SAFETY DATA SHEET SPECTIUM®



Revision date 25-January-2022

Revision Number 1

1. Identification

Product identifier

Product Name ETHYL ALCOHOL DENATURED, 190 PROOF, SDA 40B

Other means of identification

Product Code(s) E4200

UN/ID no UN1987

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Spectrum Chemical Mfg. Corp. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Causes serious eye irritation

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure May cause respiratory irritation. May cause drowsiness or dizziness Highly flammable liquid and vapor



Appearance clear Physical state Liquid Odor Alcohol

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

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 / lighting/ .? / equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

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

In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up.

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No	Weight-%	Trade secret
Ethyl Alcohol 200 Proof	64-17-5	80 - 100	*
Water	7732-18-5	5 - <10	*
tert-Butyl Alcohol	75-65-0	0.1 - 1	*
Denatonium Benzoate, Anhydrous	3734-33-6	<0.1	*

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

4. First-aid measures

Eye contact

Description of first aid measures

Show this safety data sheet to the doctor in attendance. **General advice**

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention.

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Ingestion

Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

> involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid

contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Burning sensation.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Note to physicians

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). water spray. Alcohol resistant foam. Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Explosion data

Sensitivity to mechanical impact none.

Sensitivity to static discharge yes.

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Use personal protective equipment as required. See **Personal precautions**

section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the

product must be grounded. Do not touch or walk through spilled material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor

suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other

non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal

Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl Alcohol 200 Proof 64-17-5	No data available	1000 ppm TWA 1900 mg/m³ TWA	3300 ppm IDLH
tert-Butyl Alcohol 75-65-0	No data available	100 ppm TWA 300 mg/m³ TWA	-

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Do not eat, drink or smoke when using this product. Contaminated work clothing should not **General hygiene considerations**

be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

None known

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid **Appearance** clear Color Colorless Odor Alcohol

Odor threshold No information available

Property Values Remarks • Method

no data available None known Hq -115 °C / -175 °F None known Melting point / freezing point 79 °C / 174.2 °F Boiling point / boiling range None known Flash point 13 °C / 55.4 °F CC (closed cup) **Evaporation rate** no data available None known Flammability (solid, gas) None known no data available Flammability Limit in Air None known

Upper flammability or explosive 19%

limits

Lower flammability or explosive 3%

limits

None known Vapor pressure 5.8 Vapor density no data available None known None known Relative density 8.0 None known Water solubility Miscible in water Solubility(ies) Miscible with many organic solvents None known **Partition coefficient** No data available None known

Autoignition temperature no data available

Decomposition temperature

None known Kinematic viscosity no data available None known **Dynamic viscosity** No data available None known

Other information

Explosive properties No information available No information available **Oxidizing properties** Softening point No information available No information available Molecular weight

94+%.? **VOC Content (%)**

Liquid Density No information available No information available **Bulk density**

10. Stability and reactivity

Reactivity No information available.

Stable under normal conditions. **Chemical stability**

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks. **Incompatible materials**None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation.

(based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation.

Prolonged contact may cause redness and irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl Alcohol 200 Proof 64-17-5	= 7060 mg/kg (Rat)	-	124.7 mg/L (Rat) 4 h
Water 7732-18-5	90 mL/kg (Rat)	-	-
tert-Butyl Alcohol 75-65-0	= 2200 mg/kg (Rat)	> 2 g/kg(Rabbit)	> 10000 ppm (Rat) 4 h

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

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization
Germ cell mutagenicity
Carcinogenicity

No information available.
No information available.
No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethyl Alcohol 200 Proof	-	Monograph 100E [2012]	-	-
64-17-5		in alcoholic beverages		
		Monograph 96 [2010] in		
		alcoholic beverages		

Legend

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available

for ingredients. May damage fertility or the unborn child.

STOT - single exposure No information available.

STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure.

Target organ effects liver, respiratory system, Eyes, Skin, central nervous system, blood, Reproductive System.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Ethyl Alcohol 200 Proof	-	LC50: 12.0 - 16.0mL/L	-	LC50: 9268 - 14221mg/L
64-17-5		(96h, Oncorhynchus		(48h, Daphnia magna)
		mykiss) LC50: 13400 -		EC50: =10800mg/L (24h,
		15100mg/L (96h,		Daphnia magna) EC50:
		Pimephales promelas)		=2mg/L (48h, Daphnia
		LC50: >100mg/L (96h,		magna)
		Pimephales promelas)		-
tert-Butyl Alcohol	EC50: >1000mg/L (72h,	LC50: 6130 - 6700mg/L	-	EC50: 4607 - 6577mg/L
75-65-0	Desmodesmus	(96h, Pimephales		(48h, Daphnia magna)
	subspicatus)	promelas)		EC50: =933mg/L (48h,
		·		Daphnia magna)

Persistence and degradability **Bioaccumulation**

No information available. Inherently biodegradable.

Component Information

Chemical name	Partition coefficient
Ethyl Alcohol 200 Proof 64-17-5	-0.32
tert-Butyl Alcohol 75-65-0	0.35

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

14. Transport information

DOT

UN/ID no UN1987 **Proper Shipping Name:** Alcohols, n.o.s.

Hazard class

Packing group: Special Provisions 172, IB2, T7, TP1, TP8, TP28 **Marine Pollutant** Severe Marine Pollutant **Description:** UN1987, Alcohols, n.o.s., 3, II 127

Emergency Response Guide

Number

TDG

UN-No: UN1987 Proper Shipping Name: Alcohols, n.o.s.

Hazard class 3
Packing Group: II

Description: UN1987, Alcohols, n.o.s. (Ethyl Alcohol 200 Proof), 3, II

MEX

UN-No UN1987 Proper Shipping Name Alcohols, n.o.s.

Hazard class 3
Special Provisions 274
Packing Group ||

Description UN1987, Alcohols, n.o.s. (Ethyl Alcohol 200 Proof), 3, II

ICAO (air)

UN-No: UN1987 Proper Shipping Name: UN1987 Alcohols, n.o.s.

Hazard class 3 Packing Group: II

Special Provisions A180, A3

Description: UN1987, Alcohols, n.o.s. (Ethyl Alcohol 200 Proof), 3, II

<u>IATA</u>

UN number UN1987 Proper Shipping Name: UN198, n.o.s.

Transport hazard class(es) 3
Packing group |

Description: UN1987, Alcohols, n.o.s. (Ethyl Alcohol 200 Proof), 3, II

IMDG

UN number UN1987 Proper shipping name Alcohols, n.o.s.

Transport hazard class(es)

Packing group

EmS-No

Special Provisions

Amarine pollutant

Special Provisions

Amarine pollutant

Special Provisions

Special Provisions

Amarine pollutant

Special Provisions

Description UN1987, Alcohols, n.o.s. (Ethyl Alcohol 200 Proof), 3, II, (13°C c.c.)

RID

UN number UN1987
Proper Shipping Name: Alcohols, n.o.s.

Transport hazard class(es) 3
Packing group || Classification code || F1

Special Provisions 274, 601, 640C

Description: UN1987, Alcohols, n.o.s. (Ethyl Alcohol 200 Proof), 3, II

Labels 3

ADR

UN number 1987

Proper Shipping Name: Alcohols, n.o.s.

Transport hazard class(es) 3
Packing group II
Classification code F1
Tunnel restriction code (D/E)

Special Provisions 274, 601, 640C

Description: 1987, Alcohols, n.o.s. (Ethyl Alcohol 200 Proof), 3, II, (D/E)

Labels 3

ADN

UN/ID No UN1987 Proper shipping name Alcohols, n.o.s.

Transport hazard class(es) 3

Packing Group II Classification code F1

Special Provisions 640C, 601, 274

Description UN1987, Alcohols, n.o.s. (Ethyl Alcohol 200 Proof), 3, II

Hazard label(s) 3
Limited quantity (LQ) 1 L
ventilation VE01
Equipment Requirements PP, EX, A

15. Regulatory information

International Inventories

TSCA Not listed

Note *Contact supplier for details. One or more substances in this product are either not listed

on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise

exempted from inventory listing requirements

DSL/NDSL Does not Comply EINECS/ELINCS Does not Comply

ENCS This product complies with ENCS:

IECSC This product does not comply with china:

KECLDoes not ComplyPICCSDoes not Comply

AICS This product does not comply with AICS

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

RECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and 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.

Chemical name	SARA 313 - Threshold Values %
tert-Butyl Alcohol - 75-65-0	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Ethyl Alcohol 200 Proof - 64-17-5	developmental toxicity
	carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethyl Alcohol 200 Proof 64-17-5	0844	Present	Present
tert-Butyl Alcohol 75-65-0	1787	Present	Environmental hazard

STEL (Short Term Exposure Limit)

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA

Health hazards 2

Flammability 3

Instability 0

Physical and chemical properties -

HMIS

Health hazards 2 *

Flammability 3

Physical hazards 0

Personal protection X

Chronic Hazard Star Legend *= Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL

Ceiling Maximum limit value

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date

Revision Note Disclaimer

No information available.

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