

1. Identification

| | | |
|--|--|-----------------|
| Product identifier | SULFONIC 100 | |
| Other means of identification | | |
| Product code | 1706 | |
| Recommended use | Surfactant | |
| Recommended restrictions | For industrial use only. | |
| Manufacturer/Importer/Supplier/Distributor information | | |
| Manufacturer | | |
| Company name | Stepan Company | |
| Address | 1101 Skokie Blvd. Northbrook, IL 60062 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 |
| | Skin corrosion/irritation | Category 1 |
| | Serious eye damage/eye irritation | Category 1 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 2 |
| | Hazardous to the aquatic environment, long-term hazard | Category 2 |
| OSHA defined hazards | Not classified. | |

Label elements



| | |
|--|---|
| Signal word | Danger |
| Hazard statement | Harmful if swallowed. Causes severe skin burns and eye damage. Toxic to aquatic life. Toxic to aquatic life with long lasting effects. |
| Precautionary statement | |
| Prevention | Do not breathe mist or vapor. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. 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). Wash contaminated clothing 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. |

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

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-------|
| Alkylbenzenesulfonic acid (C11-13) Br. (Alternate CAS 68411-32-5) | | 68608-88-8 | > 95 |
| Alkylbenzene (c10-c16) | | 68648-87-3 | < 2.5 |
| Sulfuric acid | | 7664-93-9 | < 2 |

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. Prevent entry into waterways, sewer, basements or confined areas. 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. 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**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. Do not get this material on clothing. Avoid prolonged exposure. 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. Do not empty into drains. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container.

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value |
|-------------------------------|------|---------|
| Sulfuric acid (CAS 7664-93-9) | PEL | 1 mg/m3 |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|-------------------------------|------|-----------|--------------------|
| Sulfuric acid (CAS 7664-93-9) | TWA | 0.2 mg/m3 | Thoracic fraction. |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|-------------------------------|------|---------|
| Sulfuric acid (CAS 7664-93-9) | TWA | 1 mg/m3 |

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 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**

Clear to slightly hazy.

Physical state

Liquid.

Form

Liquid. Viscous.

Color

Dark brown.

Odor

Not available.

Odor threshold

Not available.

pH

< 1 (as is)

Melting point/freezing point

48 °F (8.89 °C)

Initial boiling point and boiling range

> 212 °F (> 100 °C)

| | |
|---|--|
| Flash point | > 201.0 °F (> 93.9 °C) Pensky-Martens Closed Cup |
| Evaporation rate | Estimated slower than ethyl ether |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | |
| 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) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | 11500 cP @ 25C |
| Other information | |
| Density | 8.56 lbs/gal @ 38C |
| Pour point | 54 °F (12.22 °C) |
| VOC | 0 % |

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. |
| 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 | This product may react with reducing agents. Incompatible with bases. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---------------------|--|
| Inhalation | Prolonged inhalation may be harmful. May cause irritation to the respiratory system. |
| Skin contact | Causes severe skin burns. May be 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 | 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. |
|---|---|

Information on toxicological effects

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

| Product | Species | Test Results |
|--|--|------------------|
| SULFONIC 100 | | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rabbit | > 4000 mg/kg |
| Oral | | |
| LD50 | Rat | 520 - 2320 mg/kg |
| Skin corrosion/irritation | Causes severe skin burns and eye damage. | |
| Serious eye damage/eye irritation | Causes serious eye damage. | |

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity The International Agency for Research on Cancer (IARC) has concluded that occupational exposure to strong-inorganic acid mists containing sulfuric acid is carcinogenic to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

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.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

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

| Product | Species | Test Results |
|---------|---------|--------------|
|---------|---------|--------------|

SULFONIC 100

Aquatic

Acute

| | | | |
|-----------|------|---------|--------------------|
| Algae | EC50 | Algae | 5 mg/l, 72 hours |
| Crustacea | EC50 | Daphnia | 3.5 mg/l, 48 hours |
| Fish | LC50 | Fish | 3.5 mg/l, 96 hours |

Persistence and degradability Expected to be inherently biodegradable.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Sulfuric acid -2.2

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

UN number UN2586

UN proper shipping name Alkyl Sulfonic Acids, Liquid (Sulfuric Acid RQ = 117647 LBS)

Transport hazard class(es)

Class 8

Subsidiary risk -

Packing group III
Environmental hazards
Marine pollutant No
Special precautions for user Not available.

IATA

UN number UN2586
UN proper shipping name Alkyl Sulfonic Acids, Liquid (RQ, Sulfuric Acid)
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group III
Environmental hazards Yes
Special precautions for user Not available.

IMDG

UN number UN2586
UN proper shipping name Alkyl Sulfonic Acids, Liquid (RQ, Sulfuric Acid), MARINE POLLUTANT
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant Yes
EmS Not available.
Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

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)

Sulfuric acid (CAS 7664-93-9) Listed.

SARA 304 Emergency release notification

Sulfuric acid (CAS 7664-93-9) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

| Chemical name | CAS number | Reportable quantity (pounds) | Threshold planning quantity (pounds) | Threshold planning quantity, lower value (pounds) | Threshold planning quantity, upper value (pounds) |
|---------------|------------|------------------------------|--------------------------------------|---|---|
|---------------|------------|------------------------------|--------------------------------------|---|---|

| | | | | | |
|---------------|-----------|------|------|--|--|
| Sulfuric acid | 7664-93-9 | 1000 | 1000 | | |
|---------------|-----------|------|------|--|--|

SARA 311/312 Hazardous chemical

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.

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

Sulfuric acid (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Sulfuric acid (CAS 7664-93-9) 20 %WV

DEA Exempt Chemical Mixtures Code Number

Sulfuric acid (CAS 7664-93-9) 6552

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Sulfuric acid (CAS 7664-93-9)

California Proposition 65



WARNING: This product can expose you to chemicals including Strong inorganic mists containing sulfuric acid, which is known to the State of California to cause cancer, and Sulfur dioxide, which is 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

California Proposition 65 - CRT: Listed date/Developmental toxin

Sulfur Dioxide (CAS 7446-09-5) Listed: July 29, 2011

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Australia | Australian Inventory of Industrial Chemicals (AIIC) | 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 | 09-10-2014 |
| Revision date | 11-23-2022 |
| Version # | 07 |
| HMIS® ratings | Health: 3 Flammability: 1 Physical hazard: 0 |
| NFPA ratings | Health: 3 Flammability: 1 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 merchantability 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 | Composition / Information on Ingredients: Ingredients |