

ALFOL® 1216CO-O Alcohol

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

Trade name	ALFOL® 1216CO-O Alcohol		
Synonyms	Linear Primary Alcohol Mixture		
Use	Detergent, Industrial use, Personal care		
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	Eye irritation	Category 2B
Hazards	Acute aquatic toxicity	Category 1
	Chronic aquatic toxicity	Category 1

LABEL ELEMENTS

Hazard symbols



Signal word Warning

Hazard statements H320 Causes eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention P264 Wash skin thoroughly after handling.
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.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P391 Collect spillage.

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

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS-No.</u>	<u>Weight percent</u>
1-Dodecanol	112-53-8	65 - 75
1-Tetradecanol	112-72-1	21 - 30
1-Hexadecanol	36653-82-4	4 - 8

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. In case of shortness of breath, give oxygen. 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, Alcohol-resistant foam, Dry chemical, Carbon dioxide (CO₂)

Protective equipment and precautions for firefighters Wear self-contained breathing apparatus and protective suit. Keep containers and surroundings cool with water spray.

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.

Spill precautions Material can create slippery conditions.

SECTION 7 HANDLING AND STORAGE

Safe handling advice Ensure all equipment is electrically grounded before beginning transfer operations.

Storage/Transport pressure Ambient

Load/Unload temperature 32 - 54 °C
90 - 130 °F

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Wear as appropriate: Goggles, Face-shield

Skin Wear suitable protective clothing, gloves and eye/face protection.

Inhalation Respiratory protection is normally not required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Use NIOSH approved respiratory protection.

EXPOSURE GUIDELINES

Contains no substances with occupational exposure limit values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid;

Colour colourless

Form liquid

Odour sweet pungent

Odour Threshold No data available

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Flash point	129 - 141 °C, 265 - 285 °F; ASTM D 93;
Flammability	Upper explosion limit: approximately 5.1 %(V) Lower explosion limit: approximately 0.5 %(V)
Boiling point/boiling range	268 - 311 °C, 514 - 592 °F;
Melting point/range	17 - 21 °C, 63 - 70 °F;
Auto-ignition temperature	252 °C, 485 °F;
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	< 0.1 mm Hg @ 21 °C, 70 °F;
Vapour density	6.4 - 8.3
Density	0.840 g/cm ³ @ 22 °C, 72 °F;
Specific gravity	No data available
Water solubility	insoluble
Viscosity	14.5 cSt @ 38 °C, 100 °F;
pH	No data available
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	Keep away from heat and sources of ignition.

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Hazardous decomposition products Combustion products include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.

Materials to avoid Can react with strong oxidizers, inorganic acids, and halogens.

Hazardous polymerisation None.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute dermal toxicity LD50 Rabbit: 8,000 - 12,000 mg/kg
Test substance: 1-Dodecanol

LD50 Rabbit: 8,000 mg/kg
Test substance: 1-Tetradecanol

LD50 Rabbit: > 2,000 mg/kg; FHSA
Test substance: 1-Hexadecanol

Acute inhalation toxicity Rat (1 hours): > 71 mg/l; dust/mist
Test substance: 1-Dodecanol; All rats survived at indicated concentration.

Rat (1 hours): > 1.5 mg/l; dust/mist
Test substance: 1-Tetradecanol

Rat: > 3.2 mg/l; dust/mist; FHSA
Test substance: 1-Hexadecanol; exposed for 8 hours/day for 10 days showed only hyperactivity., All rats survived at indicated concentration.

Acute oral toxicity LD50 Rat: > 20,000 mg/kg
Test substance: 1-Dodecanol

LD50 Rat: > 20,000 mg/kg; OECD Test Guideline 401
Test substance: 1-Tetradecanol; (literature value)

LD50 male and female Rat: > 8,000 mg/kg; FHSA
Test substance: 1-Hexadecanol; Beagle dogs fed up to 3.0% 1-hexadecanol in the diet for 13 weeks exhibited no effect other than elevated liver enzyme (transaminase) levels.

Skin corrosion/irritation Primary irritation (Rabbit): 4.6 (Max. score is 8.0.)
Test substance: 1-Dodecanol

(human skin): OECD Test Guideline 404
Test substance: 1-Tetradecanol
Not irritating, (literature value)

Primary irritation (Rabbit): 24 hours; 1.5 (Max. score is 8.0.)
Test substance: 1-Hexadecanol

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Not irritating

Serious eye damage/eye irritation

Primary irritation (Rabbit): 24 hours; 27 (Max. score is 110.)
 Test substance: 1-Dodecanol
 Corneal opacity was observed., Irritation not completely gone by day 3, the last day of observation.

(Rabbit): OECD Test Guideline 405
 Test substance: 1-Tetradecanol
 Irritating.

Primary irritation (Rabbit): 1 hours, 15.3 (Max. score is 110.);
 OECD Test Guideline 405
 Test substance: 1-Hexadecanol
 Not irritating

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

Rat; . Oral;
 Test substance: 1-Dodecanol; Reduction in white blood cell count.
 Based on available data, the classification criteria are not met.

Aspiration toxicity

No data available

Carcinogenicity

Assessment carcinogenicity:

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Contains no ingredient listed as a carcinogen

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 1 - 10 mg/l; flow-through test
Test substance: 1-Dodecanol
(literature value)

LC50 (Oncorhynchus mykiss (rainbow trout)) 96 hours; semi-static test
Test substance: 1-Tetradecanol
In the range of water solubility not toxic under test conditions., (literature value)

LC50 (Oncorhynchus mykiss (rainbow trout)) 96 hours; semi-static test
Test substance: 1-Hexadecanol
In the range of water solubility not toxic under test conditions., (literature value)

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 48 hours: > 0.1 - 1 mg/l; static test
Test substance: 1-Dodecanol
(literature value)

EC50 (Daphnia magna (Water flea)) 48 hours
Test substance: 1-Tetradecanol
In the range of water solubility not toxic under test conditions., (literature value)

EC50 (Daphnia magna (Water flea)) 48 hours
Test substance: 1-Hexadecanol
In the range of water solubility not toxic under test conditions., (predicted value)

Toxicity to algae ErC50 (Desmodesmus subspicatus (green algae)) 72 hours: > 0.1 - 1 mg/l; OECD Test
Guideline 201
Test substance: 1-Dodecanol

ErL50 (Desmodesmus subspicatus (green algae)) 96 hours; OECD Test Guideline 201
Test substance: 1-Tetradecanol
In the range of water solubility not toxic under test conditions., (literature value)

ErL50 (Desmodesmus subspicatus (green algae)) 96 hours; OECD Test Guideline 201
Test substance: 1-Hexadecanol
In the range of water solubility not toxic under test conditions., (literature value)

Chronic toxicity to fish No data available

Chronic toxicity to aquatic invertebrates NOEC (Daphnia magna (Water flea)) 21 d: > 0.01 - 0.1 mg/l; semi-static test; OECD Test
Guideline 211

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Test substance: 1-Dodecanol
(literature value)

NOEC (Daphnia magna (Water flea)) 21 d: > 0.001 - 0.01 mg/l; semi-static test; OECD
Test Guideline 211

Test substance: 1-Tetradecanol
(literature value)

NOEC (Daphnia magna (Water flea)) 21 d:
Test substance: 1-Hexadecanol
In the range of water solubility not toxic under test conditions., (predicted value)

Biodegradation Readily biodegradable.

OECD Test Guideline 301B (28 d): > 60 %
Test substance: 1-Dodecanol
(literature value)

OECD Test Guideline 301B (28 d): > 60 %
Test substance: Tetradecanol
(literature value)

OECD Test Guideline 301B (28 d): > 60 %
Test substance: 1-Hexadecanol
(literature value)

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.

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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.(1-Dodecanol), 9, III , 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 UN 3082, Environmentally hazardous substance, liquid, n.o.s.(1-Dodecanol), 9, III

IMDG UN 3082, Environmentally hazardous substance, liquid, n.o.s., (1-Dodecanol), 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

	<u>CAS-No.</u>
1-Dodecanol	112-53-8
1-Tetradecanol	112-72-1
1-Hexadecanol	36653-82-4

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

"Immediate (acute) health hazard"

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.

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US. EPA CERCLA Hazardous Substances (40 CFR 302)
Components

none

Reportable Quantity
Weight percent
INTERNATIONAL REGULATIONS
WHMIS Classification

Eye irritation	Category 2B
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

European Union

Classification according to Regulation (EU) 1272/2008.

Eye irritation, Category 2
 Acute aquatic toxicity, Category 1
 Chronic aquatic toxicity, Category 1

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	Listed
New Zealand. Inventory of Chemical Substances	Listed
Switzerland	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
none

CAS-No.

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

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

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