

NOVEL 1216CO-7 Ethoxylate

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

| | | | |
|-----------------------|--|--|----------------|
| Trade name | NOVEL 1216CO-7 Ethoxylate | | |
| Synonyms | Ethoxylated Alcohol | | |
| Use | Industrial & Institutional cleaning | | |
| 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 | Serious eye damage | Category 1 |
| | Acute aquatic toxicity | Category 1 |
| | Chronic aquatic toxicity | Category 3 |

LABEL ELEMENTS

Hazard symbols



Signal word Danger

Hazard statements H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention P280 Wear eye protection/ face protection.
P273 Avoid release to the environment.

Response P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

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Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P391 Collect spillage.

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, 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.

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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 - 43 °C
90 - 110 °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

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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 | > 204 °C, 400 °F; PM; |
| Flammability | Upper explosion limit: approximately > 0.9 %(V) Lower explosion limit: approximately 0.1 %(V) |
| Boiling point/boiling range | approximately 174 - 331 °C, 346 - 628 °F; |
| Melting point/range | 12.28 °C, 54.1 °F; |
| Auto-ignition temperature | approximately 365 °C, 689 °F; |
| Decomposition temperature | No data available; |
| Flammability (solid, gas) | No data available |
| Vapour pressure | approximately 4.0 mm Hg @ 38 °C, 100 °F; |
| Vapour density | approximately 16 - 20 |
| Density | 0.98 g/cm ³ @ 22 °C, 72 °F; |
| Relative density | No data available |
| Water solubility | completely miscible |
| Viscosity | 24.84 cSt @ 40 °C, 100 °F; |
| pH | 6 - 9 |

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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 Data and classification obtained from the CESIO recommendation.

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: 2,300 mg/kg
Test substance: C1216-7 Ethoxylate

Skin corrosion/irritation Primary irritation (Rabbit): 4 hours; 0.04 (Max. score is 8.0.)
Not irritating

Serious eye damage/eye irritation Primary irritation (Rabbit): 26.3 (Max. score is 110.)
Causes serious eye damage.

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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 Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 0.1 - 1 mg/l
Test substance: NOVEL 1216-7 Ethoxylate

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 48 hours: > 1 - 10 mg/l
Category approach

Toxicity to algae EC50 (Pseudokirchneriella) 72 hours: > 0.1 - 1 mg/l
Category approach

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| | |
|--|---|
| Chronic toxicity to fish | No data available |
| Chronic toxicity to aquatic invertebrates | EC10 (Daphnia magna (Water flea)) 21 d: > 0.1 - 1 mg/l Category approach |
| Biodegradation | Readily biodegradable. OECD Test Guideline 301E (28 d): > 70 % Test substance: C1216-7.5 Ethoxylate |
| Bioaccumulative potential | 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-C16 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. |
|------------|---|

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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

Alcohols, C10-16, ethoxylated

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

CAS-No.

68002-97-1

SARA 302 Status

Components

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

Should this product meet EPCRA 311/312 Tier reporting criteria of 40 CFR 370, refer to Section 2 of this SDS for appropriate classification and section 3 for components that meet the hazardous classification.

SARA 313 Chemical

Components

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.

CAS-No.

Weight percent

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components

none

Reportable Quantity

Weight percent

INTERNATIONAL REGULATIONS

WHMIS Classification

Serious eye damage Category 1

Acute aquatic toxicity Category 1

Chronic aquatic toxicity Category 3

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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 aquatic toxicity, 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.

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.

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SECTION 16 OTHER INFORMATION

HAZARD RATINGS

| | <u>Health</u> | <u>Flammability</u> | <u>Physical Hazard/ Instability</u> |
|--------------|---------------|---------------------|---|
| HMIS® | 3 | 1 | 0 |
| NFPA | 3 | 1 | 0 |

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