | Show this safety data sheet to the doctor in attendance.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| <b>Skin contact</b>   | Wash skin with soap and water.   |
| <b>Ingestion</b>      | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.        |

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Effects of Exposure** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. Fire-fighting measures**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical** No information available.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Special protective actions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

## 8. Exposure controls/personal protection

### Working area parameters, subject to mandatory control (MAC or TSEL)

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations

Ventilation systems.

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

|                                       |   |
|---------------------------------------|---|
| <b>Eye/face protection</b>            | Appropriate eye/face protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.  |
| <b>Hand protection</b>                | Appropriate hand protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction   |
| <b>Skin and body protection</b>       | Appropriate skin and body protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.   |
| <b>Respiratory protection</b>         | Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice.  |

## **9. Physical and chemical properties**

### Information on basic physical and chemical properties

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | Opaque Liquid            |
| <b>Color</b>          | No information available |
| <b>Odor</b>           | Mild                     |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                                | <u>Values</u>      | <u>Remarks • Method</u> |
|--|--------------------|-------------------------|
| <b>pH</b>                                      | No data available  | None known              |
| <b>Melting point / freezing point</b>          | No data available  | None known              |
| <b>Initial boiling point and boiling range</b> | No data available  | None known              |
| <b>Flash point</b>                             | No data available  | None known              |
| <b>Evaporation rate</b>                        | No data available  | None known              |
| <b>Flammability</b>                            | No data available  | None known              |
| <b>Flammability Limit in Air</b>               |                    | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available  |                         |
| <b>Lower flammability or explosive limits</b>  | No data available  |                         |
| <b>Vapor pressure</b>                          | No data available  | None known              |
| <b>Relative vapor density</b>                  | No data available  | None known              |
| <b>Relative density</b>                        | No data available  | None known              |
| <b>Water solubility</b>                        | Insoluble in water | None known              |
| <b>Solubility in other solvents</b>            | No data available  | None known              |
| <b>Partition coefficient</b>                   | No data available  | None known              |
| <b>Autoignition temperature</b>                | No data available  | None known              |
| <b>Decomposition temperature</b>               | No data available  | None known              |
| <b>Kinematic viscosity</b>                     | 480 cPs            | None known              |
| <b>Dynamic viscosity</b>                       | No data available  | None known              |

### Other information

|                             |                           |
|-----------------------------|---------------------------|
| <b>Oxidizing properties</b> | No information available. |
| <b>Explosive properties</b> | No information available. |
| <b>Molecular weight</b>     | No information available  |
| <b>Liquid Density</b>       | No information available  |

**Bulk density** No information available

## 10. Stability and reactivity

**Reactivity** No information available.

**Chemical stability** Stable under normal conditions.

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid** None known based on information supplied.

**Incompatible materials** None known based on information supplied.

**Hazardous decomposition products** None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

**Acute toxicity** Harmful if swallowed.

#### Numerical measures of toxicity

#### The following ATE values have been calculated for the mixture

**ATEmix (oral)** 1,677.50 mg/kg  
**ATEmix (dermal)** 5,500.00 mg/kg  
**ATEmix (inhalation-dust/mist)** 5.61 mg/l

#### Unknown acute toxicity

##### Component Information

| Chemical name              | Oral LD50            | Dermal LD50          | Inhalation LC50        |
|----------------------------|----------------------|----------------------|------------------------|
| 1,4-Butanediol<br>110-63-4 | = 1525 mg/kg ( Rat ) | > 5000 mg/kg ( Rat ) | > 5.1 mg/L ( Rat ) 4 h |

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Interactive effects** No information available.

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

|  |                           |
|--|---------------------------|
| <b>Respiratory or skin sensitization</b> | No information available. |
| <b>Germ cell mutagenicity</b>            | No information available. |
| <b>Carcinogenicity</b>                   | No information available. |
| <b>Reproductive toxicity</b>             | No information available. |
| <b>STOT - single exposure</b>            | No information available. |
| <b>STOT - repeated exposure</b>          | No information available. |
| <b>Aspiration hazard</b>                 | No information available. |
| <b>Other information</b>                 | No information available. |

## 12. Ecological information

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

| Chemical name              | Algae/aquatic plants                                | Fish  | Toxicity to microorganisms | Crustacea                              |
|----------------------------|---|---|----------------------------|--|
| 1,4-Butanediol<br>110-63-4 | EC50: >500mg/L (72h,<br>Desmodesmus<br>subspicatus) | LC50: >30000mg/L<br>(96h, Pimephales<br>promelas) | -                          | EC50: ≈813mg/L (48h,<br>Daphnia magna) |

**Persistence and degradability** No information available.

### Bioaccumulation

#### Component Information

| Chemical name              | Partition coefficient |
|----------------------------|-----------------------|
| 1,4-Butanediol<br>110-63-4 | -0.88                 |

**Other adverse effects** No information available.

## 13. Disposal considerations

### Disposal methods

**Waste from residues/unused products** Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

**Contaminated packaging** Do not reuse empty containers.

## 14. Transport information

**MEX** Not regulated



Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

TDG

DOT

ICAO (air)

IATA Not regulated

IMDG Not regulated

**15. Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

|                      |   |
|----------------------|---|
| <b>TSCA</b>          | Contact supplier for inventory compliance status. |
| <b>DSL/NDSL</b>      | Contact supplier for inventory compliance status. |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECL</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AIIC</b>          | Contact supplier for inventory compliance status. |
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals

**16. Other information**

|             |                  |                |                    |                       |
|-------------|------------------|----------------|--------------------|-----------------------|
| <u>NFPA</u> | Health hazards 2 | Flammability 0 | Instability 0      | Special hazards -     |
| <u>HMIS</u> | Health hazards 1 | Flammability 0 | Physical hazards 0 | Personal protection X |

Key or legend to abbreviations and acronyms used in the safety data sheet

**Legend**

SVHC: Substances of Very High Concern for Authorization:  
 PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances  
 vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances  
 STOT: Specific Target Organ Toxicity  
 ATE: Acute Toxicity Estimate  
 LC50: 50% Lethal Concentration  
 LD50: 50% Lethal Dose

**Legend Section 8: Exposure controls/personal protection**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | Sk*  | Skin designation                 |
| +       | Sensitizers                 |      |                                  |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 U.S. National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Revision date** 27-Mar-2025

**Revision Note** No information available.

**NOM-018-STPS-2015**

**The information is believed to be accurate, but it is not exhaustive and must be used only as guidance. It is based on the current state of knowledge of the chemical substance or mixture and is applicable to the appropriate safety precautions for the product.**

**Disclaimer**

**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.**

**End of Safety Data Sheet**