

Safety Data Sheet According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Date of Issue: 04/22/2019

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture
Product Name: Completely Denatured Alcohol 12-A 200 Proof
1.2. Intended Use of the Product No additional information available
1.3. Name, Address, and Telephone of the Responsible Party
Company

High Precision Gas LLC 10770 Painter Avenue Santa Fe Springs, CA 90670 714-868-6525

www.highprecisiongas.com

1.4. Emergency Telephone Number

Emergency Number

: Professional Emergency Resource Services (PERS) (800) 633-8253 24 / 7 / 365

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification	n of the Substance or Mixture	
Flam. Liq. 2	H225	
Eye Irrit. 2	H319	
Carc. 1A	H350	
Repr. 1A	H360	
STOT SE 3	H336	
Aquatic Acute 1	H400	
Aquatic Chronic 2	H411	
Full text of hazard classes and H-statements : see section 16		
2.2. Label Elements		

GHS-US Labeling

Signal Word (GHS-US) Hazard Statements (GHS-US)

Precautionary Statements (GHS-US)

Hazard Pictograms (GHS-US)

	$\langle ! \rangle$		
GHS02	GHS07	GHS08	GHS09
: Danger			
: H225 - Highly f	lammable liqi	uid and vapour	
H319 - Causes	serious eye ir	ritation.	
H336 - May cau	use drowsines	s or dizziness.	

- H350 May cause crowsines
- H350 May cause cancer.
- H360 May damage fertility or the unborn child.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- : P201 Obtain special instructions before use.
 - P202 Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P233 Keep container tightly closed.
 - P240 Ground/Bond container and receiving equipment.
 - P241 Use explosion-proof electrical, ventilating, and lighting equipment.
 - P242 Use only non-sparking tools.
 - P243 Take precautionary measures against static discharge.
 - P261 Avoid breathing vapors, mist, or spray.
 - P264 Wash hands, forearms, and other exposed areas thoroughly after handling.
 - P271 Use only outdoors or in a well-ventilated area.
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves, protective clothing, and eye protection.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a poison center or doctor if you feel unwell.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish. P391 - Collect spillage.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	%	GHS US classification
Ethyl alcohol		(CAS-No.) 64-17-5	95.2	Flam. Liq. 2, H225 Eye Irrit. 2A, H319
				Carc. 1A, H350
				Repr. 1A, H360
				STOT SE 3, H336
n-Heptane	Heptane (n-) / Heptane / Normal heptane / Heptane, n- / HEPTANE	(CAS-No.) 142-82-5	4.8	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336
			Asp. Tox. 1, H304	
				Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Immediately drench affected area with water for at least 15 minutes. Immediately remove contaminated clothing. If exposed or concerned: Get medical advice/attention.

First-aid Measures After Eye Contact: Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: May cause drowsiness and dizziness. May cause cancer. Causes serious eye irritation. May damage fertility. May damage the unborn child.

Symptoms/Injuries After Inhalation: High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer. May damage fertility or the unborn child.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂). Water may be ineffective but water should be used to keep fire-exposed container cool.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor.

Explosion Hazard: May form flammable or explosive vapor-air mixture.

Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** Carbon oxides (CO, CO₂).

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges.

6.1.1. For Non-Emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

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. Ventilate area. Eliminate ignition sources.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

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

Precautions for Safe Handling: Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, spray, vapors. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions: Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s) No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

n-Heptane (142-82-5)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm (Heptane, all isomers)
USA ACGIH	ACGIH STEL (ppm)	500 ppm (Heptane, all isomers)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	350 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	85 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	1800 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	440 ppm
USA IDLH	US IDLH (ppm)	750 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	2000 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

- Personal Protective Equipment
- : Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing

Hand Protection Eye and Face Protection Skin and Body Protection Respiratory Protection

- : Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.
- : Wear protective gloves.
- : Chemical safety goggles.
- : Wear suitable protective clothing.
- : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information

: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties			
Physical State	: Liquid		
Appearance	: No data available		
Odor	: No data available		
Odor Threshold	: No data available		
рН	: No data available		
Evaporation Rate	: No data available		
Melting Point	: No data available		
Freezing Point	: No data available		
Boiling Point	: No data available		
Flash Point	: No data available		
Auto-ignition Temperature	: No data available		
Decomposition Temperature	: No data available		
Flammability (solid, gas)	: Not applicable		

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Solubility	: No data available
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion.

10.2. Chemical Stability: Extremely flammable liquid and vapor. May form flammable or explosive vapor-air mixture.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products: Not expected to decompose under ambient conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

n-Heptane (142-82-5)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat	103 g/m ³ (Exposure time: 4 h)
ATE (Dermal)	3,000.00 mg/kg body weight
ATE (Vapors)	103.00 mg/l/4h
ATE (Dust/Mist)	103.00 mg/l/4h

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer.

Reproductive Toxicity: May damage fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness or dizziness.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: High concentrations may cause central nervous system depression such as dizziness,

vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva. Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer. May damage fertility or the unborn child.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General	: Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.	
n-Heptane (142-82-5)		
LC50 Fish 1	375 mg/l (Exposure time: 96 h - Species: Cichlid fish)	
EC50 Daphnia 1	0.1 mg/l	
12.2. Persistence and Degradability		
Completely Denatured Alcohol 12-A 200 Proof		
Persistence and Degradability	May cause long-term adverse effects in the environment.	
12.3. Bioaccumulative Potential		
Completely Denatured Alcohol 12-A 200 F	Proof	

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

n-Heptane (142-82-5)	0. 58 / Monday, March 26, 2012 / Rules and Regulations
Log Pow	4.66
12.4. Mobility in Soil	No additional information available
, 12.5. Other Adverse E	
Other Information	: Avoid release to the environment.
SECTION 13: DISPOSAL	CONSIDERATIONS
13.1. Waste Treatme	
Waste Disposal Recommen	dations: Dispose of contents/container in accordance with local, regional, national, and international
regulations.	
	andle empty containers with care because residual vapors are flammable.
	Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out
of sewers and waterways.	
SECTION 14: TRANSPOR	
	stated herein were prepared in accordance with certain assumptions at the time the SDS was
	ed on a number of variables that may or may not have been known at the time the SDS was issued.
14.1. In Accordance w	
Proper Shipping Name	: ETHYL ALCOHOL SOLUTIONS (Ethyl alcohol, heptane)
Hazard Class	: 3
Identification Number	: UN1170
Label Codes	: 3
Packing Group	: 11
Marine Pollutant	: Marine pollutant
ERG Number	: 127
14.2. In Accordance w	
Proper Shipping Name	: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Hazard Class	: 3
Identification Number	: UN1170
Packing Group	:
Label Codes	
EmS-No. (Fire)	: F-E : S-D
EmS-No. (Spillage)	· · · · · · · · · · · · · · · · · · ·
Marine Pollutant	: Marine pollutant
14.3. In Accordance w	
Proper Shipping Name	: ETHYL ALCOHOL SOLUTION
Packing Group	
Identification Number Hazard Class	: UN1170
Label Codes	: 3
ERG Code (IATA)	: 3L
SECTION 15: REGULATO	
15.1. US Federal Regu	
Completely Denatured Alco	shol 12-A 200 Proof

SARA Section 311/312 Hazard Classes	Health hazard - Specific target organ toxicity (single or repeated
	exposure)
	Health hazard - Carcinogenicity
	Physical hazard - Flammable (gases, aerosols, liquids, or solids)
	Health hazard - Serious eye damage or eye irritation
	Health hazard - Reproductive toxicity

n-Heptane (142-82-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations

n-Heptane (142-82-5)
U.S Massachusetts - Right To Know List

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision	: 04/22/2019
Other Information	: This document has been prepared in accordance with the SDS
	requirements of the OSHA Hazard Communication Standard 29 CFR
	1910.1200

GHS Full Text Phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Repr. 1A	Reproductive toxicity Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)