

3. Composition/information on ingredients

| Chemical property | CAS # | Percentage |
|-------------------|-------------|------------|
| Water | 7732-18-5 | 30 - 60 |
| Surfactant Blend | Proprietary | < 60 |

4. First aid measures

First aid measures for different exposure routes

| | |
|---------------------|---|
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin contact | Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. |
| Ingestion | Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Do not induce vomiting. |

Most important symptoms/effects, acute delayed Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause redness and pain. Skin irritation.

Indication of immediate medical attention and special treatment needed, if necessary In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.

Protection of first-aiders In case of shortness of breath, give oxygen. Keep victim under observation. Keep victim warm.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment for fire-fighters Wear suitable protective equipment.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Containment procedures Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Collect spillage. Prevent entry into waterways, sewer, basements or confined areas.

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.

Methods for cleaning up Ventilate the contaminated area. Extinguish all flames in the vicinity. Wear appropriate protective equipment and clothing during clean-up. Should not be released into the environment. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Do not allow material to contaminate ground water system. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the MSDS.

Environmental precautions Avoid release to the environment. Refer to special instructions/safety data sheets. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Handling

Precautions for safe handling Do not get this material in contact with eyes. Avoid contact with skin. Avoid contact with clothing. Use personal protection recommended in Section 8 of the MSDS. Do not taste or swallow. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities CAUTION Keep away from heat, sparks and open flame. Store in a closed container away from incompatible materials. Use appropriate container to avoid environmental contamination. Store in a well-ventilated place. Keep container dry. Store away from incompatible materials (see Section 10 of the MSDS). Keep away from food, drink and animal feedingstuffs.

8. Exposure controls/personal protection

Recommended monitoring procedures

Additional exposure data Not available.

Appropriate engineering controls Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Wear appropriate chemical resistant gloves.

Eye protection Wear eye/face protection. Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection Wear suitable protective clothing.

Environmental exposure controls Contain spills and prevent releases and observe national regulations on emissions. Environmental manager must be informed of all major releases.

Hygiene measures When using, do not eat, drink or smoke. 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.

Control parameters Follow standard monitoring procedures.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Not available.

Colour Light yellow.

Odour Mild.

Odour threshold Not available.

pH 7.5500 (5% in water)

Melting point/freezing point Not available.

Boiling point, initial boiling point, and boiling range Not available.

Flash point > 201 °F (> 93.9 °C) Pensky-Martens Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower limit on flammability or explosive limits Not available

Vapour pressure Not available.

Vapour density Not available.

Relative density Not available.

Solubility (water) Not available.

| | |
|--|----------------|
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | 26.4 cP @ 25C |
| VOC | Not available. |

10. Stability and reactivity

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|---|---|
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. Nitrous acid and other nitrosating agents |
| Hazardous decomposition products | Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons. |

11. Toxicological information

Information on likely routes of exposure

- **Respiratory organs** Not likely, due to the form of the product.
- **Mouth** Harmful if swallowed.
- **Eyes** Causes serious eye damage.

1: Information on likely routes of exposure

- **Skin** This product is not expected to cause skin sensitization. Causes skin irritation.

Delayed, immediate, and chronic effects of short- and long-term exposure

| Product | Test Results |
|--|---|
| STEPAN 3705-44 | Acute Dermal LD50 Rabbit: > 2000 mg/kg ATEmix Acute Oral LD50 Rat: > 1000 mg/kg ATEmix |
| • Acute toxicity (list all possible routes of exposure) | Harmful if swallowed. May be harmful in contact with skin. |
| • Corrosivity or irritation to the skin | Causes skin irritation. |
| • Serious eye damage/eye irritation | Causes serious eye damage. |
| • Respiratory sensitization | Based on available data, the classification criteria are not met. |
| • Skin sensitization | This product is not expected to cause skin sensitization. Causes skin irritation. |
| • Carcinogenic properties /Carcinogenicity | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Not classifiable as to carcinogenicity to humans. |
| • Mutagenic properties /Mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| • Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |
| • Specific target organ toxicity - single exposure | Not applicable. |
| • Specific target organ toxicity - repeated exposure | Not applicable. |
| • Aspiration hazard | Not applicable. |

Numerical measures of toxicity (including acute estimates)

Not available.

12. Ecological information

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|--------------------------------------|---|
| Ecotoxicity | Toxic to aquatic life. Harmful to aquatic life with long lasting effects. |
| Persistence and degradability | Not available. |
| Bioaccumulative potential | No data available. |

| | |
|------------------------------|---|
| Mobility in soil | No data available for this product. |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

13. Disposal considerations

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|--|---|
| Disposal methods | Dispose in accordance with all applicable regulations. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Avoid discharge into water courses or onto the ground. |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

Inventory status

| 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 | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | 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 | Yes |

*A "Yes" indicates that all components of this product comply 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 | 10-16-2015 |
| Revision date | 10-16-2015 |
| Version number | 02 |

References

ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203)
Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1)
Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 29)
Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 30)
Korea. Non-Toxic Chemicals List (National Institute of Environment Research (NIER) Public Notice No. 1997-10, as amended)
Korea. Observational Chemicals (Ministerial Decree of TCCL Article 6)
Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor (MOL) Public Notice No. 1986-45, as amended)
Korea. Prohibited Chemical Substances (TCCL Article 11)
Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended)
Korea. Restricted Chemical Substances (TCCL Article 11)
Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)
Korea. Toxic Chemical Control Law (TCCL), pre-1997 List
Korea. Toxic Chemicals (TCCL Article 10)
Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)
Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)
Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended)
Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)
Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the Environmental Protection Administration)
Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)
HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits
GOST 30333-2007 - Chemical production safety passport. General requirements
JIS Z 7252:2009 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"
JIS Z 7253:2012 Hazard communication of chemicals based on GHS – Labelling and Safety Data Sheet (SDS)
Japan Chemical Industry Association (JCIA) GHS Guideline, June 2012

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