

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Benzene sulfonic acid, C10-16 alkyl derivs
Trade name	NAXSOFT® 98S
CAS No.	68584-22-5

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

Identified use(s)	Surfactant
Uses advised against	None

Details of the supplier of the safety data sheet

Company Identification	Nease Co., LLC 10740 Paddys Run Road Harrison, OH 45030
Telephone	(513) 738-1255
Telephone (Product Information)	(888) 762-7373
Fax	(513) 587-2828
E-Mail (competent person)	techservice@neaseco.com

Emergency telephone number

Emergency Phone No.	(513) 738-1255 CHEMTREC 24 hr. (800) 424-9300
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SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)	Skin Corr. 1C; Eye Dam. 1; Met. Corr. 1
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Label elements

Hazard Symbol



DANGER

Signal word(s)

Hazard statement(s)

Causes severe skin burns and eye damage.
May be corrosive to metals.

Precautionary statement(s)

Do not breathe dust/fume/gas/mist/vapors/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Seek medical treatment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation (redness, rash, blistering) develops, get medical attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Other hazards

Not classified as PBT or vPvB.

Additional Information

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredient(s)	%W/W	CAS No.	Hazard statement(s)
Benzenesulfonic acid, C10-16-alkyl derivs	>96%	68584-22-5*	Causes severe skin burns and eye damage.
Sulfuric Acid	<2%	7664-93-9	Causes severe skin burns and eye damage.

*Predominately includes Dodecyl benzene sulfonic acid (CAS# 27176-87-0)

Additional Information - Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below.

- Benzene, C10-16 alkyl derivs (68648-87-3) <2%

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is laboured, administer oxygen. If symptoms occur obtain medical attention.
Skin Contact	Wash affected skin with plenty of water. Remove contaminated clothing immediately. If irritation (redness, rash, blistering) develops, get medical attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	If ingested, rinse mouth. Do not induce vomiting. Seek medical treatment.
Most important symptoms and effects, both acute and delayed	Causes severe skin burns and eye damage.
Indication of any immediate medical attention and special treatment needed	None

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media	
-Suitable Extinguishing Media	Extinguish with waterspray, dry chemical, sand or carbon dioxide.
-Unsuitable Extinguishing Media	None anticipated.
Special hazards arising from the substance or mixture	Combustion or thermal decomposition will evolve toxic vapours.
Advice for fire-fighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Put on protective equipment before entering danger area.
Environmental precautions	Do not allow to enter drains, sewers or watercourses.
Methods and material for containment and cleaning up	Contain spillages with sand, earth or any suitable adsorbent material. Transfer to a container for disposal or recovery. Cautiously neutralize remainder. Then wash away with plenty of water. If possible prevent water running into sewers.
Reference to other sections	None
Additional Information	None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Wear protective gloves / protective clothing / eye protection / face protection.

Conditions for safe storage, including any incompatibilities

- Storage Temperature: Store at room temperature.
- Incompatible materials: Attacks many materials and clothing. Keep away from oxidising agents. Keep container tightly closed and dry.

Specific end use(s)

Surfactant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)		STEL (ppm)		Note:
		OSHA (PEL)	ACGIH (TLV)	OSHA (PEL)	ACGIH (TLV)	
Sulfuric acid	7664-93-9	1 mg/m ³	0.2 mg/m ³ ^(T)	----	----	^(T) Thoracic fraction

Recommended monitoring method

NIOSH 5043

Exposure controls

Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

Personal protection equipment

Eye/face protection



The following to be used as necessary: Goggles giving complete protection to eyes. Full face shield.

Skin protection (Hand protection/ Other)



The following to be used as necessary: Gloves (Neoprene, Butyl rubber, or Natural rubber). Chemical protection suit. Wear safety or chemical resistant shoes or boots. Check with protective equipment manufacturer's data.

Respiratory protection



No personal respiratory protective equipment normally required.

Thermal hazards

Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

Do not allow to enter drains, sewers or watercourses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Colour	Brown.
Odour	Mild Acidic.
Odour Threshold (ppm)	Not available.
pH (Value)	<2
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	260 (>500°F)
Flash Point (°C)	>93 (200 °F)

Evaporation rate (butyl acetate=1)	<1
Flammability (solid, gas)	Not applicable.
Explosive limit ranges	Not available.
Vapour Pressure (Pascal)	Not available.
Vapour Density (Air=1)	>1
Density (g/ml)	1.06
Solubility (Water)	Dispersible
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	Not available.
Auto Ignition Temperature (°C)	Not available.
Decomposition Temperature (°C)	Not available.
Kinematic Viscosity (cSt) @ 40°C	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Other information	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Avoid contact with heat and ignition sources.
Incompatible materials	Reacts with -Alkalis. Heat is generated when mixed with water.
Hazardous Decomposition Product(s)	Oxides of Sulphur and Hydrogen sulfide

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Substances in preparations / mixtures

Benzenesulfonic acid, C10-16-alkyl derivs (CAS No. 68584-22-5)

Acute toxicity (By analogy with similar materials)	Oral: LD50 > 5 g/kg-bw Dermal: LD50 >5 g/kg-bw Inhalation: LC50 >1.9 mg/l (4 hr exposure)
Irritation/Corrosivity	Corrosive (Skin and Eyes)
Sensitization	It is not a skin sensitizer.
Repeated dose toxicity (By analogy with similar materials)	NOAEL: = 500 mg/kg bw/day (29 days, oral, rat) NOAEL = 49.5 mg/m3 (6 hours per day, 5 days/week for a total of 28 days, rat).
Carcinogenicity	It is unlikely to present a carcinogenic hazard to man.
Mutagenicity (By analogy with similar materials)	There is no evidence of mutagenic potential.
Toxicity for reproduction (By analogy with similar materials)	Not to be expected.

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Sulfuric acid (CAS No. 7664-93-9)

Acute toxicity	Oral: LD50 = 2140 mg/kg-bw (rat) Dermal: No data Inhalation: LC50 = 0.37-0.42 mg/l (rat)
Irritation/Corrosivity	Corrosive (Skin and Eyes)
Sensitization	Skin sensitization has been reported in humans.
Repeated dose toxicity	No data.
Carcinogenicity	NOAEL (rat): ≥ 240 mg/kg (Fischer 344)

NTP	IARC	ACGIH	OSHA	NIOSH
Listed	Group 1	Group 2A	No.	No.

Mutagenicity There is no evidence of mutagenic potential.

Toxicity for reproduction NOAEL: 20 mg/m³ (rabbit) (New Zealand White)
NOEL: 20 mg/m³ (rabbit) (New Zealand White)

SECTION 12: ECOLOGICAL INFORMATION

Benzenesulfonic acid, C10-16-alkyl derivs (CAS No. 68584-22-5) - (By analogy with similar materials)

Short term	LL50 (96 hour): >10000 mg/L (<i>Cyprinodon variegatus</i>) EC50 (48 hour): >1000 mg/l (<i>Daphnia magna</i> , mobility) EC50 (96 hour): >1000 mg/l (<i>Pseudokirchnerella subcapitata</i>)
Long Term	Scientifically unjustified
Persistence and degradability	Readily biodegradable.
Bioaccumulative potential	The product has low potential for bioaccumulation.
Mobility in soil	The substance has high mobility in soil.
Results of PBT and vPvB assessment	Not classified as PBT or vPvB.

Sulfuric acid (CAS No. 7664-93-9)

Short term	LC50 (96 hour): 42.0 mg/l (96 hour) (<i>Gambusia affinis</i>) EC50 (24 hour): 29.0 mg/l (<i>Daphnia magna</i>) EC50 (48 hour): 29 mg/l (<i>Pandalus montagu</i>)
Long Term	Scientifically unjustified
Persistence and degradability	Not readily biodegradable.
Bioaccumulative potential	The substance has no potential for bioaccumulation.
Mobility in soil	The substance has high mobility in soil.
Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

Additional Information None known.

SECTION 14: TRANSPORT INFORMATION

	Land transport (U.S. DOT)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	2586	2586	2586
Proper Shipping Name	Alkyl sulfonic acids, liquid with not more than 5 percent free sulfuric acid (Benzene sulfonic acid, C10-16 alkyl derivs.), RQ	Alkyl sulphonic acids, liquid with not more than 5 percent free sulphuric acid (Benzene sulphonic acid, C10-16 alkyl derivs.)	Alkyl sulphonic acids, liquid with not more than 5 percent free sulphuric acid (Benzene sulphonic acid, C10-16 alkyl derivs.)
Transport hazard class(es)	8	8	8
Packing group	III	III	III
Hazard label(s)	Corrosive	Corrosive	Corrosive
Environmental hazards	No.	No.	No.
Special precautions for user	None assigned	None assigned	None assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Canada Domestic Substance List (DSL) - Listed

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
Dodecyl benzene sulfonic acid	27176-87-0	>75	1,000
Sulfuric acid	7664-93-9	< 2%	1,000

SARA 311/312 - Hazard Categories:

Fire
 Sudden Release
 Reactivity
 Immediate (acute)
 Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
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SARA 302 - Extremely Hazardous Substances(40 CFR 355):

Chemical Name	CAS No.	Typical %wt.
Sulfuric acid	7664-93-9	< 2%

SECTION 16: OTHER INFORMATION

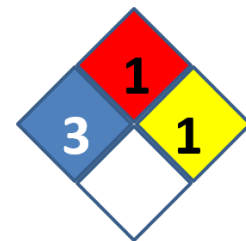
The following sections contain revisions or new statements: 1-16

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Additional Information:



HMIS (Hazardous Material Information System)



NFPA (National Fire Protection Association)

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