

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Toluenesulfonic acid and Xylenesulfonic acid
Trade name	NAXCAT® MOD ACID-35
CAS No.	Mixture
EINECS No.	Mixture

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

Identified use(s)	Catalyst in the production of foam insulation panels.
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	+1-513-587-2828
E-Mail (competent person)	techservice@neaseco.com

Emergency telephone number

Emergency Phone No.	Monday - Friday, 8 am – 4:30 p.m. (EST): 513-738-1255 CHEMTREC 24 hr. +1 (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 Met. Corr. 1
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Label elements

Hazard Symbol



Danger

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/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 or doctor/physician.

Other hazards

Additional Information

Not classified as PBT or vPvB.
None known.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredient(s)	%W/W	CAS No.	Hazard statement(s)
o, p-Toluenesulfonic acid	61%	88-20-0 104-15-4	Causes severe skin burns and eye damage. Causes serious eye damage.
Xylenesulfonic acid	31%	25321-41-9	May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage.
Sulfuric acid	<2%	7664-93-9	Causes severe skin burns and eye damage.

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.:

- Toluene (CAS No. 108-88-3) <1%
- Xylene (CAS No. 1330-20-7) <1%

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 symptoms occur obtain medical attention.
Skin Contact	Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention.
Eye Contact	Remove any contact lenses. Rinse cautiously with water for several minutes. If eye irritation persists, get medical advice/attention.
Ingestion	Rinse mouth. Do not induce vomiting. Seek medical treatment.

Most important symptoms and effects, both acute and delayed None

Indication of the 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

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.

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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.
Reference to other sections	See Section: 8 and 13
Additional Information	None.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Do not get in eyes, on skin, or on clothing.
Conditions for safe storage, including any incompatibilities	
-Storage Temperature	Store at room temperature.
-Incompatible materials	Attacks many metals. Keep away from oxidising agents.
Specific end use(s)	Catalyst in the production of foam insulation panels. In compliance with the conditions described in the annex to this safety data sheet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)		STEL (ppm)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
Sulphuric acid	7664-93-9	1 mg/m ³	----	----	----	
Toluene	108-88-3	200	20	300 ceiling	----	500 10min. peak
Xylene	1330-20-7	100	100	----	150	

Recommended monitoring method NIOSH 5043, NIOSH 7903, and NIOSH 1501

Exposure controls

Appropriate engineering controls

Local exhaust required. In compliance with the conditions described in the annex to this safety data sheet.

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 or Natural rubber). Chemical protection suit. Wear safety or chemical resistant shoes or boots. Check with protective equipment manufacturer's data.

Respiratory protection



Not normally required.

Thermal hazards

Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

In compliance with the conditions described in the annex to this safety data sheet.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Colour	Amber / Brown
Odour	Perceptible odour. Toluene-like.
Odour Threshold (ppm)	Not available.

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pH (Value)	<1
Melting Point (°C) / Freezing Point (°C)	0 - 15
Boiling point/boiling range (°C):	182 - 223
Flash Point (°C)	>200 [Open cup]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Explosive limit ranges	Not available.
Vapour Pressure (Pascal)	≈3000
Vapour Density (Air=1)	>1
Density (g/ml)	≈1.3
Solubility (Water)	1155 g/L
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	<0.1 (log P)
Auto Ignition Temperature (°C)	>465
Decomposition Temperature (°C)	Not available.
Kinematic Viscosity (cSt) @ 40°C	≈166
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	Incompatible materials.
Incompatible materials	Oxidizers
Hazardous Decomposition Product(s)	Carbon monoxide, Carbon dioxide, Sulphur oxides, Acrid smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toluene-4-sulphonic acid (CAS No. 104-15-4)

Acute toxicity

-Ingestion	LD50 (rat): 1104mg/kg
-Inhalation	Not available.
-Dermal	LD50 (rabbit): >2000 mg/kg (New Zealand White)
-Irritation	Corrosive (Skin and Eyes)

Repeated dose toxicity (sub-acute to chronic)

NOAEL (rat) : ≥ 500 mg/kg (Wistar)

Mutagenicity

Negative.

Carcinogenicity

NOAEL (rat): ≥ 240 mg/kg (Fischer 344)

Xylenesulphonic acid (CAS No. 25321-41-9)

-See Section: Toluene-4-sulphonic acid (CAS No. 104-15-4)

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

Acute toxicity

-Ingestion	LD50 (rat) : 2140 mg/kg
-Inhalation	LC50 (rat): 0.37-0.42 mg/l
-Dermal	No data.
-Irritation	Non-irritant. (rabbit)
-Sensitisation	Skin sensitisation has been reported in humans.

Repeated dose toxicity (sub-acute to chronic)

No data.

Mutagenicity

No data.

Carcinogenicity

Some evidence of weak carcinogenetic activity. (rat)

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IARC Classification: Group 1.
ACGIH: Group 2A Suspected Human Carcinogen
NTP: Listed (Strong inorganic acid mists containing sulphuric acid)

NOAEL: 20 mg/m³ (rabbit) (New Zealand White)

NOEL: 20 mg/m³ (rabbit) (New Zealand White)

None known.

Developmental impairment

Other information

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Toluene-4-sulphonic acid (CAS No. 104-15-4)

Xylenesulphonic acid (CAS No. 25321-41-9)

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

Persistence and degradability -

Toluene-4-sulphonic acid (CAS No. 104-15-4)

Xylenesulphonic acid (CAS No. 25321-41-9)

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

Bioaccumulative potential -

Toluene-4-sulphonic acid (CAS No. 104-15-4)

Xylenesulphonic acid (CAS No. 25321-41-9)

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

Mobility in soil

Results of PBT and vPvB assessment

Other adverse effects

Acute toxicity

EC50: 70 mg/l (72 hour) (*Desmodesmus subspicatus*)

NOEC: 44.8 mg/l (72 hour) (*Desmodesmus subspicatus*)

LC50: >500 mg/l (96 hour) (*Leuciscusidus melanotus*)

EC50: >103 mg/l (48 hour) (*Daphnia magna*)

See Also Section: Toluene-4-sulphonic acid

EC50: 42.5 mg/l (48 hour) (*Pandalus montagui*)

LC50: 42.0 mg/l (96 hour) (*Gambusia affinis*)

EC50: 29.0 mg/l 24 hour(s) (*Daphnia magna*)

Readily biodegradable.

Readily biodegradable.

Not readily biodegradable.

The substance has low potential for bioaccumulation.

The substance has low potential for bioaccumulation.

The substance has no potential for bioaccumulation.

The product has high mobility in soil.

Not classified as PBT or vPvB.

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

DOT (DEPARTMENT OF TRANSPORTATION)

UN number

2586

Proper Shipping Name

ARYLSULFONIC ACIDS, LIQUID

with not more than 5% free sulphuric acid

Transport hazard class(es)

8

Packing Group

III

Hazard label(s)

8

Environmental hazards

No.

Special precautions for user

None known.

Land transport (ADR/RID)

UN number

2586

Proper Shipping Name

ARYLSULPHONIC ACIDS, LIQUID

with not more than 5% free sulphuric acid

Transport hazard class(es)

8

Packing Group

III

Marine Pollutant

No.

NAXCAT® MOD ACID-35

Special precautions for user None known.

Sea transport (IMDG)

UN number 2586
Proper Shipping Name **ARYLSULPHONIC ACIDS, LIQUID**
with 5% or less free sulphuric acid
Transport hazard class(es) 8
Packing Group III
Environmental hazards No.
Special precautions for user None known.

Air transport (ICAO/IATA)

UN number 2586
Proper Shipping Name **ARYLSULPHONIC ACIDS, LIQUID**
with 5% or less free sulphuric acid
Transport hazard class(es) 8
Packing Group III
Environmental hazards No.
Special precautions for user None known.

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

SECTION 15: REGULATORY INFORMATION

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

TSCA (Toxic Substance Control Act) - Inventory Status: **On active TSCA list**
Canada Domestic Substance List (DSL) - Listed

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

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
None	----	----	----

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.
None	----	----

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

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

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 15

Date of preparation: July 23, 2019

Additional Information: None.

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