

SECTION 1: IDENTIFICATION

1.1. - IDENTIFICATION

Product Identifier	: Ethyl Alcohol, Denatured 200 Proof
Synonyms	: Denatured alcohol, ethanol
SDS Number	: R-058
Product Code	: 513701-PT, 513701-QT, 513701-1, 513701-5, 513701-55
Revision Date	: 4/14/2016
Version	: 1.1
Chemical Formula	: C ₂ H ₆ O
Product Use	: Industrial or laboratory

1.2. - RECOMMENDED USE AND RESTRICTIONS OF USE

Use of the substance/mixture	
Food industry	: component
Chemical raw material	
Cosmetic product	: component
Pharmaceutical product	: component
Detergent	: component

1.3. - SUPPLIER

Superior Surface Solutions
701 Woodswether Rd.
Kansas City, MO 64105
T 816-471-5227

1.4. - EMERGENCY TELEPHONE NUMBER

Emergency number : INFOTRAC: 1-800-535-5053

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. - CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification of the Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Physical, Flammable Liquids, 2
Health, Acute toxicity, 4 Oral
Health, Skin corrosion/irritation, 2
Health, Serious Eye Damage/Eye Irritation, 2 B
Health, Specific target organ toxicity - Single exposure, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H225 - Highly flammable liquid and vapor
H302 - Harmful if swallowed
H315 - Causes skin irritation
H320 - Causes eye irritation
H370 - Causes damage to organs
GHS Hazard Statements:

GHS Precautionary Statements:

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/light/equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. - CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P307+311 - IF exposed: Call a POISON CENTER or doctor/physician.
P370+378 - In case of fire: Use _ for extinction.
P403+235 - Store in a well ventilated place. Keep cool.
P501 - Dispose of contents/container to

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. - SUBSTANCES

Ingredients

CAS#	%	Chemical Name
64-17-5	100%	Ethanol

SECTION 4: FIRST-AID MEASURES

4.1. - DESCRIPTION OF FIRST AID MEASURES

Inhalation : If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin Contact : Promptly flush skin with water until all chemical is removed.
Remove contaminated clothing immediately.
If irritation persists get medical attention.

Eye Contact : Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. If irritation persists, seek medical attention.

Ingestion : If victim is conscious and alert, give 2-4 cupfuls of water or milk. Never give anything by mouth to an unconscious person. Get medical attention. If victim is conscious and alert, give 2-4 cupfuls of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately. Induce vomiting by giving one teaspoon of Syrup of Ipecac.

Note to Physician : Symptoms will vary with alcohol level of the blood. Mild alcohol intoxication occurs at blood levels between 0.05-0.15%. Approximately 25% of individuals show signs of intoxication at these levels. Above 0.15% the person is definitely under the influence of ethanol; 50-95% of individuals are clinically intoxicated at these levels. Severe poisoning occurs when the blood is ethanol level is 0.3- 0.5%. Above 0.5% the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs and administering excessive amounts of fluids.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. - EXTINGUISHING MEDIA

Suitable Extinguishing Media : Flammable

Flash Point : 14°C (57°F)

Flash Point Method : Closed cup

Autoignition Temp : 363°C (685°F) - (for 100% ethyl alcohol)

Extinguishing Media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use water spray to cool unopened containers.

Protective equipment and Precautions for Firefighters : Wear self-contained breathing apparatus and other protective clothing.

Specific Hazards Arising from the Chemical : May produce a floating fire hazard.
I Static ignition hazard can result from handling and use.
I Vapors may travel to source of ignition and flash back.
I Vapors may settle in low or confined spaces.
Alcohols burn with a pale blue flame which may be extremely hard to see under normal lighting conditions. Personnel may only be able to feel the heat of the fire without seeing flames. Extreme caution must be exercised in fighting alcohol fires. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. - PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1 Personal Precautions

- : Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.1.2 Environment Precautions

- : Stop leak and contain if safe to do so. Prevent material from entering drains.

6.1.3. Containment and Clean Up

- : Highly flammable liquid. Eliminate all sources of ignition. All equipment used when handling this product must be grounded. A vapor suppressing foam may be used to reduce vapors. Do not touch or walk through spilled material. 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 local / national regulations. Use non sparking tools to collect absorbed material.

SECTION 7: HANDLING AND STORAGE

7.1. - PRECAUTIONS FOR SAFE HANDLING

7.1.1 Handling Precautions

- : Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition. NO smoking. Take measures to prevent the buildup of electrostatic charge. Metal containers should be grounded.

7.1.2 Conditions for safe storage,

- : Keep away from heat, sparks, and flames. Store in cool/dry area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. - CONTROL PARAMETERS

8.1.1 Engineering Controls:

- : Use explosion -proof ventilation equipment to stay below exposure limits. Provide adequate ventilation. Provide eyewash station and safety shower.

8.1.2. Personal Protective Equipment

- : Personal protective equipment
- : Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- : Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- : Full contact: Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min
Material tested:Butoject (KCL 897 / Aldrich Z677647, Size M)
Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.2 mm Break through time: 38 min
Material tested:Dermatril P (KCL 743 / Aldrich Z677388, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
- : Body Protection: impervious clothing, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- : Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- : Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

8.1.3. Components with workplace control parameter

- : TWA 1,000 ppm USA. ACGIH Threshold Limit Values (TLV)
- : Upper Respiratory Tract irritation
Confirmed animal carcinogen with unknown relevance to humans
- : TWA 1,000 ppm USA. Occupational Exposure Limits
1,900 mg/m3 (OSHA) - Table Z-1 Limits for Air
- : Contaminants -The value in mg/m3 is approximate.
- : TWA 1,000 ppm USA. NIOSH Recommended
1,900 mg/m3 Exposure Limits

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. - INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless	Odor	Characteristic
Physical State	Liquid	Solubility:	Completely soluble in water.
Odor Threshold	No data available	Freezing/Melting Pt.:	-114°C (-173°F) (for 100% ethyl alcohol)
Spec Grav./Density	0.79	Flash Point:	14°C (57°F) - closed cup
Viscosity	No data available	Vapor Density:	1.6 (air =1)
Boiling Point	78°C (173°F) (for 100% ethyl alcohol)	Auto-Ignition Temp:	363°C (685.4°F) - (Ethyl Alcohol)
Flammability	Flammable	UFL/LFL:	3.3%(V) / 19%(V)
Partition Coefficient	No data available		
Vapor Pressure	6.4 kPa (48 mmHg) at 20 °C (68 °F) (for 100% ethanol)		
pH	No data available		
Evap Rate	3.2 (buyl acetate = 1)		
Decomp Rate	No data available		

SECTION 10: STABILITY AND REACTIVITY

10.1. - CHEMICAL STABILITY

Stable under normal conditions.

10.2. - CONDITIONS TO AVOID

Excessive heat or cold.

10.3. - MATERIALS TO AVOID

Strong Oxidizing Agents. Strong Acids;

10.5. - HAZARDOUS DECOMPOSITION

Carbon oxides are expected to be, under fire conditions, the primary hazardous decomposition products.

10.6. - HAZARDOUS POLYMERIZATION

No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

10.1. - INFORMATION ON TOXICOLOGICAL EFFECTS

Ethanol (64-17-5) [100%]

Information on toxicological effects

Acute Toxicity:

LD50 Oral - rat - 7,060 mg/kg Remarks: Lungs, Thorax, or Respiration:Other changes.

LC50 Inhalation - rat - 10 h - 20000 ppm

Dermal: no data available

Skin corrosion/irritation: Skin - rabbit Result: No skin irritation - 24 h (OECD Test Guideline 404)

Serious eye damage/eye irritation: Eyes - rabbit Result: Mild eye irritation - 24 h (OECD Test Guideline 405)

Respiratory or skin sensitisation: no data available

Germ Cell Mutagenicity: no data available

Carcinogenicity:

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Carcinogenicity - mouse - Oral:

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver:Tumors. Blood:Lymphomas including Hodgkins disease.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Reproductive toxicity - Human - female - Oral:

Effects on Newborn: Apgar score (human only). Effects on Newborn: Other neonatal measures or effects. Effects on Newborn: Drug dependence.

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: KQ6300000

Central nervous system depression, narcosis, Damage to the heart., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

SECTION 12: ECOLOGICAL INFORMATION

12.1. - TOXICITY

Ethanol (64-17-5) [100%]
 Information on ecological effects
 Toxicity: no data available
 Persistence and degradability: no data available
 Bioaccumulative potential: no data available
 Mobility in soil: no data available
 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
 Other adverse effects: no data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. - DISPOSAL METHODS

Dispose of in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT)

UN1170, Ethanol or Ethyl alcohol or Ethanol solutions or Ethyl alcohol solutions, 3, PGII

SECTION 15: REGULATORY INFORMATION

15.1. - US FEDERAL REGULATIONS

Component (CAS#) [%] - CODES

Ethanol (64-17-5) [100%] MASS, OSHAWAC, PA, TSCA, TXAIR

REGULATORY CODE DESCRIPTIONS

MASS = MA Massachusetts hazardous Substances List
 OSHAACWAC = OSHA Workplace Air Contaminants
 PA = PA Right-To-Know List of Hazardous Substances
 TSCA = Toxi Substances Control Act
 TXAIR = TX Air Contaminants with Health Effects Screening Level

SECTION 16: OTHER INFORMATION

NFPA: Health = 2, Fire = 3, Reactivity = 0, Specific Hazard = n/a
 HMIS III: Health = 2, Fire = 3, Physical Hazard = 0



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