NOVEL 23E7 Ethoxylate

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Trade name	NOVEL 23E7 Ethoxylate	
Synonyms	Ethoxylated Alcohol, Laureth-7	
Use	Industrial use, Surfactant	
Company	Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC)	
Address	12120 Wickchester Lane, Houston, TX 77079	
Telephone	CHEMTREC North America Transportation Emergency (24-hr)	(800) 424 9300
	CHEMTREC World Wide	(703) 527-3887
	Other Emergencies (24-hr)	(337) 494 5142
	SDS and Product Information (8:00am-4:30pm CST)	(281) 588 3491
	Health and Safety Information (7:30am-4:00pm CST)	(281) 588 3492
E-mail address	SasolElectronicSDS@us.sasol.com	

SECTION 2 HAZARDS IDENTIFICATION

OSHA/GHS Hazards	Acute toxicity (Oral)	Category 4
	Serious eye damage	Category 1
	Chronic aquatic toxicity	Category 3

LABEL ELEMENTS

Hazard symbols

Signal word Danger

Hazard statements

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P264 Wash hands thoroughly after handling.
P280 Wear eye protection/ face protection.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.

Response P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338 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.
P330 Rinse mouth.

Disposal P501 Dispose of contents/ container to an approved waste disposal plant.

Additional advice This product may contain residual levels of alcohols which, even under normal handling conditions, may smell and irritate the eyes, nose, and throats of some individuals.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Alcohols, C10-16, ethoxylated	68002-97-1	100

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 4 FIRST AID MEASURES

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Ingestion If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

SECTION 5 FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES

Fire/explosion NFPA Class IIIB combustible liquid.

Suitable extinguishing media Water spray, Foam, Dry chemical, Carbon dioxide (CO2)

Protective equipment and precautions for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

Further information Keep containers and surroundings cool with water spray. Do not use a solid water stream as it may scatter and spread fire. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up Evacuate personnel to safe areas. Remove all sources of ignition. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system.

SECTION 7 HANDLING AND STORAGE

Safe handling advice Take precautionary measures against static discharges.

Storage/Transport pressure Ambient

Load/Unload temperature 32 - 49 °C
90 - 120 °F

Storage and handling materials Suitable: Carbon steel coated with baked phenolic. Any moisture may cause rusting of carbon steel. If product is moisture free, uncoated carbon steel tanks.

Further information on storage conditions Mix thoroughly before use. When stored in the liquid form, ethoxylates should be padded with a dry inert gas, such as nitrogen, to prevent oxygen or air from entering the tank. Prolonged storage in the presence of air or oxygen may cause product degradation. Oxidation is not expected when stored under a nitrogen atmosphere. Inert gas blanket and breathing system needed to maintain color stability. Use dry inert gas having at least -40°C (-40°F) dew point.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Ensure adequate ventilation, especially in confined areas. Trace amounts of ethylene oxide may be present in the product and could accumulate in vapor spaces of storage or transport vessels.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Wear as appropriate: Goggles, Face-shield

Skin Full protective clothing, chemical boots, and chemical gloves. High standards of skin care and personal hygiene should be exercised at all times.

Inhalation Use respirator when performing operations involving potential exposure to vapour of the product. Use NIOSH approved respiratory protection.

EXPOSURE GUIDELINES

There are no exposure limits established for this product. Trace amounts of ethylene oxide may be present in this product., The ethylene oxide in this product is not expected to result in significant exposures or present a health hazard.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid;
Colour	Clear to slightly hazy
Form	liquid
Odour	sweet pungent
Odour Threshold	No data available
Flash point	> 163 °C, 325 °F; PM;
Flammability	Upper explosion limit: No data available
	Lower explosion limit: No data available
Boiling point/boiling range	> 260 °C, > 500 °F;
Melting point/range	Pour point: 8.5 °C, 47.3 °F;
Auto-ignition temperature	ca. 320 °C, 608 °F;
Decomposition temperature	No data available;
Flammability (solid, gas)	No data available
Vapour pressure	< 1 mm Hg @ 20 °C, 68 °F;
Vapour density	17.5
Density	0.99 g/cm3 @ 20 °C, 68 °F;
Relative density	No data available

Water solubility	completely miscible
Viscosity	27 cSt @ 40 °C, 104 °F;
pH	6 - 8
Evaporation rate	No data available
Partition coefficient: n-octanol/water	No data available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Stable at normal ambient temperature and pressure.
Chemical stability	No decomposition if stored and applied as directed.
Conditions to avoid	Reacts slowly with air or oxygen. Storage under heated conditions in the presence of air or oxygen increases reaction rate. For example, after storing at 95°F/35°C for 30 days in the presence of air, there is measureable oxidation of the ethoxylate. Lower temperatures will allow for longer storage time and higher temperatures will shorten the storage time if stored under an air or oxygen atmosphere.
Hazardous decomposition products	When storing this product in air or oxygen, decomposition may occur, generating vapors which could be irritating. Ensure adequate ventilation, especially in confined areas. Oxidation is not expected when stored under a nitrogen atmosphere.
Materials to avoid	Can react with strong oxidizers, inorganic acids, and halogens.
Hazardous polymerisation	None.

SECTION 11 TOXICOLOGICAL INFORMATION

Additional Remarks	The product itself has not been tested.
Acute dermal toxicity	LD50 Rabbit: 3,870 - 8,000 mg/kg
Acute inhalation toxicity	LC50 value expected to exceed the saturated vapor concentration in air.
Acute oral toxicity	LD50 Rat: > 1,000 mg/kg
Skin corrosion/irritation	Primary irritation (Rabbit): 24 hours; 4.4 (Max. score is 8.0.)

Serious eye damage/eye irritation	Primary irritation (Rabbit): 50.8 (Max. score is 110.) Irreversible effects on the eye
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	**Genotoxicity in vitro**: No data available **Genotoxicity in vivo**: No data available **Assessment Mutagenicity:** No data available
Reproductive toxicity	**Reproductive toxicity:** No data available **Assessment Reproductive toxicity:** No data available **Teratogenicity:** No data available **Assessment teratogenicity:** No data available
STOT - single exposure	No data available
STOT - repeated exposure	No data available
Aspiration toxicity	No data available
Carcinogenicity	**Assessment carcinogenicity:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity	Harmful to aquatic life with long lasting effects.
Toxicity to fish	LC50 (Poecilia reticulata (guppy)) 96 hours: 6.5 mg/l Test substance: SAFOL 23E7 Ethoxylate
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 48 hours: 2.32 mg/l Test substance: SAFOL 23E7 Ethoxylate

Toxicity to algae	EbC50 (Desmodesmus subspicatus (green algae)) 72 hours: 2.7 mg/l Test substance: SAFOL 23E7 Ethoxylate
Chronic toxicity to fish	EC10 (Pimephales promelas (fathead minnow)): 0.21 mg/l (literature value)
Chronic toxicity to aquatic invertebrates	EC10 (Daphnia magna (Water flea)): 0.36 mg/l; Reproduction Test; OECD Test Guideline 211 (literature value)
Biodegradation	Readily biodegradable. Modified Sturm Test > 60 % Test substance: SAFOL 23E7 Ethoxylate EPA OPPTS 835.3100 Aerobic Aquatic Biodegradation Test > 80 % Test substance: SAFOL 23E7 Ethoxylate
Bioaccumulative potential	Bioaccumulation is unlikely.
Mobility in soil	immobile
Other adverse effects	No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Code	Any unused product or empty containers may be disposed of as non-hazardous in accordance with state and federal requirements. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification. If the resulting material is determined to be hazardous, please dispose in accordance with state and federal (40 CFR 262) hazardous waste regulations.
Disposal methods	Dispose of only in accordance with local, state, and federal regulations.
Empty containers.	Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

SECTION 14 TRANSPORT INFORMATION

DOT UN 3082, Environmentally hazardous substance, liquid, n.o.s., (Alcohol C12-16 poly (1-6) ethoxylate), 9, III, Marine pollutant
Not regulated in non-bulk packaging of 119 gallons or less or a net mass of 882 pounds or less per package.

IATA UN 3082, Environmentally hazardous substance, liquid, n.o.s., (Alcohol C12-16 poly (1-6) ethoxylate), 9, III
Not regulated in non-bulk packaging of 5L or less or a net mass of 5kg or less per package.

IMDG UN 3082, Environmentally hazardous substance, liquid, n.o.s., (Alcohol C12-16 poly (1-6) ethoxylate), 9, III, Marine pollutant
This product is regulated as a Marine Pollutant when shipped by water in all quantities according to the IMDG Code.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks No data available

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory Listing

Components	CAS-No.
Alcohols, C10-16, ethoxylated	68002-97-1

All chemical substances in this product are either on the TSCA Active Inventory, or in compliance with the inventory.

SARA 302 Status

Components	CAS-No.	Weight percent

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Classification

Acute toxicity, Serious eye damage

SARA 313 Chemical

Components	CAS-No.	Weight percent

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components	Reportable Quantity	Weight percent
none		

NOVEL 23E7 Ethoxylate

INTERNATIONAL REGULATIONS

WHMIS Classification

Acute toxicity (Oral)	Category 4
Serious eye damage	Category 1
Chronic aquatic toxicity	Category 3

European Union

This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Classification according to Regulation (EU) 1272/2008.

Acute toxicity (Oral), Category 4
Serious eye damage, Category 1
Chronic aquatic toxicity, Category 3
Classified according to the CESIO recommendation.

Australia. Inventory of Chemical Substances (AICS)	Listed
Japan. Inventory of Existing and New Chemical Substances (ENCS)	Listed
Japan. ISHL - Inventory of Chemical Substances	Listed
Canada. Domestic Substances List (DSL) Inventory	Listed
Canada. Non-Domestic Substance Listing (NDSL)	Not listed
Philippines. Inventory of Chemicals / Chemical Substances (PICCS)	Listed
Korea. Existing Chemicals Inventory (KECI)	Listed
China. Inventory of Existing Chemical Substances (IECSC)	Listed
Mexico. National Inventory of Chemical Substances (INSQ)	Not listed
New Zealand. Inventory of Chemical Substances (NZIoC)	Listed
Switzerland. Inventory of Notified New Substances (CHINV)	Listed
Taiwan. National Existing Chemical Inventory (NECI)	Listed

Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.

NOVEL 23E7 Ethoxylate

STATE REGULATIONS

California Prop. 65

Components	CAS-No.
Ethylene Oxide	75-21-8

Sasol Chemicals (USA) LLC's ethoxylates may contain detectable quantities of ethylene oxide which is a chemical on the California Proposition 65 list. The level is typically below 1.0 ppm, although it may vary. The manufacturing process is controlled to reduce the residual ethylene oxide content.

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

	Health	Flammability	Physical Hazard/ Instability
HMIS®	3	1	0
NFPA	3	1	0

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