Section 1. Identification

Product identifier

Product Identity	Linear Alkyl Benzene Sulphonic Acid
Other means of identification	Linear Alkyl Benzene Sulphonate

Relevant identified uses of the substance or mixture and uses advised against

Detergent Powder, Liquid Washing Detergent

Details of the supplier of the safety data sheet

Company Name	Silver Fern Chemical, Inc. 121 W. De La Guerra Street, Suite B Santa Barbara, CA 93101 USA Customer Service: 1-866-282-3384 / info@silverfernchemical.com Website - www.silverfernchemical.com
Emergency 24 hour Emergency Telephone No.	Emergency telephone number Infotrac: 1-800-535-5053; Outside USA & Canada +1-352-323-3500
Customer Service:	

Section 2. Hazard(s) identification

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)

Acute toxicity(oral), category 4;H302	Harmful if swallowed.
Skin corrosion/irritation category 1B;H314	Causes severe skin burns and eye damage.

Serious eye damage / eye irritation, category 1;H318	Causes serious eye damage.
Specific target organ toxicity, Single exposure category 3;H335	May cause respiratory irritation.

Label elements

Danger

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
[Prevention]
P233 Keep container tightly closed.
P260 Do not breathe dust, fume, mist, vapors or spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, protective clothing, eye protection, face protection.
[Response]
P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.
P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.
P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER, doctor or physician.
P312 Call a POISON CENTER, doctor or physician if you feel unwell.
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363 Wash contaminated clothing before reuse.
[Storage]
P403+233 Store in a well ventilated place. Keep container tightly closed.
P405 Store locked up.
[Disposal]
P501 Dispose of contents or container in accordance with local and national regulations.
Other hazards
This product contains no PBT/vPvB/vPvM chemicals.
This product contains no endocrine disrupting chemicals.

Does not contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per US or Canadian regulations.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Benzenesulfonic acid, C10-16-alkyl derivatives **CAS Number: 68584-22-5** **Synonyms: Benzenesulfonic acid, C10-16-alkyl derivs.**	**80 - 100**	**Acute toxicity(oral), category 4;H302** **Skin corrosion/irritation category 1B;H314** **Serious eye damage / eye irritation, category 1;H318** **Specific target organ toxicity, Single exposure category 3;H335**	**No data available**
Benzene, c10-13-alkyl derivatives **CAS Number: 67774-74-7** **Synonyms: Benzene, c10-13-alkyl derivitives**	**1 - 5**	**Not Classified**	**No data available**
Sulfuric acid **CAS Number: 7664-93-9** **Synonyms: Sulfuric acid (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size), Sulphuric acid**	**0.5 - 1.5**	**Skin corrosion/irritation category 1A;H314: C ≥ 15 %** **Skin corrosion/irritation category 2;H315: 5 % ≤ C < 15 %** **Serious eye damage / eye irritation, category 2;H319: 5 % ≤ C < 15 %**	**No data available**

The actual concentration or concentration range is withheld as a trade secret.
*PBT/vPvB - PBT, vPvM or vPvB-substance.
The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes Rinse with plenty of clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion Do NOT induce vomiting. Rinse mouth and slowly drink several glasses of water. Call a physician. Do NOT give anything by mouth to an unconscious or convulsing person.

Most important symptoms and effects, both acute and delayed

Overview **IMMEDIATE CONCERNS:**CAUTION: May cause eye or skin burns. Avoid vapor.
POTENTIAL SIDE EFFECTS
EYES: Tissue destruction and permanent eye damage may occur if not treated immediately.
SKIN: May be corrosive and cause severe burns.
INGESTION: Corrosive to mucous membranes of the mouth, esophagus, stomach & throat.
INHALATION: Avoid mist, can be a severe irritant.
ACUTE TOXICITY: Eye, skin, lung burning may be caused with exposure to mist. Avoid mist.
TARGET ORGAN STATEMENT: Contains material which may cause damage to gastrointestinal tract and respiratory tract. No chronic toxicity or long term toxicity information available. Treat symptomatically. See section 2 for further details.

Inhalation May cause respiratory irritation.

Eyes Causes serious eye damage.

Skin Causes severe skin burns and eye damage.

Ingestion Harmful if swallowed.

Section 5. Fire-fighting measures

Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO_2, powder, water spray.
Unsuitable extinguishing media: Do not use; water jet.

Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of sulfur at high temperatures. Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.
Keep container tightly closed.
Do not breathe dust, fume, mist, vapors or spray.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

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Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions

Do not allow spills to enter drains or waterways.

Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.
Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.
Contain, dilute cautiously with water, and neutralize with soda ash or lime.

Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage.
Do not add water to contents while in container because of violent reaction. Always add slowly and in small amounts. Never use hot water. Never add water to acids-always add acids to water..
See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Store between -5C and 40C.
Incompatible materials: Acids react with most metals to release hydrogen gas which can form explosive mixtures in air. Water, alkaline solutions, metals, metal powder, carbides, chlorates, fuminates, nitrates, picrates, strong oxidizers, reducers, or combustible organics.
Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.
See section 2 for further details. - [Storage]

Specific end use(s)

No available information

Section 8. Exposure controls / personal protection

Control parameters

Exposure Limits

CAS No.	Ingredient	Source	Value
7664-93-9	Sulfuric acid	OSHA	1 mg/m^3
		ACGIH	0.2 mg/m^3(T) Thoracic Fraction
		NIOSH	TWA 1 mg/m^3
67774-74-7	Benzene, c10-13-alkyl derivatives	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
68584-22-5	Benzenesulfonic acid, C10-16-alkyl derivatives	OSHA	No Established Limit
		ACGIH	No Established Limit

CAS No.	Ingredient	Source	Value
		NIOSH	No Established Limit

Exposure controls

Respiratory Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.

Eyes Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.

Skin Chemical resistant clothing such as coveralls/apron and boots should be worn. Chemical impervious gloves required.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Liquid
Color	Brown Viscous
Odor	Sulphur
Melting point / freezing point	~ -10°C
Initial boiling point and boiling range	~ 315°C
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:**No available information **Upper Explosive Limit:**No available information

Flash Point	> 200 degrees °C
Auto-ignition temperature	Not applicable to this product
Decomposition temperature	> 100 degrees C
pH	~2
Viscosity (cSt)	~ 1500 – 2000 mPa.s
Solubility in Water	Soluble
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapor pressure (Pa)	below 0.15 (0.001mm Hg)
Relative Density	No available information
Vapor Density	Not applicable to this product
Average molecular mass	318~ 324
Evaporation rate (Ether = 1)	No available information
Oxidising properties	No available information
Explosive properties	Not pertinent to this product
Melting Range	~ -10°C
Mass density	LABSA 96%: 1.060 g/cm3

Other information
No other relevant information.

Section 10. Stability and reactivity

Reactivity
Hazardous Polymerization will not occur.
Chemical stability
Stable under normal circumstances.
Possibility of hazardous reactions
Reacts with some bases.
Conditions to avoid
Keep away from extreme heat and extreme cold.
Incompatible materials
Acids react with most metals to release hydrogen gas which can form explosive mixtures in air. Water, alkaline solutions, metals, metal powder, carbides, chlorates, fuminates, nitrates, picrates, strong oxidizers, reducers, or combustible organics.
Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

Hazardous decomposition products
Oxides of sulfur at high temperatures. Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Benzenesulfonic acid, C10-16-alkyl derivatives - (68584-22-5)	No data available.	No data available.	No data available.	No data available.	No data available.
Benzene, c10-13-alkyl derivatives - (67774-74-7)	> 5,000.00, Rat - Category: NA	>2,000.00, Rat - Category: 5	No data available.	No data available.	No data available.
Sulfuric acid - (7664-93-9)	No data available.	No data available.	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
7664-93-9	Sulfuric acid	OSHA	Regulated Carcinogen: No;
		NTP	Known: Yes; Suspected: No;
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	A2 (in strong inorganic acid mists)
67774-74-7	Benzene, c10-13-alkyl derivatives	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
68584-22-5	Benzenesulfonic acid, C10-16-alkyl derivatives	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-single exposure	3	May cause respiratory irritation.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry: No available information

Symptoms and effects, both acute and delayed:
IMMEDIATE CONCERNS:CAUTION: May cause eye or skin burns. Avoid vapor.
POTENTIAL SIDE EFFECTS
EYES: Tissue destruction and permanent eye damage may occur if not treated immediately.
SKIN: May be corrosive and cause severe burns.
INGESTION: Corrosive to mucous membranes of the mouth, esophagus, stomach & throat.
INHALATION: Avoid mist, can be a severe irritant.
ACUTE TOXICITY: Eye, skin, lung burning may be caused with exposure to mist. Avoid mist.
TARGET ORGAN STATEMENT: Contains material which may cause damage to gastrointestinal tract and respiratory tract. No chronic toxicity or long term toxicity information available. Treat symptomatically.

Eyes	Causes serious eye damage.
Skin	Causes severe skin burns and eye damage.
Ingestion	Harmful if swallowed.

Section 12. Ecological information

Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Benzenesulfonic acid, C10-16-alkyl derivatives - (68584-22-5)	> 10,000, Cyprinodon variegatus	> 1,000, Daphnia magna	> 1,000, Pseudokirchneriella subcapitata
Benzene, c10-13-alkyl derivatives - (67774-74-7)	No data available.	No data available.	No data available.
Sulfuric acid - (7664-93-9)	27.00, Lepomis macrochirus	101.00, Daphnia magna	101.00, Desmodesmus subspicatus

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

No available information

Mobility in soil

No available information

Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

Other adverse effects

No available information

Section 13. Disposal considerations

Waste treatment methods
Observe all federal, provincial and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN2586	UN2586	UN2586
UN proper shipping name	UN2586,Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with not more than 5 percent free sulfuric acid,8,III	Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with not more than 5 percent free sulfuric acid	Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with not more than 5 percent free sulfuric acid
Transport hazard class(es)	**Class:**8 **Sub Class:**Not Applicable	**Class:**8 **Sub Class:**Not Applicable	**Class:**8 **Sub Class:**Not Applicable
Packing group	III	III	III

Environmental hazards

IMDG Marine Pollutant: No;

Special precautions for user

No available information

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)

Toxic Substance Control Act (TSCA)

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0067774-74-7	Benzene, c10-13-alkyl derivatives	Yes	UVCB	ACTIVE
0068584-22-5	Benzenesulfonic acid, C10-16-alkyl derivatives	Yes	UVCB	ACTIVE
0007664-93-9	Sulfuric acid	Yes		ACTIVE

The following flags are used:
•Active - indicates commercial status designation of active
•E - indicates a substance that is the subject of a Section 5(e) Consent Order under TSCA.
•F - indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
•N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
•P - indicates a commenced Premanufacture Notice (PMN) substance.
•R - indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
•S - indicates a substance that is identified in a final Significant New Uses Rule.
•SP - indicates a substance that is identified in a proposed Significant New Uses Rule.
•T - indicates a substance that is the subject of a final Section 4 test rule under TSCA.
•UVCB Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials •XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
•Y1 - indicates a polymer that has a number-average molecular weight greater than 1,000 and that was exempt under the 1984 polymer exemption rule.
•Y2 - indicates a polymer that is a polyester and that was exempt under the 1984 polymer exemption rule.

EPCRA 302 Extremely Hazardous:

Sulfuric acid

EPCRA 313 Toxic Chemicals:

Sulfuric acid

Proposition 65 - Carcinogens (>0.0%):

Sulfuric acid

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

WARNING: This product can expose you to chemicals including [Sulfuric acid], which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Note: Strong inorganic acid mists containing sulfuric acid are listed on the California Proposition 65 Carcinogen List. [Sulfuric acid, in and of itself, is not listed under Proposition 65. However, if one has sulfuric acid, which through its intended use generates an acid mist that in turn contains sulfuric acid that would meet the listing. The term "strong" does not refer to the concentration of the acid, but rather the strength of the acid. The basis for the listing of strong inorganic acid mists containing sulfuric acid was the formal identification by the National Toxicology Program (NTP), in its Ninth Report on Carcinogens, that this chemical mixture is "known to be a human carcinogen." (Public notice available at http://www.oehha.ca.gov/prop65/CRNR_notices/admin_listing/intent_to_list/noil19b4.html.)]

Mass RTK Substances (>1%) :

Sulfuric acid

New Jersey RTK Substances (>1%):

Sulfuric acid

Pennsylvania RTK Substances (>1%):

Sulfuric acid

OSHA Process Safety Management Standard Highly Hazardous Chemicals, Toxics and Reactives:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

US EPA List of Regulated Substances under the Risk Management Plan (RMP) Program:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

US EPA Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the Minimum Risk Exemption:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

U.S. - DEA List II or Essential Chemicals:

Sulfuric acid

U.S. - DEA - Exempt Chemical Mixtures - List 1 and 2:

Sulfuric acid

US DHS Chemical Facility Anti-Terrorism Standards (CFATS):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 311/312 Chemicals and RQs (lbs):

Sulfuric acid (1,000.00)

Section 16. Other information

Revision Date 05/30/2025

DISCLAIMER OF RESPONSIBILITY

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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