

## 1. Identification

<b>Product identifier</b>	<b>CALSOFT® LAS-99</b>	
<b>Other means of identification</b>		
<b>Product Code</b>	400000	
<b>Recommended use</b>	Processing Aid	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Pilot Chemical Company	
<b>Address</b>	9075 Centre Pointe Drive Suite 400 West Chester, OH 45069 United States	
<b>Telephone</b>	(513) 326-0600	(8 AM to 5 PM Eastern)
	1-800-707-4568	
<b>E-mail</b>	sdsinfo@pilotchemical.com	
<b>Emergency phone number</b>	CHEMTREC International: 1-703-527-3887	
<b>CHEMTREC USA:</b>	1-800-424-9300	

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1C
	Serious eye damage/eye irritation	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 3
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	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. Wash contaminated clothing before reuse.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Supplemental information None.

### 3. Composition/information on ingredients

#### Substances

Chemical name	Common name and synonyms	CAS number	%
Benzenesulfonic Acid, C10-16-alkyl Derivs.		68584-22-5 ALT CAS 27176-87-0	90 - 100
Other components below reportable levels			< 1

#### Byproducts

Chemical name	Common name and synonyms	CAS number	%
Sulfuric Acid		7664-93-9	0 - < 1.5

#### Impurities

Chemical name	Common name and synonyms	CAS number	%
Benzene, C10-16-alkyl Derivs.		68648-87-3	0 - < 1.5
Sulphur Dioxide		7446-09-5	0 < 0.1

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	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.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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.
<b>Most important symptoms/effects, acute and delayed</b>	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.
<b>Indication of immediate medical attention and special treatment needed</b>	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. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	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.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. 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.
--	--

**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 breathe mist/vapors. Do not get in eyes, on skin, or on clothing. 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 locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

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

Byproducts	Type	Value
Sulfuric Acid (CAS 7664-93-9)	PEL	1 mg/m <sup>3</sup>
Impurities	Type	Value
Sulphur Dioxide (CAS 7446-09-5)	PEL	13 mg/m <sup>3</sup>
		5 ppm

**US. ACGIH Threshold Limit Values**

Byproducts	Type	Value	Form
Sulfuric Acid (CAS 7664-93-9)	TWA	0.2 mg/m <sup>3</sup>	Thoracic fraction.
Impurities	Type	Value	
Sulphur Dioxide (CAS 7446-09-5)	STEL	0.25 ppm	

**US. NIOSH: Pocket Guide to Chemical Hazards**

Byproducts	Type	Value
Sulfuric Acid (CAS 7664-93-9)	TWA	1 mg/m <sup>3</sup>
Impurities	Type	Value
Sulphur Dioxide (CAS 7446-09-5)	STEL	13 mg/m <sup>3</sup>
		5 ppm
	TWA	5 mg/m <sup>3</sup>
		2 ppm

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Good general ventilation 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.

<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear appropriate chemical resistant clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	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

<b>Appearance</b>	Viscous
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Brown.
<b>Odor</b>	Sulphurous.
<b>Odor threshold</b>	Not available.
<b>pH</b>	< 2
<b>Melting point/freezing point</b>	-15°C
<b>Initial boiling point and boiling range</b>	> 372.2 °F (> 189 °C)
<b>Flash point</b>	> 386.4 °F (> 196.9 °C) Cleveland Open Cup None to decomposition
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1.051 @ 20 deg C
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	> 16 g/100g Miscible
<b>Partition coefficient (n-octanol/water)</b>	2 @23°C, pH 3.7
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	1260 cP @ 25 deg C estimated
<b>Other information</b>	
<b>Density</b>	8.81 lb/gal
<b>Explosive properties</b>	Not explosive.
<b>Molecular weight</b>	312
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.  
**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** May cause irritation to the respiratory system.  
**Skin contact** Causes severe skin burns.  
**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.

Components	Species	Test Results
------------	---------	--------------

Benzenesulfonic Acid, C10-16-alkyl Derivs.

#### Acute

##### **Dermal**

LC50	Rabbit	> 2000 mg/kg
------	--------	--------------

##### **Oral**

LD50	Rat	1470 mg/kg
------	-----	------------

Byproducts	Species	Test Results
------------	---------	--------------

Sulfuric Acid (CAS 7664-93-9)

#### Acute

##### **Inhalation**

LC50	Rat	375 mg/m <sup>3</sup> , 4 h
------	-----	-----------------------------

##### **Oral**

LD50	Rat	2140 mg/kg
------	-----	------------

Impurities	Species	Test Results
------------	---------	--------------

Sulphur Dioxide (CAS 7446-09-5)

#### Acute

##### **Inhalation**

LC50	Hamster	50 ppm, 4 h
------	---------	-------------

##### *Gas*

LC50	Rat	965 - 1168 ppm, 4 Hours
------	-----	-------------------------

Benzene, C10-16-alkyl Derivs. (CAS 68648-87-3)

#### Acute

##### **Dermal**

LD50	Rabbit	> 5000 mg/kg
------	--------	--------------

##### **Oral**

LD50	Rat	> 5000 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** IARC has concluded that "occupational exposure to strong inorganic mists containing sulfuric acid is carcinogenic for humans (Group 1)". This product is not expected to be present in the form of inorganic mist during normal use.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Sulfuric Acid (CAS 7664-93-9)

1 Carcinogenic to humans.

Sulphur Dioxide (CAS 7446-09-5)

3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Sulfuric Acid (CAS 7664-93-9)

Known To Be Human Carcinogen.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.**Specific target organ toxicity - single exposure** Not classified.**Specific target organ toxicity - repeated exposure** Not classified.**Aspiration hazard** Not an aspiration hazard.**12. Ecological information****Ecotoxicity** Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
Benzenesulfonic Acid, C10-16-alkyl Derivs.		

**Aquatic***Acute*

Algae	EC50	Algae	7.39 mg/l, 72 h
Crustacea	EC50	Daphnia	2.4 mg/l, 48 h
Fish	LC50	Bluegill (Lepomis macrochirus)	1.67 mg/l, 96 h

*Chronic*

Algae	NOEC	Algae	3.1 mg/l, 15 d 0.35 mg/l, 96 h
Crustacea	NOEC	Ceriodaphnia dubia	0.59 mg/l, 7 d
Fish	NOEC	Fish	0.23 mg/l, 72 d

Byproducts	Species	Test Results
Sulfuric Acid (CAS 7664-93-9)		

**Aquatic***Acute*

Algae	EC50	Algae	> 100 mg/l, 72 h
Crustacea	EC50	Daphnia	> 100 mg/l, 48 h
Fish	LC50	Bluegill (Lepomis macrochirus)	16 - 28 mg/l, 96 h

*Chronic*

Crustacea	NOEC	Daphnia	0.15 mg/l, 35 d
Fish	NOEC	Fish	0.025 mg/l, 65 d

Impurities	Species	Test Results
Benzene, C10-16-alkyl Derivs. (CAS 68648-87-3)		

**Aquatic***Acute*

Algae	EC50	Algae	> 0.1 mg/l, 72 h
Crustacea	EC50	Daphnia	0.009 mg/l, 48 h
Fish	LC50	Fathead minnow (Pimephales promelas)	> 0.041 mg/l, 96 h

*Chronic*

Fish	NOEC	Fish	> 0.0578 mg/l
------	------	------	---------------

**Persistence and degradability** This product is expected to be readily biodegradable.**Bioaccumulative potential** This product has low potential for bioaccumulation.**Partition coefficient n-octanol / water (log Kow)**

CALSOFT® LAS-99

2 @23°C, pH 3.7

**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** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]  
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** 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

#### DOT

**UN number** UN2586  
**UN proper shipping name** Aryl sulfonic acids, liquid  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Label(s)** 8  
**Packing group** III  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Special provisions** IB3, T4, TP1  
**Packaging exceptions** 154  
**Packaging non bulk** 203  
**Packaging bulk** 241

#### DOT NON-BULK

##### NON-BULK

**UN number** UN2586  
**UN proper shipping name** Aryl sulfonic acids, liquid  
**Transport hazard class(es)**  
**Class** 8  
**Packing group** III  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### IATA

**UN number** UN2586  
**UN proper shipping name** Arylsulphonic acids, liquid  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards** No.  
**ERG Code** 8L  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Other information**  
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.

#### IMDG

**UN number** UN2586  
**UN proper shipping name** ARYLSULPHONIC ACIDS, LIQUID  
**Transport hazard class(es)**  
**Class** 8

**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-A, S-B  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

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

**DOT; DOT Non-Bulk packaging type**



**IATA; IMDG**



## 15. Regulatory information

### CERCLA (Superfund) reportable quantity, lbs

Not listed.

### California Proposition 65

Pilot Chemical does not provide Proposition 65 information on our safety data sheets. Proposition 65 statements are available upon request by contacting [reginfo@pilotchemical.com](mailto:reginfo@pilotchemical.com).

### US federal regulations

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

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

**Hazard categories**  
 Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

### Section 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		
Sulphur Dioxide	7446-09-5	500	500		

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Sulfuric Acid	7664-93-9	0 - < 1.5



## 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)

Sulfuric Acid (CAS 7664-93-9)

Sulphur Dioxide (CAS 7446-09-5)

### 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

### FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Sulphur Dioxide (CAS 7446-09-5) High priority

## 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
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
Taiwan	Taiwan Chemical Substance 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

Issue date	08-27-2014
Revision date	01-17-2023
Version #	11
HMIS® ratings	Health: 3 Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 3 Flammability: 1 Instability: 0

**Disclaimer**

The Pilot Chemical Corp. product referred to in this document is sold pursuant to Pilot Chemical Corp.'s Standard Terms and Conditions ("Terms"); however, the information contained in this document shall not be considered part of said Terms. Although the information is believed to be accurate and reliable as of the date compiled, PILOT CHEMICAL CORP. MAKES NO GUARANTEE, REPRESENTATION, OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE ACCURACY, RELIABILITY, SUFFICIENCY, SUITABILITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF ANY INFORMATION IN THIS DOCUMENT OR THE PRODUCT TO WHICH THIS DOCUMENT RELATES. Users should make their own investigations, tests and determinations as to the information's completeness and the product's suitability for their particular purposes. It is the user's responsibility to ensure that all activities comply with applicable laws. Pilot Chemical Corp. makes no warranty or representation that the information or product may be used without infringing the intellectual property rights of Pilot Chemical Corp or others. This document is provided gratuitously for guidance only and Pilot Chemical Corp. assumes no liability for its use.

**Revision information**

This document has undergone significant changes and should be reviewed in its entirety.