NOVEL® TDA-96CG Ethoxylate

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

Trade name	NOVEL® TDA-96CG Ethoxylate	
Synonyms	Ethoxylated Alcohol	
Use	Industrial use, Processing aid	
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

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

LABEL ELEMENTS

Hazard symbols

Signal word Danger

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

Precautionary statements

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

Response 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 or doctor/ physician.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
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
Isotridecanol, ethoxylated	9043-30-5	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.

NOVEL® TDA-96CG Ethoxylate

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 15 - 38 C
59 - 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. 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.

NOVEL® TDA-96CG Ethoxylate

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid;
Colour	Clear to slightly hazy
Form	liquid
Odour	sweet
Odour Threshold	no data available
Flash point	> 196 °C, > 385 °F;
Flammability	Upper explosion limit: no data available
	Lower explosion limit: no data available
Boiling point/boiling range	ca. > 253 °C, > 487 °F;
Melting point/range	-14 - 3 °C, 6.8 - 37.4 °F;
Auto-ignition temperature	ca. 355 °C, 671 °F;
Decomposition temperature	no data available
Flammability (solid, gas)	no data available
Vapour pressure	< 1 mm Hg @ 20 °C, 68 °F;
Vapour density	17.4
Density	0.99 g/cm3 @ 20 °C, 68 °F; ASTM D-4052;
Specific gravity	no data available
Water solubility	insoluble
Viscosity	72.1 cSt @ 20 °C, 68 °F;
Viscosity, dynamic	ca. 25 mPa.s @ 50 °C, 122 °F;
pH	6 - 8
Evaporation rate	no data available
Partition coefficient: n-octanol/water	no data available
Volatile organic	5.64 % (EPA Method 24);

compounds (VOC) content

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 Information given is based on data obtained from similar substances.

Acute dermal toxicity no data available

Acute inhalation toxicity LC50 value expected to exceed the saturated vapor concentration in air.

Acute oral toxicity LD50 rat: 300 - 2,000 mg/kg
Test substance: C13-9 Ethoxylate

LD50 rat: > 2,000 mg/kg
Test substance: C13-6 Ethoxylate

Skin corrosion/irritation Primary irritation (rabbit): 4 hours; 4.1 - 4.6 (Max. score is 8.0.)
Test substance: MARLIPAL O13/60 & MARLIPAL O13/90

Eye damage/irritation Primary irritation (rabbit): 35.6 - 42.1 (Max. score is 110.)
Test substance: MARLIPAL O13/60 & MARLIPAL O13/90

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

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 (Danio rerio (zebra fish)) 96 hours: 5.8 mg/l
Test substance: C13-6 Ethoxylate

LC50 (Danio rerio (zebra fish)) 96 hours: 12 mg/l
Test substance: C13-9 Ethoxylate

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 48 hours: 2.5 mg/l
Test substance: C13-6 Ethoxylate

EC50 (Daphnia magna (Water flea)) 48 hours: 4.7 mg/l
Test substance: C13-9 Ethoxylate

Toxicity to algae ErC50 (Desmodesmus subspicatus (green algae)) 72 hours: 8.2 mg/l
Test substance: C13-6 Ethoxylate

ErC50 (Desmodesmus subspicatus (green algae)) 72 hours: 17 mg/l
Test substance: C13-9 Ethoxylate

Chronic toxicity to no data available

fish

Chronic toxicity to aquatic invertebrates NOEC (Daphnia magna (Water flea)) 21 d: 0.37 mg/l
Test substance: C13-6 Ethoxylate
(literature value)

Biodegradation Readily biodegradable.

OECD Test Guideline 301A (28 d): > 70 %
Test substance: Alcohols branched/linear, ethoxylated

OECD Test Guideline 301B (28 d): > 60 %
Test substance: Alcohols branched/linear, ethoxylated

Bioaccumulation no data available

Mobility in soil no data available

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 , Marine pollutant
This product is regulated as a hazardous material according to the Department of Transportation only in bulk quantities (greater than 119 gallons per package).

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 irritation

TSCA Inventory Listing

Components	CAS-No.
Poly(oxy-1,2-ethanediyl), a-isotridecyl-w-hydroxy-	9043-30-5

SARA 302 Status

Components	CAS-No.	Weight percent

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

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.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components	Reportable Quantity	Weight percent
none		

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.

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

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)	Not 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.

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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