

LIALCHEM® 25/75 Alcohol**SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

| | | |
|-----------------------|--|----------------|
| Trade name | LIALCHEM® 25/75 Alcohol | |
| Synonyms | Isomeric and Linear Alcohol | |
| Use | Industrial use, Raw material for chemical processes | |
| 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 aquatic toxicity | Category 1 |
| Chronic aquatic toxicity | Category 1 |

LABEL ELEMENTS**Hazard symbols****Signal word** Warning**Hazard statements** H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.**Precautionary statements****Prevention** P273 Avoid release to the environment.**Response** P391 Collect spillage.**Disposal** P501 Dispose of contents/ container to an approved waste disposal plant.

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SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Components</u> | <u>CAS-No.</u> | <u>Weight percent</u> |
|-------------------|----------------|-----------------------|
| Alcohols, C10-16 | 67762-41-8 | 50 |
| Alcohols, C14-18 | 67762-30-5 | 50 |

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** Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. In the case of inhalation of aerosol/mist consult a physician if necessary.
- 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.

Further information Keep containers and surroundings cool with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up Evacuate personnel to safe areas. Remove all sources of ignition. Material can create slippery conditions. 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. Do not flush into surface water or sanitary sewer system.

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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 - 43 °C
90 - 110 °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; 1,013 hPa

Colour clear

Form liquid, viscous

Odour characteristic

Odour Threshold no data available

Flash point > 125 °C, > 257 °F;

Flammability Upper explosion limit: no data available

Lower explosion limit: no data available

Boiling point/boiling range 261 - 305 °C, 501 - 581 °F;

Melting point/range approximately 21 °C, 70 °F; pour point

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|---|---|
| Auto-ignition temperature | no data available |
| Decomposition temperature | no data available |
| Flammability (solid, gas) | no data available |
| Vapour pressure | < 0.04 hPa @ 20 °C, 68 °F; |
| Vapour density | 7.1 |
| Density | approximately 0.829 g/cm ³ @ 30 °C, 86 °F; |
| Specific gravity | no data available |
| Water solubility | insoluble |
| Viscosity | no data available |
| pH | no data available |
| Evaporation rate | no data available |
| Partition coefficient: n-octanol/water | log Pow: > 4; |

SECTION 10 STABILITY AND REACTIVITY

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| 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. |
| 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

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| Acute dermal toxicity | LD50 rat: > 2,000 mg/kg; OECD Test Guideline 402(literature value) |
| Acute inhalation toxicity | LC50 value expected to exceed the saturated vapor concentration in air. |

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| Acute oral toxicity | LD50 rat: > 2,000 mg/kg; OECD Test Guideline 401 |
| Skin corrosion/irritation | (rabbit): OECD Test Guideline 404 slight irritation |
| Eye damage/irritation | (rabbit) Not irritating |
| Respiratory or skin sensitization | guinea pig: not sensitizing; Maximisation Test (literature value) |
| Germ cell mutagenicity | Genotoxicity in vitro: In vitro tests did not show mutagenic effects. Genotoxicity in vivo: In vivo tests did not show mutagenic effects Assessment Mutagenicity: |
| Reproductive toxicity | Reproductive toxicity: rat; Oral; 55-day; OECD Test Guideline 422 NOAEL (parents): 2,000 mg/kg NOAEL (F1): 2,000 mg/kg Test substance: 1-Dodecanol (literature value) Assessment Reproductive toxicity: Teratogenicity: rat; Oral; OECD Test Guideline 422 NOAEL (teratogen): 2,000 mg/kg NOAEL (maternal): 2,000 mg/kg Test substance: 1-Dodecanol (literature value) Assessment teratogenicity: Based on available data, the classification criteria are not met. |
| STOT - single exposure | The substance or mixture is not classified as specific target organ toxicant, single exposure. |
| STOT - repeated exposure | rat; Oral; 90-day; NOAEL: 1,127 mg/kg (literature value) The substance or mixture is not classified as specific target organ toxicant, repeated exposure. |
| Aspiration toxicity | not applicable |
| Carcinogenicity | Assessment carcinogenicity: Contains no ingredient listed as a carcinogen |

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SECTION 12 ECOLOGICAL INFORMATION

| | |
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| Aquatic toxicity | Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. |
| Toxicity to fish | LL50 (Oncorhynchus mykiss (rainbow trout)) 96 hours; semi-static test; OECD Test Guideline 203 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; semi-static test; OECD Test Guideline 202 |
| Toxicity to algae | ErL50 (Raphidocelis subcapitata) 72 hours: > 0.01 - 0.1 mg/l; OECD Test Guideline 201 (literature value) |
| Chronic toxicity to fish | no data available |
| Chronic toxicity to aquatic invertebrates | NOEC (Daphnia magna (Water flea)) 21 d: 0.0016 mg/l; semi-static test; OECD Test Guideline 211 Test substance: 1-Tetradecanol NOEC (Daphnia magna (Water flea)) 23 d: 0.0078 mg/l; semi-static test; OECD Test Guideline 211 Test substance: Pentadecanol |
| Biodegradation | Readily biodegradable. OECD Test Guideline 301D (30 d): > 60 % Test substance: Alcohols, C12-15 branched and linear (literature value) |
| Bioaccumulation | Bioaccumulation is unlikely. |
| 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. |

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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.(Fatty alcohol C12-15), 9, III, Marine pollutant
Not regulated in non-bulk packaging of 119 gallons or less per container.
- IATA** UN 3082, Environmentally hazardous substance, liquid, n.o.s.(Fatty alcohol C12-15), 9, III
- IMDG** UN 3082, Environmentally hazardous substance, liquid, n.o.s., (Fatty alcohol C12-15), 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

OSHA Hazards (HCS 1994)

Eye irritant

TSCA Inventory Listing

Components

Alcohols, C10-16

Alcohols, C14-18

CAS-No.

67762-41-8

67762-30-5

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

Non-hazardous substance

SARA 313 Chemical

Components

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.

CAS-No.

Weight percent

US. EPA CERCLA Hazardous Substances (40 CFR 302)

LIALCHEM® 25/75 Alcohol**Components**

none

Reportable Quantity**Weight percent****INTERNATIONAL REGULATIONS****WHMIS Classification**

WHMIS hazardous composition: No ingredients are hazardous according to the CPR criteria.

European Union

Classification according to Regulation (EU) 1272/2008.

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. 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**

none

CAS-No.

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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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