

# SAFETY DATA SHEET

### 1. Identification

Product identifier	ALCOHOL, REAGENT (ACS)			
Other means of identification				
Product code	1850			
Synonym(s)	REAGENT ALCOHOL * ETHYL A	ALCOHOL * ETHANOL * DENATURED ALCOHOL		
Recommended use		solvent technical function of substance professional, scientific and technical activities: other professional, scientific and technical activities		
<b>Recommended restrictions</b>	None known.			
Manufacturer/Importer/Supp	lier/Distributor information			
Company name Address	GFS Chemicals, Inc. P.O. Box 245 Powell OH 43065 US			
Telephone	Phone Toll Free Fax	740-881-5501 800-858-9682 740-881-5989		
Website E-mail	www.gfschemicals.com service@gfschemicals.com			
Emergency phone number	Emergency Assistance	Chemtrec 800-424-9300		
2. Hazard(s) identification				
Physical hazards	Flammable liquids	Category 2		

Physical hazards	Flammable líquids	Category 2
Health hazards	Serious eye damage/eye irritation	Category 2A
	Sensitization, respiratory	Category 1
	Germ cell mutagenicity	Category 1B
	Reproductive toxicity	Category 1A
	Specific target organ toxicity, single exposure	Category 1 (central nervous system, kidney, systemic toxicity)
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1 (central nervous system, liver, visual organs)
OSHA hazard(s)	Not classified.	

OSHA hazard(s)

Label elements



Signal word Hazard statement

Highly flammable liquid and vapor. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May cause genetic defects. May damage fertility or the unborn child. Causes damage to organs (central nervous system, kidney, systemic toxicity). Causes damage to organs (central nervous system, liver, visual organs) through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement				
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces No smoking. Use only outdoors or in a well-ventilated area. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.			
Response	Eliminate all ignition sources if safe to do so. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media for extinction.			
Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.			
Disposal	Dispose of contents/container to an approved incineration plant.			
Hazard(s) not otherwise classified (HNOC)	Static accumulating flammable liquid			
Environmental hazards	Hazardous to the aquatic environment, acute Category 2 hazard			
	Hazardous to the aquatic environment, Category 2 long-term hazard			
Supplemental information				
Hazard statement	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.			
<b>Precautionary statement</b>				
Prevention	Keep away from heat/sparks/open flames/hot surfaces No smoking. Ground/bond container and receiving equipment. These alone may be insufficient to remove static electricity. Avoid release to the environment.			
Response	Collect spillage.			
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.			

## 3. Composition/information on ingredients

#### Mixtures

#### **Hazardous components**

Chemical name	CAS number	%
ETHYL ALCOHOL	64-17-5	90
ISOPROPYL ALCOHOL	67-63-0	5
METHYL ALCOHOL	67-56-1	5
Constituents Chemical name	CAS number	%

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Irritation of eyes and mucous membranes. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Proteinuria. May cause allergic respiratory reaction. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed	Symptoms may be delayed. Provide general supportive measures and treat symptomatically.		
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention.		
5. Fire-fighting measures	5		
Suitable extinguishing media	Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Alcohol resistant foam. Powder.		
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.		
Specific hazards arising from the chemical	This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. By heating and fire, harmful vapors/gases may be formed. Material will float and may ignite on surface of water.		
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.		
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage.		
Specific methods	In the event of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk.		
6. Accidental release measures			
Personal precautions, protective equipment and emergency procedures	Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unnecessary personnel		

s	salvage tank or other suitable container for recovery or safe disposal. ELIMINATE all ignition
	sources (no smoking, flares, sparks or flames in immediate area). Keep unnecessary personnel
	away. Local authorities should be advised if significant spillages cannot be contained. Wear
	appropriate protective equipment and clothing during clean-up. Do not touch damaged containers
	or spilled material unless wearing appropriate protective clothing. Keep people away from and
	upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering
	them. Avoid inhalation of vapors or mists. Wear appropriate personal protective equipment.

**Methods and materials for containment and cleaning up** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Should not be released into the environment. This product is miscible in water.

> Large Spills: Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. This material and its container must be disposed of as hazardous waste. Following product recovery, flush area with water. Clean up in accordance with all applicable regulations.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.

**Environmental precautions** Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment. Use appropriate containment to avoid environmental contamination. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

### 7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Vapors may form explosive mixtures with air. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code". DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Use personal protective equipment as required. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in cool place. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers. Keep out of the reach of children. Store in

### 8. Exposure controls/personal protection

#### **Occupational exposure limits**

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

a cool, dry place out of direct sunlight.

Components	Туре	Value	
ETHYL ALCOHOL (CAS 64-17-5)	PEL	1900 mg/m3	
		1000 ppm	
ISOPROPYL ALCOHOL (CAS 57-63-0)	PEL	980 mg/m3	
		400 ppm	
METHYL ALCOHOL (CAS 57-56-1)	PEL	260 mg/m3	
		200 ppm	
US. ACGIH Threshold Limit Value	es		
Components	Туре	Value	
ETHYL ALCOHOL (CAS 64-17-5)	STEL	1000 ppm	
ISOPROPYL ALCOHOL (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
ETHYL ALCOHOL (CAS 54-17-5)	TWA	1900 mg/m3	
		1000 ppm	
ISOPROPYL ALCOHOL (CAS 57-63-0)	STEL	1225 mg/m3	
		500 ppm	
	TWA	980 mg/m3	
		400 ppm	
METHYL ALCOHOL (CAS 57-56-1)	STEL	325 mg/m3	
		250 ppm	
	TWA	260 mg/m3	
		200 ppm	

US. ACGIH. BEIs. Biologic	-	; Determinant	Specimer	Somaling Time
Components ISOPROPYL ALCOHOL (CAS	Value 40 mg/l	Acetone	Specimen Urine	Sampling Time *
67-63-0)	to mg/i	ACELUITE	onne	
-	15 mg/l	Methanol	Urine	*
* - For sampling details, plea	se see the source doc	ument.		
cposure guidelines				
US. ACGIH Threshold Lim	it Values			
METHYL ALCOHOL (CAS US. California Code of Reg	,		e absorbed throi orne Contami	-
METHYL ALCOHOL; MET	HANOL (CAS 67-56-1)	Can be	absorbed thro	ugh the skin.
US. Minnesota Hazardous	Substances List (M	inn. Rules 5206.0	0400).	
METHYL ALCOHOL (CAS			esignation appli	es.
US. NIOSH: Pocket Guide				
METHYL ALCOHOL (CAS US. OSHA Table Z-1-A (29	,	Can be	e absorbed thro	ugh the skin.
METHYL ALCOHOL (CAS	-	Can be	e absorbed throu	uah the skin.
US. Tennessee. OELs. Occ	2			
METHYL ALCOHOL (CAS	67-56-1)	Can be	e absorbed throu	ugh the skin.
ppropriate engineering ontrols	Explosion-proof ger	neral and local exha	ust ventilation.	Provide eyewash station.
ndividual protection measur	es, such as personal	protective equip	oment	
Eye/face protection	Wear chemical gog	gles.		
Skin protection				
Hand protection	Wear protective glo	ves.		
Other	Wear appropriate c	hemical resistant cl	othing. Wear pr	otective gloves.
Respiratory protection		nt ventilation, wear	•	atory equipment. Chemical respirator with
Thermal hazards	Not available.			
eneral hygiene onsiderations	When using, do not			t with eyes. Wash hands before breaks a ordance with good industrial hygiene and
. Physical and chemica	l properties			
ppearance	Clear.			
Physical state	Liquid.			
Form	Liquid.			
Color	Colorless.			
dor	Alcoholic.			
dor threshold	Not available.			
H	Not available.			
lelting point/freezing point	-169.6 °F (-112.005	5°C) estimated		
	172 4 05 (70 00)			

Melting point/freezing point	-169.6 °F (-112.005 °C)	
Initial boiling point and boiling range	172.4 °F (78 °C)	
Flash point	55.40 °F (13.00 °C)	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or ex	cplosive limits	
Flammability limit - lower (%)	3.5 % estimated	
Flammability limit -	24 % estimated	

Flammability limit - upper (%)	24 % estimate
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Material name: ALCOHOL, REAGENT	(ACS)

Vapor pressure	82.645284 hPa estimated
Vapor density	1.6
Relative density	Not available.
Solubility(ies)	Miscible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	677.21 °F (358.45 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.79 g/cm3
Flammability class	Flammable IB estimated
Flash point class	Flammable IB
Percent volatile	100 %
Specific gravity	0.79
VOC (Weight %)	100 % estimated

## 10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Risk of explosion. Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
Incompatible materials	Oxidizing materials. Strong oxidizing agents. Isocyanates. Acids. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.

### 11. Toxicological information

#### Information on likely routes of exposure

Ingestion	Based on available data, the classification criteria are not met.	
Inhalation	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause irritation to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Skin contact	Due to lack of data the classification is not possible.	
Eye contact	Causes serious eye irritation.	
Symptoms related to the physical, chemical and toxicological characteristics	Narcosis. Edema. Liver enlargement. Jaundice. Proteinuria. Behavioral changes. Decrease in motor functions. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.	

### Information on toxicological effects

Acute toxicity

Product	Species	Test Results
ALCOHOL, REAGENT (CAS	Mixture)	
Acute		
Dermal		
LD50	Rabbit	99999 mg/kg
Inhalation		
LC50	Cat	1708.2 mg/l, 4.5 Hours, estimated
		873.6 mg/l, 6 Hours, estimated
	Mouse	43.3333 mg/l, 4 Hours, estimated
	Rat	22222.2227 ppm, 10 Hours, estimated
		1750 mg/l, 6 Hours, estimated
Oral		
LD50	Dog	95940 mg/kg
		6.1111 g/kg, estimated

Product	Species	Test Results
	Guinea pig	6.2222 g/kg, estimated
	Monkey	40 g/kg, estimated
	Mouse	72000 mg/kg
		90 g/kg, estimated
	Rabbit	99999 mg/kg
		74.5569 g/kg, estimated
	Rat	7060 mg/kg
		5628 mg/kg
		6.4185 g/kg, estimated
Other		
LD50	Guinea pig	71120 mg/kg, estimated
	Monkey	60 g/kg, estimated
	Mouse	30180 mg/kg
	Rabbit	36520 mg/kg, estimated
	Rat	1441.0072 mg/kg, estimated
Components	Species	Test Results
ETHYL ALCOHOL (CAS 64-1		
Acute		
Inhalation		
LC50	Mouse	39 mg/l, 4 Hours
	Rat	20000 ppm, 10 Hours
Oral		
LD50	Dog	5.5 g/kg
	Guinea pig	5.6 g/kg
	Mouse	3450 mg/kg
	Rat	7060 mg/kg
		6.2 g/kg
Other		
LD50	Mouse	933 mg/kg
	Rat	1440 mg/kg
ISOPROPYL ALCOHOL (CAS	67-63-0)	
Acute		
Dermal	Dates	F020 7000
LD50	Rabbit	5030 - 7900 mg/kg
- /		12800 mg/kg
Oral	Dec	4707 mg///g
LD50	Dog	4797 mg/kg
	Mouse	3600 mg/kg
		4.5 g/kg
	Rabbit	8000 mg/kg
		6410 mg/kg
		5.03 g/kg
	Rat	4700 - 5800 mg/kg
		5045 mg/kg
		4.7 g/kg
Other		
LD50	Mouse	1509 mg/kg
	Rat	1099 mg/kg

Components	Species	Test Results
METHYL ALCOHOL (CAS 67-56-1)		
Acute		
Dermal		
LD50	Rabbit	15800 mg/kg
Inhalation		
LC50	Cat	85.41 mg/l, 4.5 Hours
		43.68 mg/l, 6 Hours
	Rat	64000 mg/l, 4 Hours
		87.5 mg/l, 6 Hours
Oral		
LD50	Dog	8000 mg/kg
	Monkey	2 g/kg
	Mouse	7300 mg/kg
	Rabbit	14.4 g/kg
	Rat	5628 mg/kg
Other		
LD50	Guinea pig	3556 mg/kg
	Hamster	8555 mg/kg
	Monkey	3 g/kg
	Mouse	4100 mg/kg
	Rabbit	1826 mg/kg
	Rat	2131 mg/kg
* Estimates for product may b	e based on additional component data not shown.	
Skin corrosion/irritation	Due to lack of data the classification is not possible.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory sensitization	May cause allergy or asthma symptoms or breathing	g difficulties if inhaled.
Skin sensitization	Due to lack of data the classification is not possible.	
Germ cell mutagenicity	May cause genetic defects.	
Carcinogenicity	This product is not considered to be a carcinogen by	y IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	Possible reproductive hazard. May damage fertility of	or the unborn child.
Specific target organ toxicity - single exposure	Respiratory tract irritation. Narcotic effects. Causes damage to organs (central nervous system, kidney, systemic toxicity).	
Specific target organ toxicity - repeated exposure	Causes damage to organs (central nervous system, liver, visual organs) through prolonged or repeated exposure.	

**Aspiration hazard** Due to lack of data the classification is not possible.

Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure.

### **12. Ecological information**

Ecotoxicity

**Chronic effects** 

Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected. Contains a substance which causes risk of hazardous effects to the environment.

Product		Species	Test Results
ALCOHOL, REAGENT (	CAS Mixture)		
Crustacea	EC50	Daphnia	5525.1104 mg/l, 48 hours, estimated
Fish	LC50	Fish	9967.9453 mg/l, 96 hours, estimated
Components		Species	Test Results
ETHYL ALCOHOL (CAS	5 64-17-5)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours

Components		Species	Test Results
ISOPROPYL ALCOHOL	. (CAS 67-63-0)		
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours
METHYL ALCOHOL (C	AS 67-56-1)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours

 $\ast$  Estimates for product may be based on additional component data not shown.

Persistence and degradability	None known.	
<b>Bioaccumulative potential</b>	Not available.	
Partition coefficient n-octanol / water (log Kow)		
ISOPROPYL ALCOHOL		0.05
ETHYL ALCOHOL		-0.31
METHYL ALCOHOL		-0.77
Mobility in soil	Not available.	
Other adverse effects	Not available.	

### 13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Not available.
Hazardous waste code	D001: Waste Flammable material with a flash point $<140$ F
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

#### DOT

DO		
	UN number	UN1170
	UN proper shipping name	Ethanol solutions or Ethyl alcohol solutions, MARINE POLLUTANT
	Transport hazard class(es)	3
	Subsidary class(es)	Not available.
	Packing group	II
	Special precautions for	Read safety instructions, SDS and emergency procedures before handling.
	user	
	Labels required	3
	Special provisions	24, IB2, T4, TP1
	Packaging exceptions	4b, 150
	Packaging non bulk	202
	Packaging bulk	242
IA	ГА	
	UN number	UN1170
	UN proper shipping name	Ethanol
	Transport hazard class(es)	3
	Subsidary class(es)	-
	Packaging group	II
	Environmental hazards	No
	Labels required	Not available.
	ERG Code	3L
	Special precautions for	Not available.
	user	
IM	DG	
	UN number	UN1170
Ма	terial name: ALCOHOL, REAGENT (A	CS)
18	50 Version	: 01 Revision date: Issue date: May-07-2014

UN proper shipping name Transport hazard class(es)	ETHANOL, MARINE POLLUTANT 3
Subsidary class(es)	-
Packaging group	II
Environmental hazards	
Marine pollutant	Yes
Labels required	Not available.
EmS	F-E, S-D
Special precautions for user	Not available.
Transport in bulk according to Annex II of MARPOL	No information available.

73/78 and the IBC Code

**General information** 

DOT



**Marine pollutant** 



### 15. Regulatory information

#### **US federal regulations** All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated. US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not on regulatory list.

CERCLA Hazardous Substance List (40 CFR 302.4) METHYL ALCOHOL (CAS 67-56-1)

LISTED

DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** 

Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

CADA 202 Extremely		
SARA 302 Extremely hazardous substance	No	
SARA 311/312 Hazardous chemical	No	
Other federal regulations		
Clean Air Act (CAA) Sectio	n 112 Hazardous Air Pollutants (HAPs) List	
METHYL ALCOHOL (CAS		
	n 112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.		
Safe Drinking Water Act (SDWA)	Not regulated.	
Drug Enforcement Adminis Chemical Code Number	stration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b)	) and 1310.04(f)(2) and
Not listed.		
-	stration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR :	1310.12(c))
Not regulated. DEA Exempt Chemical Mix	turos Codo Numbor	
Not regulated.		
Food and Drug	Not regulated.	
Administration (FDA)	Not regulated.	
US state regulations	WARNING: This product contains a chemical known to the State of or other reproductive harm.	California to cause birth defects
US. Massachusetts RT	K - Substance List	
ETHYL ALCOHOL (CA	AS 64-17-5)	
ISOPROPYL ALCOHO		
METHYL ALCOHOL (		
-	er and Community Right-to-Know Act	
METHYL ALCOHOL ((	CAS 67-56-1) 500 LBS - Hazardous Substances	
ETHYL ALCOHOL (CA ISOPROPYL ALCOHO METHYL ALCOHOL (	AS 64-17-5) DL (CAS 67-63-0)	
US. Rhode Island RTK	-	
ISOPROPYL ALCOHO METHYL ALCOHOL ((		
US. California Proposition		
•	ition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed s	ubstance
METHYL ALCOHOL (		
International Inventories	,	
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes
гншршсэ	(PICCS)	Tes
United States & Puerto Rico *A "Yes" indicates this product co	Toxic Substances Control Act (TSCA) Inventory omplies with the inventory requirements administered by the governing country	y(s)
16. Other information, in	cluding date of preparation or last revision	

### 16. Other information, including date of preparation or last revision

Issue date	May-07-2014
Version #	01

Further information	Not available.
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