



NOVEL® 810FD-6 Ethoxylate

Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Trade name	NOVEL® 810FD-6 Ethoxylate		
Synonyms	Ethoxylated Alcohol		
Use	Industrial, Agricultural		
Manufacturer/Supplier	Sasol North America Inc.		
Address	900 Threadneedle, Ste 100, 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 (8:00am-4:00pm CST)		(281) 588-3492
E-mail address	info@us.sasol.com		

SECTION 2 HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Clear to slightly hazy liquid
Odour	sweet pungent
Precautions	WARNING! Causes eye irritation. Avoid contact with eyes. Wash thoroughly after handling.
Environmental precautions	Do not flush into surface water or sanitary sewer system. Harmful to aquatic organisms. Readily biodegradable.

Potential Health Effects

Eyes	Irritating to eyes. May cause corneal inflammation.
Skin	May cause skin irritation and/or dermatitis. High standards of skin care and personal hygiene should be exercised at all times.
Inhalation	Irritating to respiratory system.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Additional advice	This product contains residual levels of alcohols which, even under normal handling conditions, may smell and irritate the eyes, nose, and throats of some individuals.



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(See Section 11 for Toxicological Information)

SECTION 3 COMPOSITION AND 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 FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

- Flash point** 154 °C PM 310 °F
- Autoignition temperature** ca. 330 °C 626 °F
- Flammable limits in air % by volume** **Lower explosion limit:** ca. 0.2 %(V)
Upper explosion limit: ca. > 1.0 %(V)
- Fire and explosion** NFPA Class IIIB combustible liquid.
- Extinguishing media** Water spray or fog, foam, dry chemical, CO₂.
- Fire fighting instructions** 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.



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SECTION 6 ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak 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 Ambient

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 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 Chemical resistant goggles must be worn. Face-shield

Skin Full protective clothing, chemical boots, and chemical gloves.

Inhalation Use NIOSH approved respiratory protection.



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EXPOSURE GUIDELINES

Components Exposure limit(s)

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.

PEL= Permissible Exposure Limits
TLV= Threshold Limit Value
EL= Excursion Limit

TWA= Time Weighted Average (8 hr.)
STEL= Short Term Exposure Limit (15 min.)
WEEL= Workplace Environmental Exposure Level

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

Colour Clear to slightly hazy

Odour sweet pungent

Form liquid

Boiling point/boiling range > 220 °C 392 °F

Vapour pressure ca. < 1 mm Hg @ 21 °C

Vapour density 12 - 15

Solubility(water) soluble

Viscosity 35.727 cSt @ 20 °C
16.513 cSt @ 40 °C

Melting point/range -6 - -0.9 °C 21 - 30 °F

Density 0.9961 g/cm³ @ 20 °C

pH 6 - 8



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SECTION 10 STABILITY AND REACTIVITY

- 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 polymerization** None.

SECTION 11 TOXICOLOGICAL INFORMATION

- Additional Remarks** Information given is based on data obtained from similar substances.
- Eyes** Primary irritation (rabbit): 16.7 - 33.8 (Maximum score is 110.)
- Skin** Primary irritation (rabbit): 0 (Maximum score is 8.0.)
Acute dermal
- Inhalation** LC50 value expected to exceed the saturated vapor concentration in air.
- Ingestion** Acute oral LD50 (rat): > 1,000 mg/kg

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 organisms.
- LC50 (Pimephales promelas (fathead minnow)) 96 hours: 22.5 mg/l
Test Substance: Novel 810-7.5
- LC50 (Daphnia) 48 hours: 23.5 mg/l
Test Substance: Novel 810-7.5



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Biodegradation Readily biodegradable.

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 Not regulated.

IATA Not regulated.

IMDG Not regulated.

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA Hazards
Eye irritant

TSCA Inventory Listing

Components

CAS-No.

Alcohols, C6-C12, ethoxylated

68439-45-2



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SARA 302 Status **Components**

CAS-No.

Weight percent

Contains no chemicals subject to SARA 302 reporting.

SARA 311/312 Classification

"Immediate (acute) health hazard"

SARA 313 Chemical **Components**

CAS-No.

Weight percent

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.

CERCLA Hazardous Substance **Components**

Reportable Quantity

Weight percent

none

INTERNATIONAL REGULATIONS

Workplace Hazardous Materials Information System (WHMIS) Classification

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

European Union

Classification and labelling according to Directive 67/548/EEC.

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.

Xi: Irritant

R41: Risk of serious damage to eyes.

Australian Inventory of Chemical Substances (AICS) Listing

Listed

Japanese Minister of International Trade and Industry (MITI) Inventory Listing

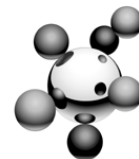
Listed

Canadian Domestic Substance List (DSL) Inventory Listing

Listed

Canadian Non-Domestic Substance Listing (NDSL)

Not listed



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European Inventory of Existing Commercial Chemical Substances (EINECS) Listing

Listed

Philippines Inventory List (PICCS)

Listed

Korean Inventory List

Listed

China Inventory List

Listed

STATE REGULATIONS

California Prop. 65

Components

CAS-No.

Ethylene Oxide

75-21-8

Sasol North America Inc. 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>Reactivity</u>
HMIS	2	1	0
NFPA	1	1	0

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