

HF-1000 Solvent

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

Trade name HF-1000 Solvent
Synonyms Paraffin/Olefin/Oxygenate Mixture
Use Mining, Oilfield, Oilfield Drilling
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 Aspiration hazard Category 1

LABEL ELEMENTS

Hazard symbols



Signal word Danger

Hazard statements H304 May be fatal if swallowed and enters airways.

Precautionary statements

Response P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.

Storage P405 Store locked up.

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> |
|---------------------------------|----------------|-----------------------|
| Oxygenate and paraffinic stream | 876065-86-0 | 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. 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. 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 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).

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SECTION 7 HANDLING AND STORAGE

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

Storage/Transport temperature Ambient

Storage/Transport pressure Ambient

Load/Unload temperature Above product melting point.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Air contaminant levels should be controlled below the PEL or TLV for this product (see Exposure Guidelines).

PERSONAL PROTECTIVE EQUIPMENT

Eyes Wear as appropriate:
Goggles. Face-shield.

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

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.

The following Sasol internal standard would apply: 100 ppm (525 mg/m³) for 8-hour TWA (Exposure limits for Petroleum Distillate - Stoddard Solvent)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

Colour yellow

Form oily liquid

Odour Waxy odor

Odour Threshold No data available

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| | |
|---|---|
| Flash point | $\geq 93.3\text{ }^{\circ}\text{C}$, $\geq 200\text{ }^{\circ}\text{F}$; Pensky-Martens closed cup; |
| Flammability | Upper explosion limit: No data available Lower explosion limit: No data available |
| Boiling point/boiling range | 213 - 347 $^{\circ}\text{C}$, 415 - 657 $^{\circ}\text{F}$; ASTM D-86; |
| Melting point/range | $< -20\text{ }^{\circ}\text{C}$, $< -4\text{ }^{\circ}\text{F}$; |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Flammability (solid, gas) | No data available |
| Vapour pressure | 0.0655 mm Hg @ 20 $^{\circ}\text{C}$, 68 $^{\circ}\text{F}$; |
| Vapour density | ca. 7 |
| Density | 0.80 g/cm ³ @ 20 $^{\circ}\text{C}$, 68 $^{\circ}\text{F}$; |
| Relative density | No data available |
| Water solubility | negligible |
| Viscosity | 2.2 cSt @ 40 $^{\circ}\text{C}$, 104 $^{\circ}\text{F}$; |
| 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 Hazardous gases and vapors produced in fire are oxides of carbon.

Materials to avoid Oxidizing agents.

Hazardous polymerisation None.

SECTION 11 TOXICOLOGICAL INFORMATION

Additional Remarks Information given is based on data obtained from this and similar substances.

Acute dermal toxicity LD50: > 2,000 mg/kg

Acute inhalation toxicity No data available

Acute oral toxicity LD50 Rat: > 2,000 mg/kg
Test substance: HF-1000

Skin corrosion/irritation (Rabbit)
Not irritating

Serious eye damage/eye irritation (Rabbit)
Not irritating

Respiratory or skin sensitisation Guinea pig: not sensitizing; Buehler Test

Germ cell mutagenicity **Genotoxicity in vitro:**
Type: Ames test; OECD Test Guideline 471
System: Salmonella typhimurium; with and without metabolic activation
Result: negative
Test substance: HF-1000

Genotoxicity in vivo:
Type: micronucleus assay (chromosome aberration); OECD Test Guideline 474
male and female Rat; intraperitoneal;
Result: negative
Test substance: HF-1000

Assessment Mutagenicity:
Based on available data, the classification criteria are not met.

Reproductive toxicity **Reproductive toxicity:**
Rat; Oral (gavage); OECD Test Guideline 422
Rat; Oral (dietary); OECD Test Guideline 416

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Assessment Reproductive toxicity:

Based on available data, the classification criteria are not met.

Teratogenicity:

Based on available data, the classification criteria are not met.

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 In an oral combined repeat-dose/reproductive and developmental toxicity screening study (OECD 422) in rats, this product showed a potential to cause adverse effects on the developing fetus (fetotoxicity) at 1000 mg/Kg; the highest dose tested. No other adverse developmental effects were observed and the NOEL for fetotoxicity was 500 mg/kg/day. The parental NOAEL for the study is 1000 mg/kg/day.

In an oral (dietary) 2 generation reproductive toxicity study (OECD 416) in rats, this product was well tolerated, and the parental and reproductive NOAELs were considered to be 800 mg/kg/day in F0 males and 1038, 881, and 2293 mg/kg/day in F0 females prior to mating, during gestation, and during lactation, respectively; and 1001 mg/kg/day for F1 males and 1200, 912, and 2256 mg/kg/day in F1 females prior to mating, during gestation, and during lactation, respectively. No adverse developmental effects and fetotoxicity related to treatment with this product were observed.

Aspiration toxicity May be fatal if swallowed and enters airways.

Carcinogenicity **Assessment carcinogenicity:**
Contains no ingredient listed as a carcinogen

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity Controlled release to the environment is not expected to have a significant impact.

Toxicity to fish LL50 (Oncorhynchus mykiss (rainbow trout)) 96 hours: > 100 mg/l; semi-static test; OECD Test Guideline 203

Toxicity to aquatic invertebrates EL50 (Daphnia magna (Water flea)) 48 hours: > 100 mg/l; semi-static test; OECD Test Guideline 202

LC50 (Corophium volutator) 10 d: 2,026 milligram per kilogram; marine sediment test; OSPARCOM Part A Method

Toxicity to algae EL50 (Pseudokirchneriella subcapitata (green algae)) 72 hours: > 100 mg/l; static test; OECD Test Guideline 201

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NOELR (Pseudokirchneriella subcapitata (green algae)) 72 hours: 100 mg/l; static test;
OECD Test Guideline 201

Chronic toxicity to fish NOELR (Oncorhynchus mykiss (rainbow trout)) 28 d: > 1,000 mg/l; QSAR

Chronic toxicity to aquatic invertebrates NOELR (Daphnia magna (Water flea)) 21 d: > 1,000 mg/l; QSAR

Biodegradation Readily biodegradable.OECD Test Guideline 301F (28 d): > 60 %

Biodegradable in sea water
OECD Test Guideline 306 (21 d): > 60 %

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 Not regulated. Product does not sustain combustion (49 CFR 173.120(b)(3)).

IATA not regulated

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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**TSCA Inventory Listing****Components****CAS-No.**

Alcohols, C2-C33 manuf. of, by products from overheads

876065-86-0

This product or a component(s) is the subject of a Section 5(e) Consent Order under TSCA.

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

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

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****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.

US. EPA CERCLA Hazardous Substances (40 CFR 302)**Components****Reportable Quantity****Weight percent**

none

INTERNATIONAL REGULATIONS**WHMIS Classification**

Aspiration hazard

Category 1

European Union

Classification according to Regulation (EU) 1272/2008.

Aspiration hazard, Category 1



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| | |
|---|------------|
| Australia. Inventory of Chemical Substances (AICS) | Not listed |
| Japan. Inventory of Existing and New Chemical Substances (ENCS) | Not listed |
| Japan. ISHL - Inventory of Chemical Substances | Not listed |
| Canada. Domestic Substances List (DSL) Inventory | Listed |
| Canada. Non-Domestic Substance Listing (NDSL) | Not listed |
| Philippines. Inventory of Chemicals / Chemical Substances (PICCS) | Not listed |
| Korea. Existing Chemicals Inventory (KECI) | Not listed |
| China. Inventory of Existing Chemical Substances (IECSC) | Not listed |
| Mexico. National Inventory of Chemical Substances (INSQ) | Not listed |
| New Zealand. Inventory of Chemical Substances (NZIoC) | Not listed |
| Switzerland. Inventory of Notified New Substances (CHINV) | Not listed |
| Taiwan. National Existing Chemical Inventory (NECI) | Not 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.

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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