

Ethanol SOF 663 200 Proof

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

Trade name	Ethanol SOF 663 200 Proof	
Synonyms	SOF 663 Duplicating Fluid / Denatured Alcohol	
Use	Industrial use, Inks and Printing, Paint and Coatings, Raw material for chemical processes, Raw material for industry, Solvent	
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	ProdSafe.Shared@sasol.com	

SECTION 2 HAZARDS IDENTIFICATION

OSHA/GHS Hazards	Flammable liquids	Category 2
	Eye irritation	Category 2A

LABEL ELEMENTS**Hazard symbols****Signal word** Danger

Hazard statements H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements

Prevention P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.

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P280 Wear protective gloves/ eye protection/ face protection.

P264 Wash skin thoroughly after handling.

Response P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.

Storage P403 + P235 Store in a well-ventilated place. Keep cool.

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>
Ethanol	64-17-5	81
2-Propanol	67-63-0	18
Propyl Acetate	109-60-4	1

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 Flash back possible over considerable distance. Dangerous gases or fumes may occur in case of fire.
 NFPA Class 1B flammable liquid.

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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

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. Keep away from heat and sources of ignition.

Storage/Transport pressure Ambient

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

<u>Components</u>	<u>Exposure limit(s)</u>
Ethanol	ACGIH STEL (Short Term Exposure Limit) 1,000 ppm OSHA PEL (Permissible Exposure Limit) 1,000 ppm 1,900 mg/m ³
2-Propanol	OSHA PEL (Permissible Exposure Limit) 400 ppm 980 mg/m ³ ACGIH TLV (8-hour) 200 ppm ACGIH STEL (Short Term Exposure Limit) 400 ppm

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Propyl Acetate OSHA PEL (Permissible Exposure Limit) 200 ppm 840 mg/m³
ACGIH TLV (8-hour) 200 ppm
ACGIH STEL (Short Term Exposure Limit) 250 ppm

PEL= Permissible Exposure Limits
TLV= Threshold Limit Value
EL= Excursion Limit

TWA= Time Weighted Average (8 hr.)
STEL= Short Term Exposure Limit (15 min.)
WEEL= Workplace Environmental Exposure Level

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

Colour clear

Form liquid

Odour alcohol-like

Odour Threshold No data available

Flash point 13 °C, 55.4 °F;

Flammability Upper explosion limit: 20.0 %(V)
Lower explosion limit: 4.0 %(V)

Boiling point/boiling range 74 - 80 °C, 165.2 - 176 °F;

Melting point/range < -88 °C, < -127.3 °F; Propanol

Auto-ignition temperature ca. 400 °C, 752 °F; ASTM D 2155;

Decomposition temperature No data available

Flammability (solid, gas) No data available

Vapour pressure ca. 66.661 hPa @ 20 °C, 68 °F;

Vapour density No data available

Density 0.79 g/cm³

Relative density No data available

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Water solubility	completely soluble
Viscosity	No data available
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.
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: > 2,000 mg/kg; OECD Test Guideline 402 Test substance: Ethanol (literature value) LD50 Rabbit: > 2,000 mg/kg Test substance: Isopropanol (literature value) LD50 Rat: > 2,000 mg/kg Test substance: Propyl Acetate (literature value)
Acute inhalation toxicity	LC50 Mouse (4 hours): > 20 mg/l Test substance: Ethanol (literature value) LC50 Rat (8 hours): > 20 mg/l

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Test substance: Isopropanol
(literature value)

Acute oral toxicity LD50 Rat: 2,000 mg/kg; OECD Test Guideline 401
Test substance: Ethanol
(literature value)

LD50 Rat: > 2,000 mg/kg
Test substance: Isopropanol
(literature value)

LD50 Rat: > 2,000 mg/kg
Test substance: Propyl Acetate
(literature value)

Skin corrosion/irritation (Rabbit): OECD Test Guideline 404
Test substance: Ethanol
Not irritating
(literature value)

(Rabbit)
Test substance: Isopropanol
Not irritating
(literature value)

(Rabbit)
Test substance: Propyl Acetate
slight irritation
(literature value)

Serious eye damage/eye irritation (Rabbit): OECD Test Guideline 405
Test substance: Ethanol
irritating
(literature value)

(Rabbit)
Test substance: Isopropanol
irritating
(literature value)

(Rabbit)
Test substance: Propyl Acetate
irritating
(literature value)

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Respiratory or skin sensitisation Guinea pig: not sensitizing; Maximisation Test
Ethanol
(literature value)

Guinea pig: not sensitizing; Buehler Test
Isopropanol
(literature value)

Germ cell mutagenicity **Genotoxicity in vitro:**
Type: Ames test; OECD Test Guideline 471
System: Salmonella typhimurium; with and without metabolic activation
Result: In vitro tests did not show mutagenic effects
Test substance: Ethanol
(literature value)
Type: Ames test
System: Salmonella typhimurium; with and without metabolic activation
Result: In vitro tests did not show mutagenic effects
Test substance: Isopropanol
(literature value)

Genotoxicity in vivo:
No data available

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

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 The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure Rat; Oral; 90-day; NOAEL: 1,730 mg/kg
LOAEL: 3,160 mg/kg
Test substance: Ethanol
Based on available data, the classification criteria are not met.

Rat; Oral; 90-day; NOAEL: 1,730 mg/kg
LOAEL: 3,160 mg/kg
Test substance: Isopropanol
Based on available data, the classification criteria are not met.

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Aspiration toxicity No data available

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

SECTION 12 ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; flow-through test
Test substance: Ethanol
(literature value)

LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; flow-through test
Test substance: Isopropanol
(literature value)

LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 10 - 100 mg/l; static test
Test substance: Propyl Acetate
(literature value)

Toxicity to aquatic invertebrates EC50 (Ceriodaphnia dubia (water flea)) 48 hours: > 100 mg/l; static test
Test substance: Ethanol
(literature value)

EC50 (Daphnia magna (Water flea)) 24 hours: > 100 mg/l; static test
Test substance: Isopropanol
(literature value)

EC50 (Daphnia magna (Water flea)) 48 hours: > 10 - 100 mg/l; static test
Test substance: Propyl Acetate
(literature value)

Toxicity to algae EC50 (Chlorella vulgaris) 72 hours: > 100 mg/l; static test; OECD Test Guideline 201
Test substance: Ethanol
(literature value)

EC50 (Scenedesmus quadricauda (Green algae)) 7 d: > 100 mg/l; static test
Test substance: Isopropanol
(literature value)

EC50 (Pseudokirchneriella subcapitata (green algae)) 72 hours: > 100 mg/l; static test
Test substance: Propyl Acetate
(literature value)

Chronic toxicity to aquatic invertebrates NOEC (Ceriodaphnia dubia (water flea)) 10 d: 9.6 mg/l; semi-static test
Test substance: Ethanol
(literature value)

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Biodegradation Readily biodegradable.
OECD Test Guideline 301B (28 d): > 60 %
Test substance: Ethanol
(literature value)
BOD5 (5 d): 53 %
aerobic
Test substance: Isopropanol
(literature value)
OECD Test Guideline 301D (20 d): > 60 %
Test substance: Propyl Acetate
(literature value)

Bioaccumulative potential Test substance: Ethanol
No bioaccumulation is to be expected (log Pow <= 4).

Test substance: Isopropanol
No bioaccumulation is to be expected (log Pow <= 4).

Mobility in soil No data available

Other adverse effects No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Code D001 - Ignitability (RQ 100 LB). This product has the RCRA characteristic of ignitability. 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.

Disposal methods Dispose of only in accordance with local, state, and federal regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

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 1170, Ethanol solutions, 3, II
IATA UN 1170, Ethanol solutions, 3, II
IMDG UN 1170, Ethanol solutions, 3, II

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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Remarks No data available

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS**TSCA Inventory Listing****Components**

Ethanol

2-Propanol

Acetic acid, propyl ester

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

CAS-No.

64-17-5

67-63-0

109-60-4

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

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**

2-Propanol

CAS-No.

67-63-0

Weight percent

18 %

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

none

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

Flammable liquids

Category 2

Eye irritation

Category 2A

European Union

Classification according to Regulation (EU) 1272/2008.

Flammable liquids, Category 2

Eye irritation, Category 2

Australia. Inventory of Chemical Substances (AICS)

Listed

Japan. Inventory of Existing and New Chemical Substances (ENCS)

Listed

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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)	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

none

CAS-No.

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

	<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard/ Instability</u>
HMIS®	2	3	0
NFPA	2	3	0

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