



SAFETY DATA SHEET

1. Identification

Product identifier DDDDK-tagged Protein Magnetic Purification Kit
Anti-DDDDK-tag Magnetic Beads

Other means of identification
Product code 3343R

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer and Supplier (Asia) Medical & Biological Laboratories (MBL) Co., Ltd.
4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan

Telephone number +81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

Fax +81-52-238-1440

E-mail sds-support@mbl.co.jp

URL <http://www.mbl.co.jp/e/index.html>

Contact person SDS Support

Supplier MBL International Corporation
15A Constitution Way, Woburn, MA 01801, USA

Telephone number +1-800-200-5459, option 3

Fax +1-781-939-6963

E-mail tech@mblintl.com

URL <http://www.mblintl.com/>

Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA hazard(s) Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage None.

Disposal None.

Hazard(s) not otherwise classified (HNOC) None.

3. Composition/Information on ingredients

Mixtures

| Chemical name | CAS number | % |
|--|------------|-------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one | 55965-84-9 | < 0.1 |

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

| | |
|---|---|
| Inhalation | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| Skin contact | Remove contaminated clothing. Dry skin with paper towel or similar. Get medical attention if irritation develops or persists. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops or persists. |
| Ingestion | Drink plenty of water. Get medical attention if any discomfort occurs. |
| Most important symptoms/ effects, acute and delayed | Dry skin. |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. |
| General information | Get medical attention if any discomfort develops. |

5. Fire-fighting measures

| | |
|--|---|
| Suitable extinguishing media | Use fire-extinguishing media appropriate for surrounding materials. |
| Unsuitable extinguishing media | None known. |
| Specific hazards arising from the chemical | None known. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire. |
| Fire-fighting equipment/ instructions | Move containers from fire area if you can do that without risk. Use water spray to cool unopened containers. Prevent entry to sewers and public waters. |

6. Accidental release measures

| | |
|--|--|
| Personal precautions, protective equipment and emergency procedures | Avoid contact with eyes and prolonged skin contact. For personal protection, see Section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Absorb spillage with suitable absorbent material. Flush contaminated area thoroughly with water, following removal of the spillage. For waste disposal, see Section 13 of the SDS. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

7. Handling and storage

| | |
|---|---|
| Precautions for safe handling | Avoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Keep container tightly closed. |

8. Exposure controls/personal protection

| | |
|--|--|
| Occupational exposure limits | No exposure limits noted for ingredient(s). |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Appropriate engineering controls | Ensure adequate ventilation is available, especially in confined areas. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Risk of splashes: Wear safety glasses with side shields. |
| Skin protection | |
| Hand protection | Risk of contact: Wear protective gloves. Suitable gloves can be recommended by the glove supplier. |
| Other | Wear appropriate clothing to prevent repeated or prolonged skin contact. |
| Respiratory protection | Where excessive vapor, mist or dust may result, use NIOSH approved respiratory protection equipment. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

| | |
|---|---|
| Physical state | Opaque suspension (50% beads). |
| Form | Suspension. |
| Color | White (agarose beads). Dark brown (magnetic beads, magnetic agarose beads). |
| Odor | Odorless. |
| Odor threshold | Not available. |
| pH | Neutral. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | Soluble in water. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

10. Stability and reactivity

| | |
|---|--|
| Reactivity | The product is non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Stable at normal conditions. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. Hazardous reactions do not occur. |
| Conditions to avoid | None known. |
| Incompatible materials | None known. |
| Hazardous decomposition products | None known. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---|--|
| Ingestion | Large quantities: May cause discomfort if swallowed. |
| Inhalation | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| Skin contact | Prolonged contact may cause dryness of the skin. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| Symptoms related to the physical, chemical and toxicological characteristics | Dry skin. |
| Information on toxicological effects | |
| Acute toxicity | Large quantities: May cause discomfort if swallowed. |
| Skin corrosion/irritation | May cause mild skin irritation. |
| Serious eye damage/eye | May cause eye irritation. |

| | |
|---|--------------------|
| Respiratory sensitization | No data available. |
| Skin sensitization | No data available. |
| Germ cell mutagenicity | No data available. |
| Carcinogenicity | No data available. |
| Reproductive toxicity | No data available. |
| Specific target organ toxicity - single exposure | No data available. |
| Specific target organ toxicity - repeated exposure | No data available. |
| Aspiration hazard | No data available. |

12. Ecological information

| | |
|--------------------------------------|--|
| Ecotoxicity | The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. |
| Persistence and degradability | No data available. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | Expected to be highly mobile in soil. |
| Mobility in general | The product is water soluble and may spread in water systems. |
| Other adverse effects | No data available. |

13. Disposal considerations

| | |
|--|---|
| Disposal instructions | Dispose of in accordance with all applicable regulations. Do not discharge into drains, water |
| Local disposal regulations | Dispose of in accordance with local regulations. |
| Hazardous waste code | Not regulated. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. |
| Contaminated packaging | Dispose of in same manner as unused product. |

14. Transport information

| | |
|---|-----------------------------------|
| DOT | Not regulated as dangerous goods. |
| IATA | Not regulated as dangerous goods. |
| IMDG | Not regulated as dangerous goods. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |

15. Regulatory information

| | |
|---|--|
| US federal regulations | This product is not hazardous according to OSHA 29CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. |
| TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) | Not regulated. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | Not listed. |
| CERCLA Hazardous Substance List (40 CFR 302.4) | Not listed. |
| Superfund Amendments and Reauthorization Act of 1986 (SARA) | |
| Hazard categories | Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |
| SARA 302 Extremely hazardous substance | No |
| SARA 311/312 Hazardous chemical | No |
| SARA 313 (TRI reporting) | Not regulated. |
| Other federal regulations | |
| Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List | Not regulated. |
| Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) | Not regulated. |

Safe Drinking Water Act (SDWA) Not regulated.
Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Massachusetts RTK - Substance List Not regulated.
New Jersey Worker and Community Right-to-Know Act Not regulated.
Pennsylvania RTK - Hazardous Substances Not regulated.
Rhode Island RTK Not regulated.
California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT) Not listed.

International inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | EC Inventory | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCs) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 11/10/2020
Revision date -
Version 10
Further information Not available.
References HSDB® - Hazardous Substances Data Bank
 Registry of Toxic Effects of Chemical Substances (RTECS)
 C&L Inventory database
Disclaimer This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

| | |
|---|--|
| Product identifier | DDDDK-tagged Protein Magnetic Purification Kit Elution Peptide |
| Other means of identification | |
| Product code | 3343R |
| Recommended use | Research use only. |
| Recommended restrictions | None known. |
| Manufacturer / Importer / Supplier / Distributor information | |
| Manufacturer and Supplier (Asia) | Medical & Biological Laboratories (MBL) Co., Ltd. 4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan |
| Telephone number | +81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST) |
| Fax | +81-52-238-1440 |
| E-mail | sds-support@mbl.co.jp |
| URL | http://www.mbl.co.jp/e/index.html |
| Contact person | SDS Support |
| Supplier | MBL International Corporation 15A Constitution Way, Woburn, MA 01801, USA |
| Telephone number | +1-800-200-5459, option 3 |
| Fax | +1-781-939-6963 |
| E-mail | tech@mblintl.com |
| URL | http://www.mblintl.com/ |
| Contact person | Technical Service |

2. Hazard(s) identification

| | |
|--|--|
| Physical hazards | Not classified. |
| Health hazards | Not classified. |
| OSHA hazard(s) | Not classified. |
| Label elements | |
| Hazard symbol | None. |
| Signal word | None. |
| Hazard statement | None. |
| Precautionary statement | |
| Prevention | Observe good industrial hygiene practices. |
| Response | Wash thoroughly after handling. |
| Storage | None. |
| Disposal | None. |
| Hazard(s) not otherwise classified (HNOC) | None. |

3. Composition/Information on ingredients

Mixtures
The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First-aid measures

| | |
|---------------------|---|
| Inhalation | Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort continues. |
| Skin contact | Wash contact areas with soap and water. Get medical attention if irritation develops or persists. |
| Eye contact | Do not rub eye. Rinse the eye with water immediately. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention if irritation develops and persists. |

| | |
|---|--|
| Ingestion | Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues. |
| Most important symptoms/ effects, acute and delayed | Dry skin. |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. |
| General information | Get medical attention if any discomfort develops. |

5. Fire-fighting measures

| | |
|--|--|
| Suitable extinguishing media | Use fire-extinguishing media appropriate for surrounding materials. |
| Unsuitable extinguishing media | None known. |
| Specific hazards arising from the chemical | None known. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. |
| Fire-fighting equipment/ instructions | Use standard firefighting procedures and consider the hazards of other involved materials. |

6. Accidental release measures

| | |
|--|---|
| Personal precautions, protective equipment and emergency procedures | Avoid prolonged and repeated contact. Wear suitable protective clothing. For personal protection, see Section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Sweep up or vacuum up spillage and collect in suitable container for disposal. After removal, flush contaminated area thoroughly with water. Never return spills to original containers for re-use. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

7. Handling and storage

| | |
|---|--|
| Precautions for safe handling | Avoid prolonged and repeated contact. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Keep container closed. |

8. Exposure controls/personal protection

| | |
|--|---|
| Occupational exposure limits | No exposure limits noted for ingredient(s). |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Appropriate engineering controls | Provide adequate ventilation. Minimize dust generation and accumulation. Provide easy access to water supply and eye wash facilities. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | If risk of splashing, wear safety goggles or face shield. |
| Skin protection | |
| Hand protection | Wear protective gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier. |
| Other | Wear protective gloves. Wear appropriate clothing to prevent repeated or prolonged skin contact. |
| Respiratory protection | No protection is ordinarily required under normal conditions of use. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

9. Physical and chemical properties

Appearance

| | |
|---|-------------------|
| Physical state | Solid. |
| Form | Powder. |
| Color | White. |
| Odor | Odorless. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | Soluble in water. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

10. Stability and reactivity

| | |
|---|--|
| Reactivity | The product is stable and non reactive under normal conditions of use, storage and |
| Chemical stability | Stable at normal conditions. |
| Possibility of hazardous reactions | None known. |
| Conditions to avoid | None known. |
| Incompatible materials | None known. |
| Hazardous decomposition products | No hazard in normal industrial use. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---|--|
| Ingestion | Large quantities: May cause discomfort if swallowed. |
| Inhalation | Dust may irritate respiratory system. |
| Skin contact | Prolonged contact may cause dryness of the skin. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| Symptoms related to the physical, chemical and toxicological characteristics | Dry skin. |

Information on toxicological effects

| | |
|--|--|
| Acute toxicity | Large quantities: May cause discomfort if swallowed. |
| Skin corrosion/irritation | Prolonged contact may cause dryness of the skin. |
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. |
| Respiratory sensitization | No data available. |
| Skin sensitization | Not a skin sensitizer. |
| Germ cell mutagenicity | No data available. |
| Carcinogenicity | No data available. |
| Reproductive toxicity | No data available. |

Specific target organ toxicity - single exposure No data available.
Specific target organ toxicity - repeated exposure No data available.
Aspiration hazard No data available.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment.
Persistence and degradability No data available.
Bioaccumulative potential No data available.
Mobility in soil No data available.
Mobility in general The product is water soluble and may spread in water systems.
Other adverse effects No data available.

13. Disposal considerations

Disposal instructions Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.
Local disposal regulations Dispose of in accordance with local regulations.
Hazardous waste code Not regulated.
Waste from residues / unused products Dispose of in accordance with local regulations.
Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT Not regulated as dangerous goods.
IATA Not regulated as dangerous goods.
IMDG Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

| | |
|---|----------------|
| TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) | Not regulated. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | Not listed. |
| CERCLA Hazardous Substance List (40 CFR 302.4) | Not listed. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

| | |
|---|--|
| Hazard categories | Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |
| SARA 302 Extremely hazardous substance | No |
| SARA 311/312 Hazardous chemical | No |
| SARA 313 (TRI reporting) | Not regulated. |

Other federal regulations

| | |
|---|----------------|
| Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List | Not regulated. |
| Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) | Not regulated. |
| Safe Drinking Water Act (SDWA) | Not regulated. |
| Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number | Not listed. |

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Not regulated.
DEA Exempt Chemical Mixtures Code Number Not regulated.
Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Massachusetts RTK - Substance List Not regulated.
New Jersey Worker and Community Right-to-Know Act Not regulated.
Pennsylvania RTK - Hazardous Substances Not regulated.
Rhode Island RTK Not regulated.
California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT) Not listed.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|--|---|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | EC Inventory | Yes |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 11/10/2020
Revision date -
Version 10
Further information Not available.
Disclaimer This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

| | |
|---|--|
| Product identifier | DDDDK-tagged Protein Magnetic Purification Kit Wash Concentrate |
| Other means of identification | |
| Product code | 3343R |
| Recommended use | Research use only. |
| Recommended restrictions | None known. |
| Manufacturer / Importer / Supplier / Distributor information | |
| Manufacturer and Supplier (Asia) | Medical & Biological Laboratories (MBL) Co., Ltd. 4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan |
| Telephone number | +81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST) |
| Fax | +81-52-238-1440 |
| E-mail | sds-support@mbl.co.jp |
| URL | http://www.mbl.co.jp/e/index.html |
| Contact person | SDS Support |
| Supplier | MBL International Corporation 15A Constitution Way, Woburn, MA 01801, USA |
| Telephone number | +1-800-200-5459, option 3 |
| Fax | +1-781-939-6963 |
| E-mail | tech@mblintl.com |
| URL | http://www.mblintl.com/ |
| Contact person | Technical Service |

2. Hazard(s) identification

| | |
|--|--|
| Physical hazards | Not classified. |
| Health hazards | Not classified. |
| OSHA hazard(s) | Not classified. |
| Label elements | |
| Hazard symbol | None. |
| Signal word | None. |
| Hazard statement | None. |
| Precautionary statement | |
| Prevention | Observe good industrial hygiene practices. |
| Response | Wash thoroughly after handling. |
| Storage | None. |
| Disposal | None. |
| Hazard(s) not otherwise classified (HNOC) | None. |

3. Composition/Information on ingredients

Mixtures
The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First-aid measures

| | |
|---------------------|---|
| Inhalation | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| Skin contact | Remove contaminated clothing. Dry skin with paper towel or similar. Get medical attention if irritation develops or persists. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops or persists. |

| | |
|---|---|
| Ingestion | No adverse effects due to ingestion are expected. Get medical attention if any discomfort occurs. |
| Most important symptoms/ effects, acute and delayed | Dry skin. |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. |
| General information | Get medical attention if any discomfort develops. |

5. Fire-fighting measures

| | |
|--|--|
| Suitable extinguishing media | Use fire-extinguishing media appropriate for surrounding materials. |
| Unsuitable extinguishing media | None known. |
| Specific hazards arising from the chemical | None known. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. |
| Fire-fighting equipment/ instructions | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | The product is non-combustible. |

6. Accidental release measures

| | |
|--|--|
| Personal precautions, protective equipment and emergency procedures | Avoid prolonged and repeated contact. Wear suitable protective clothing. For personal protection, see Section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Absorb spillage with non-combustible, absorbent material. After removal, flush contaminated area thoroughly with water. For waste disposal, see Section 13 of the SDS. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

7. Handling and storage

| | |
|---|--|
| Precautions for safe handling | Avoid prolonged and repeated contact. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Keep container closed. |

8. Exposure controls/personal protection

| | |
|--|---|
| Occupational exposure limits | No exposure limits noted for ingredient(s). |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Appropriate engineering controls | Provide adequate ventilation. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | If risk of splashing, wear safety goggles or face shield. |
| Skin protection | |
| Hand protection | Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier. |
| Other | Wear protective gloves. Wear appropriate clothing to prevent repeated or prolonged skin contact. |
| Respiratory protection | No protection is ordinarily required under normal conditions of use. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

9. Physical and chemical properties

Appearance

| | |
|---|-------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Colorless. |
| Odor | Odorless. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | Soluble in water. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

10. Stability and reactivity

| | |
|---|--|
| Reactivity | The product is stable and non reactive under normal conditions of use, storage and |
| Chemical stability | Stable at normal conditions. |
| Possibility of hazardous reactions | None known. |
| Conditions to avoid | None known. |
| Incompatible materials | None known. |
| Hazardous decomposition products | No hazard in normal industrial use. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---|--|
| Ingestion | Large quantities: May cause discomfort if swallowed. |
| Inhalation | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| Skin contact | Prolonged contact may cause dryness of the skin. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| Symptoms related to the physical, chemical and toxicological characteristics | Dry skin. |

Information on toxicological effects

| | |
|--|--|
| Acute toxicity | Large quantities: May cause discomfort if swallowed. |
| Skin corrosion/irritation | Prolonged contact may cause dryness of the skin. |
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. |
| Respiratory sensitization | No data available. |
| Skin sensitization | Not a skin sensitizer. |
| Germ cell mutagenicity | No data available. |

| | |
|---|--------------------|
| Carcinogenicity | No data available. |
| Reproductive toxicity | No data available. |
| Specific target organ toxicity - single exposure | No data available. |
| Specific target organ toxicity - repeated exposure | No data available. |
| Aspiration hazard | No data available. |

12. Ecological information

| | |
|--------------------------------------|--|
| Ecotoxicity | The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. |
| Persistence and degradability | No data available. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| Mobility in general | The product is water soluble and may spread in water systems. |
| Other adverse effects | No data available. |

13. Disposal considerations

| | |
|--|---|
| Disposal instructions | Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground. |
| Local disposal regulations | Dispose of in accordance with local regulations. |
| Hazardous waste code | Not regulated. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. |
| Contaminated packaging | Dispose of in same manner as unused product. |

14. Transport information

| | |
|---|-----------------------------------|
| DOT | Not regulated as dangerous goods. |
| IATA | Not regulated as dangerous goods. |
| IMDG | Not regulated as dangerous goods. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |

15. Regulatory information

| | | |
|---|--|--|
| US federal regulations | This product is not hazardous according to OSHA 29CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. | |
| TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) | | Not regulated. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | | Not listed. |
| CERCLA Hazardous Substance List (40 CFR 302.4) | | Not listed. |
| Superfund Amendments and Reauthorization Act of 1986 (SARA) | | |
| Hazard categories | | Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |
| SARA 302 Extremely hazardous substance | | No |
| SARA 311/312 Hazardous chemical | | No |
| SARA 313 (TRI reporting) | | Not regulated. |
| Other federal regulations | | |
| Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List | | Not regulated. |
| Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) | | Not regulated. |
| Safe Drinking Water Act (SDWA) | | Not regulated. |

| | |
|---|----------------|
| Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number | Not listed. |
| Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) | Not regulated. |
| DEA Exempt Chemical Mixtures Code Number | Not regulated. |
| Food and Drug Administration (FDA) | Not regulated. |

| | |
|--|--|
| US state regulations | This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. |
| Massachusetts RTK - Substance List | Not regulated. |
| New Jersey Worker and Community Right-to-Know Act | Not regulated. |
| Pennsylvania RTK - Hazardous Substances | Not regulated. |
| Rhode Island RTK | Not regulated. |
| California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT) | Not listed. |

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|--|---|-------------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | EC Inventory | Yes |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

| | |
|----------------------------|---|
| Issue date | 11/10/2020 |
| Revision date | - |
| Version | 10 |
| Further information | Not available. |
| Disclaimer | This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. |