

SAFETY DATA SHEET

1. Identification

| Product identifier | BIO-SOFT DR-13 | |
|----------------------------------|--------------------------|-----------------|
| Other means of identification | | |
| Product code | 8665 | |
| Recommended use | Surfactant | |
| Recommended restrictions | For industrial use only. | |
| Manufacturer/Importer/Supplier/I | 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 |
| | Chemtrec Int'l | +1 703-527-3887 |

2. Hazard(s) identification

| Physical hazards | Not classified. | |
|-----------------------|-----------------------------------|------------|
| Health hazards | Acute toxicity, oral | Category 4 |
| | Serious eye damage/eye irritation | Category 1 |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |
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Label elements

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| Signal word | Danger |
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| Hazard statement | Harmful if swallowed. Causes serious eye damage. |
| Precautionary statement | |
| Prevention | Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection. |
| Response | If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. 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. |
| Storage | Store away from incompatible materials. |
| 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 | % |
|---------------------|--------------------------|-------------|------|
| Alcohol ethoxylate* | | Proprietary | > 99 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

| Move to fresh air. Call a physician if symptoms develop or persist. |
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| Wash off with soap and water. Get medical attention if irritation develops and persists. |
| 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. |
| Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell. |
| Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |
| Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |
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5. Fire-fighting measures

| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |
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| 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 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

| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. 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. For personal protection, see section 8 of the SDS. |
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| Methods and materials for containment and cleaning up | 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. Absorb in vermiculite, dry sand or earth and place into containers. 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 SDS. |
| Environmental precautions | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. |
| 7. Handling and storage | |
| Precautions for safe handling | Do not get this material in contact with eyes. Do not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). |

8. Exposure controls/personal protection

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. Provide eyewash station. | |
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| Individual protection measures, such as personal protective equipment | | |
| 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 suitable protective clothing. | |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. | |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. | |
| General hygiene considerations | Keep away from food and drink. 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 | Slightly hazy to opaque. |
|---|--|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Colourless to light yellow. |
| Odor | Mild. |
| Odor threshold | Not available. |
| рН | 5 - 7 (5% in water) |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | > 201.0 °F (> 93.9 °C) Pensky-Martens Closed Cup |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | 20 cP @ 45C |
| Other information | |
| Density | 8.26 lbs/gal @ 45C |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Pour point | 59 °F (15 °C) |
| 10. Stability and reactivity | |

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

| Chemical stability Material is stable under normal conditions. Pressibility of Nazardous No dangerous reaction known under conditions of normal use. No dangerous reactions for an experimentation of normal use. Reconditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials. Incompatible materials Strong oxidizing agents. Hazardous decomposition products are known. products 11. Toxicological information Information on likely routes of exposure Inflation No adverse effects due to inhalation are expected. Skin contact Irritating to skin. Eye contact Causes serious eye damage. Ingestion Harmful if swallowed. Symptoms related to the Severe eye initiation. Symptoms may include stinging, tearing, redness, swelling, and blurred bytiscial, chemical and Wision. Permanent eye damage including blindness could result. Acute toxicity Harmful if swallowed. Skin contact Causes serious eye damage. Information on toxicological effect: Acute toxicity Causes serious eye damage. Information on toxicological effect: Respiratory ensitization Prolonged skin contact may cause temporary initiation. Skin sensitization Na respiratory sensitizer. Respiratory ensitization Na respiratory sensitizer. Skin sensitization No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Carcinogenicity No toxicity - Not respiratory consting toxicity - Prepated exposure (Signer Causes ereproductive or developmental effects. Specific target organ toxicity - Specific target organ toxicity - Specific target organ toxicity - Prepated exposure (Signer C | | •• | | |
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| mutagenic or genotoxic. Carcinogenicity Not classifiable as to carcinogenicity to humans. IARC Monographs. Overall Evaluation of Carcinogenicity Not listed. Not classifiable as to carcinogenicity Not listed. OSHA Specifically Regulated. Substances (29 CFR 1910.1001-1052) Not regulated. US. National Toxicology Program (NTP) Report on Carcinogens Not listed. This product is not expected to cause reproductive or developmental effects. Specific target organ toxicity repeated exposure Not classified. Specific target organ toxicity repeated exposure Not classified. Aspiration hazard Not an aspiration hazard. Aspiration bazard Not expected to be harmful to aquatic organisms. Persistence and degradability Expected to be readily biodegradable. Bioaccumulative potential 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/ Hazardous waste code Dispose of contents/container in accordance with local/regional/national/international regulations. | Skin sensitization | | | |
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| 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 - repeated exposure Not classified. Aspiration hazard Not classified. Fectological information Expected to be harmful to aquatic organisms. Persistence and degradability Bioaccumulative potential 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 Dispose of contents/container in accordance with local/regional/national/international regulations. Hazardous waste code Dispose of contents/container in accordance with local/regional/national/international regulations. | Carcinogenicity | Not classifiable as to carcinogenicity to humans. | | |
| Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.Specific target organ toxicity - single exposureNot classified.Specific target organ toxicity - repeated exposureNot classified.Aspiration hazardNot an aspiration hazard.12. Ecological informationNot expected to be harmful to aquatic organisms.Persistence and degradability Bioaccumulative potentialNot data available.Mobility in soilNo data available.Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.Jisposal instructionsDispose of contents/container in accordance with local/regional/national/international regulations.Hazardous waste codeDispose of contents/container in accordance with local/regional/national/international regulations. | Not listed. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052) Not regulated. US. National Toxicology Program (NTP) Report on Carcinogens | | | |
| Specific target organ toxicity - single exposureNot classified.Specific target organ toxicity - repeated exposureNot classified.Aspiration hazardNot classified.Aspiration hazardNot an aspiration hazard.12. Ecological informationNot expected to be harmful to aquatic organisms.EcotoxicityNot expected to be harmful to aquatic organisms.Persistence and degradability Bioaccumulative potentialExpected to be readily biodegradable.Mobility in soilNo data available.Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.13. Disposal instructions Hazardous waste codeDispose of contents/container in accordance with local/regional/national/international regulations. | | This product is not expected to cause reproductive or developmental effects. | | |
| Specific target organ toxicity - repeated exposureNot classified.Aspiration hazardNot an aspiration hazard.Aspiration hazardNot an aspiration hazard.12. Ecological informationEcotoxicityEcotoxicityNot expected to be harmful to aquatic organisms.Persistence and degradabilityExpected to be readily biodegradable.Bioaccumulative potentialNo data available.Mobility in soilNo data available.Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.13. Disposal considerationsDispose of contents/container in accordance with local/regional/national/international regulations.Hazardous waste codeDispose of contents/container in discussion between the user, the producer and the waste | Specific target organ toxicity - | | | |
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| EcotoxicityNot expected to be harmful to aquatic organisms.Persistence and degradabilityExpected to be readily biodegradable.Bioaccumulative potentialNo data available.Mobility in soilNo data available.Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.13. Disposal considerationsDispose of contents/container in accordance with local/regional/national/international regulations.Hazardous waste codeDispose of contents/container in discussion between the user, the producer and the waste | | Not an aspiration hazard. | | |
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| Bioaccumulative potentialMobility in soilNo data available.Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.13. Disposal considerationsDispose of contents/container in accordance with local/regional/national/international regulations.Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste | Ecotoxicity | Not expected to be harmful to aquatic organisms. | | |
| Mobility in soilNo data available.Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.13. Disposal considerationsDisposal instructionsDispose of contents/container in accordance with local/regional/national/international regulations.Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste | Persistence and degradability | Expected to be readily biodegradable. | | |
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| potential, endocrine disruption, global warming potential) are expected from this component. 13. Disposal considerationsDisposal 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 | Mobility in soil | No data available. | | |
| Disposal instructionsDispose of contents/container in accordance with local/regional/national/international regulations.Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste | Other adverse effects | | | |
| Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste | 13. Disposal considerations | | | |
| Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste | Disposal instructions | Dispose of contents/container in accordance with local/regional/national/international regulations. | | |
| | | The waste code should be assigned in discussion between the user, the producer and the waste | | |

| Waste from residues / unuse products | d 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 | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. | | |
| 14. Transport information | on | | |
| DOT | | | |
| Not regulated as dangerou | is goods. | | |
| IATA Not regulated as dangerou | us goods. | | |
| IMDG | | | |
| Not regulated as dangerou | - | | |
| Transport in bulk according t Annex II of MARPOL 73/78 ar the IBC Code | | | |
| 15. Regulatory informat | ion | | |
| US federal regulations | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. | | |
| | Australia: Secondary notification conditions apply. Contact NICNAS before introducing this product into Australia. | | |
| Toxic Substances Contro | | | |
| Not regulated. | Export Notification (40 CFR 707, Subpt. D) | | |
| - | estance List (40 CFR 302.4) | | |
| Not listed. SARA 304 Emergency re | | | |
| | | | |
| Not regulated. | | | |
| Superfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Not listed. | | | |
| SARA 311/312 Hazardou chemical | s Yes | | |
| Classified hazard categories | Acute toxicity (any route of exposure) 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. Safe Drinking Water Act (SDWA) | Contains component(s) regulated under the Safe Drinking Water Act. | | |
| 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 Propositio | on 65 - CRT: Listed date/Carcinogenic substance | | |
| Acataldahuda (Ci | | | |

| 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 Australia | Inventory name Australian Inventory of Chemical Substances (AICS) | On inventory (yes/no) * Yes |
|--|--|---------------------------------------|
| Canada | Domestic Substances List (DSL) | No |
| 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) | No |
| Taiwan | Taiwan Inventory (TCSI) | 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

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|----------------------|--|
| Issue date | 09-16-2019 |
| Revision date | 03-06-2020 |
| Version # | 02 |
| HMIS® ratings | Health: 3 Flammability: 0 Physical hazard: 0 |
| NFPA ratings | Health: 3 Flammability: 0 Instability: 0 |
| Disclaimer | Terms and Conditions. This SDS is designed only as guidance for the products to which it applies. To the greatest extent permitted by applicable law, nothing contained herein creates any legal obligation including contractual obligations, expressed or implied warranties, including any warranties of merchantibility or fitness for particular purpose; or confers any intellectual property rights, including rights to use trademarks or a license to use patents, issued or pending. The information contained herein is based on the manufacturer's own study and the work of others, and is subject to change at any time without further notice. There is no warranty, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein, and neither the provider nor the manufacturer (nor the agents, directors, officers, contractors or employees of either) are liable to any party for any damages of any nature, including direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of any information in this SDS, or in any other way related (directly or indirectly) to this SDS. The receipt and use of this information constitutes consent to these terms and conditions. |
| Revision information | Hazard(s) identification: Hazard statement Hazard(s) identification: Prevention Ecological information: Ecotoxicity Ecological information: Persistence and degradability |