

Issue Date 19-May-2016

Revision Date 03-August-2017

Version 1

1. IDENTIFICATION

Product identifier

Product Name Denatured Alcohol

Other means of identification

Product Code FG00208

Synonyms

Recommended use of the chemical and restrictions on use

Recommended Use Industrial Use

Uses advised against No Data

Details of the supplier of the safety data sheet

Manufacturer Address

Surface Koatings, Inc. 134 Davis Street Portland, TN 37148 Telephone (615) 323-9461

Emergency telephone number

Company Phone Number (615) 323-9461

24 Hour Emergency Phone Number 800-535-5053 (United States & Canada), International Call: 1-352-323-3500

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable Liquids	Category 2
Acute Toxicity, Oral	Category 3
Acute Toxicity, Dermal	Category 3
Acute Toxicity, Inhalation	Category 3
Specific target organ toxicity, single exposure	Category 1

Label elements

Emergency Overview

Danger!

Hazard statements

Highly flammable liquid and vapor

Toxic if swallowed

Toxic in contact with skin

Toxic if inhaled

Causes damage to organs



Appearance Transparent Liquid	Physical state liquid	Odor Low
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Precautionary Statements - Prevention

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/light/equipment, etc.
- Use only non-sparking tools
- Take precautionary measures to prevent static discharge
- Do not breathe dust/fumes/gas/mist/vapors/spray
- Wash thoroughly after handling
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated areas
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

- IF SWALLOWED Immediately call a POISON CENTER or doctor/physician
- IF ON SKIN Wash with plenty of water
- IF ON SKIN Remove/take off immediately all contaminated clothing. Rinse skin with water
- IF INHALED Remove victim to fresh air and keep comfortable for breathing
- If exposed or concerned, call POISON CENTER/doctor/physician

Precautionary Statements - Storage

Store in well-ventilated place. Keep Cool. Keep container tightly closed. Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/regional/national regulations.

Hazards not otherwise classified (HNOC)

Repeated exposure may cause skin dryness or cracking

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
Hexone	108-10-1	< 1%	*
Methanol	67-56-1	15-20%	*
Ethyl Alcohol	64-17-5	75-80%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Move out of the dangerous area. Consult a physician. Provide this Safety Data Sheet to the doctor in attendance.
Eye contact	IF IN EYES: Flush with water for 15 minutes. Seek immediate medical attention.
Skin contact	IF ON SKIN (or hair): Wash exposed areas with water and mild soap. Remove contaminated clothing immediately and launder before use. If irritations persist, seek immediate medical attention.
Inhalation	IF INHALED: Remove victim to fresh air. Administer oxygen or artificial respiration if breathing is affected or stopped. Seek immediate medical attention.
Ingestion	IF SWALLOWED: If vomiting occurs, keep head below hips to prevent aspiration into lungs. Induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms Eye, Skin, and Respiratory Irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. For additional information, see Safety Data Sheet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water fog, foam, CO2, dry chemical.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Special Fire Fighting Procedures

Use self-contained breathing apparatus and full bunker gear in fire areas. Evacuate all unprotected personnel from area. Keep containers cool with water fog to minimize swelling taking care not to spread flames with water used for cooling.

Unusual Fire Fighting Hazards

Product is flammable and may be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights or mechanical/electrical equipment). Vapors are heavier than air and may accumulate in low areas. Vapors may travel considerable distances to a source of ignition where they can ignite, flashback or explode. May create vapor/air explosion hazard indoors, outdoors, or in sewers. If container is not properly cooled, it can explode in the heat of a fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Keep all sources of ignition and hot metal surfaces away from spill or release. Evacuate all unprotected personnel from the area.

Environmental precautions

Environmental precautions Prevent liquid from entering drains, sewers or waterways. Contain spill if it can be done with minimal risk. Notify proper authorities.

Methods and material for containment and cleaning up

Methods for containment Use foam on spills to minimize vapors.

Methods for cleaning up Using only non-sparking tools and explosion proof equipment, collect spill on absorbent

material and put into approved container.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take measures to prevent the buildup of electrostatic charge. Use non-sparking tools. Wash hands and skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions

- NFPA Class I Storage.
- Vent container carefully before opening.
- Bond and ground all equipment when transferring from one vessel to another. The use of explosion-proof equipment is recommended.
- "Empty" containers retain residue and/or vapor and may be dangerous. Do not cut, weld, braze solder, drill, grind, or expose such containers to heat, flames, sparks, or other ignition sources.
- Keep containers tightly closed when not in use.
- Avoid prolonged breathing of mist or vapor. Wash thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Component Name	CAS#	OSHA PEL	ACGIH TLV
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm
Hexone	108-10-1	50 ppm	20 ppm
Methanol	67-56-1	200 ppm (Skin)	200 ppm (Skin)

Appropriate engineering controls

Engineering Controls

Adequate local or mechanical to reduce vapor or mist to below the PEL or TLV.

Monitoring

Follow accepted work practices for handling a flammable material. Do not eat, drink, or smoke in areas where this chemical is used or stored. Have eye wash stations and safety showers readily available.

Individual protection measures, such as personal protective equipment

Eye/face protection

Googles or approved OSHA device with side shields; do not wear contact lenses when handling this product.

Skin and body protection

Impervious solvent resistant gloves.
Impervious apron and work boots recommended where splashing may occur.

Respiratory protection

Use the proper respirator in areas where the chemical exposure is unknown or above the OSHA PEL or ACGIH TLV.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before and after breaks and at the end of the work day.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	Alcohol odor
Appearance	Clear, colorless, liquid	Odor threshold	No data available
Color	Clear		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not Available	
Melting point / freezing point	Not Applicable	
Boiling point / boiling range	148 - 241 °F	
Flash point	55 - 59 °F	CC (closed cup)
Evaporation rate	2.32 (Butyl Acetate=1)	
Flammability (solid, gas)	Not Relevant	
Flammability Limit in Air		
Upper flammability limit:	21.8%	
Lower flammability limit:	3.65%	
Vapor pressure	51.7 mmHg @ 20 °C	
Vapor density	1.53 (Air=1)	
Specific Gravity	.79 (6.63#/Gal)	
Water solubility	Not Available	
Solubility in other solvents	Not Available	
Partition coefficient	Not Available	
Autoignition temperature	Not Available	
Decomposition temperature	Not Available	
Kinematic viscosity	Not Available	
Dynamic viscosity	Not Available	
Explosive properties	Not Available	
Oxidizing properties	Not Available	

Other Information

Softening point	Not Relevant
Molecular weight	Not Available
VOC Content (%)	100% (6.75#/Gal)
Density	Not Available
Bulk density	Not Available

10. STABILITY AND REACTIVITY

Stability	Stable
Conditions to Avoid	Extreme heat and ignition sources
Hazardous Decomposition/Byproducts	CO, CO2, and various hydrocarbons under combustion conditions
Hazardous Polymerization	Will not occur
Polymerization Contions to Avoid	None
Incompatibilities	Strong Oxidizers

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	May cause irritation to the upper respiratory tract and CNS depression. Low to moderate
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degree of toxicity by inhalation.

- Eye contact** Causes eye irritation including stinging, watering and redness which may result in corneal injury.
- Skin contact** Contact may cause mild skin irritation including redness, burning, and drying/cracking of the skin.
- Ingestion** Aspiration hazard. Can enter the lungs during swallowing or vomiting and cause chemical pneumonia and edema.
Moderate to high degree of toxicity by ingestion. May be harmful or fatal if swallowed. May produce CNS depression and kidney damage which may be fatal.
- Acute Toxicity Value** See Health Hazards below.
- Chronic (Long Term) Effects** See Health Hazards below.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl Alcohol	Rat – 7,060 mg/kg	-	Rat – 10 h – 20000 ppm
Hexone	Rat – 2,080 mg/kg	Rabbit - > 16,000 mg/kg	Rat – 4 h – 8.2 – 16.4 mg/m3
Methanol	Human – 143 mg/kg Rat – 1,187 – 2,769 mg/kg	-	Rat – 4 h – 128.2 mg/l Rat – 6 h – 87.6 mg/l

Information on toxicological effects

Symptoms May cause drowsiness or dizziness if inhaled. May cause respiratory irritation. Causes serious eye irritation. Causes skin irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Reproductive Effects** Not Available
- Teratogenicity** Not Available
- Mutagenicity** Not Available
- Embryotoxicity** Not Available
- Sensitization to Product** Not Available
- Synergistic Products** Not Available
- Carcinogenicity** Not Listed as Carcinogen

12. ECOLOGICAL INFORMATION

- Ecotoxicity** Information not available.
- Mobility** Information not available.
- Degradability** Information not available.
- BioAccumulation** Information not available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

- Disposal of wastes** Under RCRA 40 CFR 261 this material is a hazardous waste. Dispose of in accordance with all federal, state, and local regulations. If uncertain of local requirements, contact the proper environmental authorities for information on waste disposal in your area. Contact a licensed professional waste disposal service to dispose of this material.
- Contaminated packaging** Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

<u>DOT</u>	UN1987, Alcohols, N.O.S. (Contains Ehtyl Alcohol, D-4), 3, II
<u>IATA</u>	UN1987, Alcohols, N.O.S. (Contains Ehtyl Alcohol, D-4), 3, II
<u>IMDG</u>	UN1987, Alcohols, N.O.S. (Contains Ehtyl Alcohol, D-4), 3, II

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	Yes
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

US State Regulations

California Proposition 65

This product contains chemicals known to the state of California to cause birth defects or other reproductive harm

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 3	Flammability 3	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 3	Flammability 3	Physical hazards 0	Personal protection -

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Revision Note
 No data available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet