

NOVEL® 810-4.5 Ethoxylate

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

Trade name	NOVEL® 810-4.5 Ethoxylate	
Synonyms	Ethoxylated Alcohol	
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
	MSDS 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

GHS Hazards

Acute toxicity (Dermal)	Category 4
Eye irritation	Category 2A

LABEL ELEMENTS

Hazard symbols



Signal word Warning

Hazard statements H312 Harmful in contact with skin.
H319 Causes serious eye irritation.

Precautionary statements

Prevention P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P264 Wash skin thoroughly after handling.

Response P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P362 Take off contaminated clothing and wash before reuse.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.

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P337 + P313 If eye irritation persists: Get medical advice/ attention.

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

<u>Components</u>	<u>CAS-No.</u>	<u>Weight percent</u>
Alcohols, C6-C12, ethoxylated	68439-45-2	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 fire fighting 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

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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 10 - 38 °C
50 - 100 °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 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.

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;

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Colour	Clear to slightly hazy
Form	liquid
Odour	sweet pungent
Odour Threshold	no data available
Flash point	127 °C, 261 °F; PM; ASTM D 9385;
Flammability	Upper explosion limit: approximately 1.8 %(V) Lower explosion limit: approximately 0.3 %(V)
Boiling point/boiling range	approximately 211 °C, 412 °F;
Melting point/range	-17 - -10 °C, 1.4 - 14 °F;
Auto-ignition temperature	326 °C, 619 °F;
Decomposition temperature	no data available
Flammability (solid, gas)	no data available
Vapour pressure	approximately 0.19 mm Hg @ 79 °C, 175 °F; ASTM D 2879-86;
Vapour density	11.8
Density	0.975 g/cm ³ @ 20 °C, 68 °F; ASTM D-4052;
Specific gravity	approximately 0.9528 @22 °C, 72 °F;
Water solubility	completely miscible
Viscosity	29 cSt @ 20 °C, 68 °F;
pH	6 - 8
Evaporation rate	no data available
Partition coefficient: n-octanol/water	no data available
Volatile organic compounds (VOC) content	10.86 %

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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

Acute dermal toxicity	LD50 rabbit: > 1,000 mg/kg
Acute inhalation toxicity	LC50 value expected to exceed the saturated vapor concentration in air.
Acute oral toxicity	LD50 rat: > 2,500 mg/kg
Skin corrosion/irritation	Primary irritation (rabbit): 0 (Max. score is 8.0.)
Eye damage/irritation	Primary irritation (rabbit): 16.7 (Max. score is 110.)
Respiratory or skin sensitization	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

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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

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)) 96 hours: 9.4 mg/l
Test substance: NOVEL® 810-4.5 Ethoxylate

Toxicity to aquatic invertebrates LC50 (Daphnia magna (Water flea)) 48 hours: 14.4 mg/l
Test substance: ALFONIC® 810-4.5 Ethoxylate

Toxicity to algae no data available

Chronic toxicity to fish no data available

Chronic toxicity to aquatic invertebrates no data available

Biodegradation Readily biodegradable.

OECD Test Guideline 301E (28 d): 98 %
Test substance: NOVEL® 810-4.5 Ethoxylate

Bioaccumulation no data available

Mobility in soil no data available

Other adverse effects no data available

SECTION 13 DISPOSAL CONSIDERATIONS

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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 Not regulated.

IATA Not regulated.

IMDG Not regulated.

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

OSHA Hazards (HCS 1994)

Eye irritant

TSCA Inventory Listing

Components

Alcohols, C6-C12, ethoxylated

CAS-No.

68439-45-2

SARA 302 Status

Components

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

CAS-No.

Weight percent

SARA 311/312 Classification

"Immediate (acute) health hazard"

SARA 313 Chemical

Components

CAS-No.

Weight percent

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SARA 313: 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

none

Reportable Quantity

Weight percent

INTERNATIONAL REGULATIONS

WHMIS Classification

Class D, Division 2, Subdivision B: Toxic material.

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.

Eye irritation, Category 2

Acute toxicity (Dermal), Category 4

Classified according to the CESIO recommendation.

Australia. Inventory of Chemical Substances (AICS)	Listed
Japan. Inventory of Existing and New Chemical Substances (ENCS)	Listed
Japan. Industrial Safety & Health Law (ISHL) Inventory	Listed
Canada. Domestic Substances List (DSL) Inventory	Listed
Canadian Non-Domestic Substance Listing (NDSL)	Not listed
European Inventory of Existing Commercial Chemical Substances (EINECS) Listing	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)	Listed
New Zealand. Inventory of Chemicals (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.

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STATE REGULATIONS

California Prop. 65

Components

Ethylene Oxide

CAS-No.

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

	<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard/ Instability</u>
HMIS®	2	1	0
NFPA	2	1	0

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