

1. Identification

| | | |
|---|--|-----------------|
| Product identifier | BIO-SOFT TA-2 | |
| Other means of identification | | |
| Product code | 0393 | |
| Recommended use | Surfactant | |
| Recommended restrictions | For industrial use only. | |
| Manufacturer/Importer/Supplier/Distributor information | | |
| Manufacturer | | |
| Company name | Stepan Company | |
| Address | 22 West Frontage Road Northfield, IL 60093 USA | |
| Telephone | General | 1-847-446-7500 |
| E-mail | Not available. | |
| Emergency phone number | Medical | 1-800-228-5635 |
| | Chemtrec | 1-800-424-9300 |
| | Chemtrec Int'l | +1 703-527-3887 |

2. Hazard(s) identification

| | | |
|------------------------------|--|------------|
| Physical hazards | Not classified. | |
| Health hazards | Acute toxicity, oral | Category 4 |
| | Acute toxicity, dermal | Category 4 |
| | Skin corrosion/irritation | Category 1 |
| | Serious eye damage/eye irritation | Category 1 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 1 |
| | Hazardous to the aquatic environment, long-term hazard | Category 2 |
| OSHA defined hazards | Not classified. | |

Label elements



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| Signal word | Danger |
| Hazard statement | Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. |
| Precautionary statement | |
| Prevention | Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment. |
| Response | If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment (see this label). Take off contaminated clothing and wash before reuse. Collect spillage. |
| Storage | Store locked up. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Hazard(s) not otherwise classified (HNOC) | None known. |

Supplemental information None.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-----------------------------------|--------------------------|------------|----------|
| Amines, tallow alkyl, ethoxylated | | 61791-26-2 | 90 - 100 |

4. First-aid measures

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| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin contact | Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing 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. Call a physician or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. |
| Most important symptoms/effects, acute and delayed | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| General information | IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

5. Fire-fighting measures

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| Suitable extinguishing media | Dry chemical, foam, carbon dioxide, water fog. |
| Unsuitable extinguishing media | Water. 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 and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions | Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | No unusual fire or explosion hazards noted. |

6. Accidental release measures

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| 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 breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | Should not be released into the environment. 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. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. 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. |
| Environmental precautions | Avoid release to the environment. 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

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| Precautions for safe handling | Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Avoid prolonged exposure. Do not get this material on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains. |
| Conditions for safe storage, including any incompatibilities | Store locked up. Store in original tightly closed container. |

8. Exposure controls/personal protection

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| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Appropriate engineering controls | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Wear eye/face protection. Wear safety glasses with side shields (or goggles) and a face shield. |
| Skin protection | |
| Hand protection | Wear appropriate chemical resistant gloves. |
| Other | Wear appropriate chemical resistant clothing. Wear protective gloves. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | 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. |

9. Physical and chemical properties

Appearance

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| Physical state | Liquid. |
| Form | Liquid. |
| Color | Amber. |
| Odor | Not available. |
| Odor threshold | Not available. |
| pH | 9.8 (5% in 1:1 IPA/H ₂ O) |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | > 212 °F (> 100 °C) |
| Flash point | > 201.0 °F (> 93.9 °C) Pinsky-Martens Closed Cup |
| Evaporation rate | Estimated slower than ethyl ether |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not determined or unknown |
| Vapor density | Estimated heavier than air |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Insoluble |
| Auto-ignition temperature | Not available. |

| | |
|----------------------------------|-----------------|
| Decomposition temperature | Not available. |
| Viscosity | 70 cP @ 38C |
| Other information | |
| Pour point | 69.8 °F (21 °C) |
| Specific gravity | 0.89 @ 38C |

10. Stability and reactivity

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| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| 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. Reacts violently with strong alkaline substances. This product may react with reducing agents. Contact with incompatible materials. |
| Incompatible materials | Strong acids and oxidizing 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

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|---------------------|--|
| Inhalation | Prolonged inhalation may be harmful. May cause irritation to the respiratory system. |
| Skin contact | Causes severe skin burns. Harmful in contact with skin. |
| Eye contact | Causes serious eye damage. |
| Ingestion | Causes digestive tract burns. Harmful if swallowed. |

| | |
|---|----------------|
| Symptoms related to the physical, chemical and toxicological characteristics | Not available. |
|---|----------------|

Information on toxicological effects

| | |
|-----------------------|---|
| Acute toxicity | Harmful in contact with skin. Harmful if swallowed. |
|-----------------------|---|

| Product | Species | Test Results |
|---------------|---------|--------------------------------------|
| BIO-SOFT TA-2 | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | > 1260 mg/kg |
| Oral | | |
| LD50 | Rat | 1437 mg/kg male 1316 mg/kg female |

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|----------------------------------|--|
| Skin corrosion/irritation | Causes severe skin burns and eye damage. |
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|--|----------------------------|
| Serious eye damage/eye irritation | Causes serious eye damage. |
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Respiratory or skin sensitization

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|----------------------------------|---|
| Respiratory sensitization | Not available. |
| Skin sensitization | This product is not expected to cause skin sensitization. |

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| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
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|------------------------|---|
| Carcinogenicity | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
|------------------------|---|

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

| | |
|------------------------------|--|
| 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.

12. Ecological information

Ecotoxicity Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

| Product | | Species | Test Results |
|----------------|------|---------|----------------------------|
| BIO-SOFT TA-2 | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Algae | EC50 | Algae | 0.008 mg/l, 24 hours |
| Crustacea | EC50 | Daphnia | 0.47 mg/l, 48 hours |
| Fish | LC50 | Fish | 0.18 - 0.99 mg/l, 96 hours |

Persistence and degradability Expected to be readily biodegradable.

Bioaccumulative potential No data available.

Mobility in soil No data available.

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

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

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).

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

DOT

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|-------------------------------------|---|
| UN number | UN2735 |
| UN proper shipping name | Amines, Liquid, Corrosive, N.O.S. (Amines, tallow alkyl, ethoxylated), MARINE POLLUTANT |
| Transport hazard class(es) | |
| Class | 8 |
| Subsidiary risk | - |
| Packing group | II |
| Environmental hazards | |
| Marine pollutant | Yes |
| Special precautions for user | Not available. |

IATA

| | |
|-------------------------------------|---|
| UN number | UN2735 |
| UN proper shipping name | Amines, Liquid, Corrosive, N.O.S. (Amines, tallow alkyl, ethoxylated) |
| Transport hazard class(es) | |
| Class | 8 |
| Subsidiary risk | - |
| Packing group | II |
| Environmental hazards | Marine Pollutant |
| Special precautions for user | Not available. |

IMDG

| | |
|-----------------------------------|---|
| UN number | UN2735 |
| UN proper shipping name | Amines, Liquid, Corrosive, N.O.S. (Amines, tallow alkyl, ethoxylated), MARINE POLLUTANT |
| Transport hazard class(es) | |
| Class | 8 |
| Subsidiary risk | - |

Packing group II

Environmental hazards

Marine pollutant Yes

EmS Not available.

Special precautions for user Not available.

Transport in bulk according to Not available.

Annex II of MARPOL 73/78 and

the IBC Code

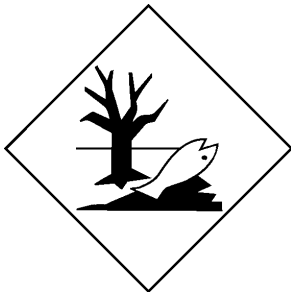
DOT



IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

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.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Hazardous substance

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

California Proposition 65



WARNING: This product can expose you to chemicals including acetaldehyde, which are known to the State of California to cause cancer, and ethylene glycol, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,4-dioxane (CAS 123-91-1) Listed: January 1, 1988
Acetaldehyde (CAS 75-07-0) Listed: April 1, 1988
Ethylene oxide (CAS 75-21-8) Listed: July 1, 1987

California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene Glycol (CAS 107-21-1) Listed: June 19, 2015
Ethylene oxide (CAS 75-21-8) Listed: August 7, 2009

California Proposition 65 - CRT: Listed date/Female reproductive toxin

Ethylene oxide (CAS 75-21-8) Listed: February 27, 1987

California Proposition 65 - CRT: Listed date/Male reproductive toxin

Ethylene oxide (CAS 75-21-8) Listed: August 7, 2009

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 |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| New Zealand | New Zealand Inventory (NZIoC) | 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, including date of preparation or last revision

Issue date 08-26-2014
Revision date 12-16-2019
Version # 10
HMIS® ratings Health: 3
Flammability: 1
Physical hazard: 0
NFPA ratings Health: 3
Flammability: 1
Instability: 0

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Revision information

Hazard(s) identification: Supplemental information
Transport Information: Agency Name, Packaging Type, and Transport Mode Selection
Regulatory Information: United States