SAFETY DATA SHEET

Section 1 Identification

Cat#: V16CDA12A55

Part Name: CDA 12A 200 proof
Completely Denatured Alcohol

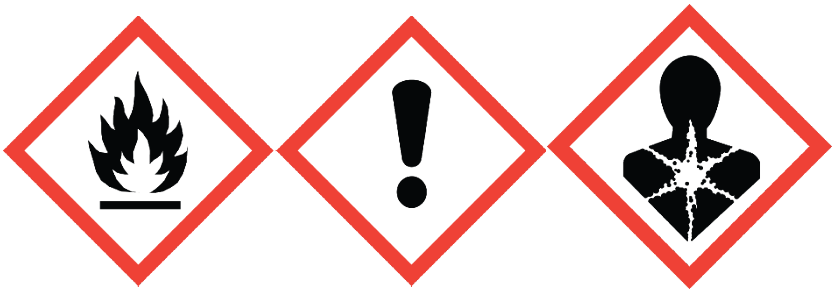
Emergency Telephone Numbers
US Chemtrec: (800) 424-9300
Canada: (703) 527-3887

Supplier: **Decon Laboratories Inc.**
460 Glennie Circle King of Prussia, PA 19406
SDS Telephone # (610) 755-0800

Identified uses: Laboratory use

Section 2 Hazard Identification

Classification of Substance or Mixture
GHS US Classification
Flammable Liquid 2.6
Eye Irritant 2A
Acute Toxicity, Oral – 5
Specific Organ Toxicity 3
Label Elements
Pictograms:



Flammable Irritant Health Hazard

Signal Word: **Danger**
Hazard Statements: **H225 – Highly flammable liquid and vapor**
H319 – Causes serious eye irritation
H335 – May cause respiratory irritation
H303 – May be harmful if swallowed
Precautionary Statements: P210 – Keep away from heat, open flames and sparks. No smoking.
P233 – Keep container tightly closed
P240 – Ground/Bond container and receiving equipment.
P241 – Use explosion-proof electrical, lighting, ventilating equipment.
P242 – Use only non-sparking tools.
P243 – Take precautionary measures against static discharge.
P264 – Wash hands, forearms, and exposed areas thoroughly after handling.
P280 – Wear eye protection, protective gloves, protective clothing.
P303+P361+P353 – IF ON SKIN OR HAIR: Take off immediately all contaminated clothing. Rinse skin with water/shower.
P337+P378 – If eye irritation persists: get medical advice / attention.
P370+P378 – In case of fire: Use appropriate media to extinguish.
P403+P235 – Store in a well-ventilated place. Keep cool.
P501 – Dispose of contents / container in accordance with local, regional

**national, territorial
provincial and
international regulations.
P312 – Call a poison center if you feel unwell.
P261 – Avoid breathing fumes.
P271 – Use only in a well-ventilated area.**

Section 3: Composition Information on Ingredients

Mixture

Name	Product Identifier	% w/w ± 1.0	GHS-US Hazardous Classification
Ethyl Alcohol	CAS 64-17-5	95.0	Flammable Liquid Cat. 2 Eye Irritant 2A H319
Heptane	CAS 142-82-5	5.0	Skin irritation Cat. 2 Specific target organ toxicity - single exposure Cat. 3 (Central nervous system) Aspiration hazard Cat. 1

Section 4: First Aid Measures

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Remove contaminated clothing. Rinse immediately with large amounts of water. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Get medical advice and attention if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation.

Inhalation: Prolonged exposure to liquid may cause a mild irritation.

Skin Contact: Repeated or prolonged skin contact may cause dermatitis and defatting.

Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Ingestion: Ingestion of this product is extremely harmful to human health. Nausea and vomiting, higher exposure causes unconsciousness.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

Section 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media: Alcohol-resistant foam, carbon dioxide, dry chemical, water spray, fog.
Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid. Water may be
ineffective because it may not cool material below its flash point.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor.
Explosion Hazard: May form flammable/explosive vapor-air mixture. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.
Reactivity: Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.
Firefighting Instructions: Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: Carbon oxides (CO, CO2)

Section 6: Accidental Release Measures

Personal precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges. Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Avoid all eyes and skin contact, and do not breathe vapor and mist.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

Section 7 Storage and Handling Conditions

Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment.

Storage Conditions: Store in a dry, cool, and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Keep in fireproof place.

Incompatible Materials: Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.

Specific End Use(s) **For professional use only.**

Section 8 Exposure Controls

Any component listed in Section 3 Composition Information omitted in this section does not have is non-hazardous or does not have exposure control information listed by any relevant authority.

Constituent	CAS#	OSHA PEL
Ethyl Alcohol	64-17-5	1000ppm
Heptane	142-82-5	500ppm

General ventilation is typically suitable to maintain exposure levels below occupational exposure standards however each workspace should be assessed to determine whether additional controls are necessary.

Individual protection measures should include Personal Protective Equipment for the eyes such as chemical goggles or safety glasses. Chemically resistant gloves may also be used. Do not eat drink or smoke when handling this product. If occupational exposure standards are exceeded the use of respiratory protection may be required if additional engineering controls or localized ventilation are not available.

Section 9 Physical and Chemical Properties

Appearance	: Clear liquid
Odor	: Mild characteristic alcohol odor
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: -113.8 °C (-237 °F)
Boiling Point	: 78 °C (174 °F)
Flash Point	: 14 °C (57 °F) CC
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: 3.3 % for Ethanol
Upper Flammable Limit	: 19 % for Ethanol
Vapor Pressure	: 44.6 mm Hg @ 20°C (68°F)
Relative Vapor Density at 20 ˚C	: 1.59 for Ethanol
Relative Density	: Not available
Specific Gravity at 20° C	: 0.8126
Solubility in Water	: Miscible in all proportions
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: 1.2 cP @ 20°C (68°F)
Explosion Data /Sensitivity to Static Discharge	: Static discharge could act as an ignition source.

Section 10 Stability and Reactivity

Reactivity: Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion.

Chemical Stability: Stable at standard temperature and pressure.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Ignition sources.

Incompatible Materials: Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride,

permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.

Hazardous Decomposition Products: Carbon oxides (CO, CO2)

Section 11 Toxicological Information

Acute Toxicity: Not classified
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Causes serious eye irritation.
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not classified
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified

Section 12 Ecological Information

Ecology: Readily biodegrades. Evaporates to moderate extent. Does not bioaccumulate.
Toxicity:
LC50 Fish 1 12.0 - 16.0 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1 9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2 > 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Mobility in Soil: Not available

Other Adverse Effects: Avoid release to the environment.

Section 13 Disposal Considerations

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.
Additional Information: Handle empty containers with care because residual vapors are flammable.

Section 14 Transportation Information

UN Number:	UN 1170
Proper Shipping Name:	Ethanol (Denatured)
Hazard Class:	Flammable Liquid 3
Packing Group:	II
Packaging Exceptions:	49 CFR §173.150
IMDG:	Not listed

Section 15 Regulatory Information

Ethyl alcohol may be regulated under numerous state and federal regimes including at the federal level the Federal Alcohol Administration Act, the Resource Conservation and Recovery Act, the Toxic Substance Control Act and the Hazardous Materials Regulations. Undertake due diligence to ensure compliance with the relevant authority.

Section 16 Other Information

Date of Issue: 05/03/2023
Date of Revision: 12/31/2024R

End of Safety Data Sheet