

SAFETY DATA SHEET

1. Identification

Product identifier **Unifirst First Aid Corp.**
Ammonia Inhalants

Other means of identification Not available.
Recommended use Not available.
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer: Safetec of America, Inc.
887 Kensington Avenue
Buffalo, NY 14215

Company Telephone: 1-716-895-1822

E-mail Address: www.safetec.com

Emergency Telephone: 1-800-255-3924

Supplier Refer to Manufacturer

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3

Health hazards Skin corrosion/irritation Category 1

Serious eye damage/eye irritation Category 1

Environmental hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

OSHA defined hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Label elements



Signal word Danger

Hazard statement Flammable liquid and vapor. Causes severe skin burns and eye damage.

Precautionary statement

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response

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. If swallowed: Rinse mouth. Do NOT induce vomiting. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. In case of fire: Use appropriate media for extinction. Wash contaminated clothing before reuse.

Storage

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

Disposal

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

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ethanol	Alcohol Ethyl Alcohol	64-17-5	< 30
Ammonia	AQUEOUS AMMONIA	1336-21-6	< 15

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist.
Skin contact	Wash off immediately with soap and plenty of water. Get medical attention immediately.
Eye contact	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting without advice from poison control center. Get medical attention.
Most important symptoms/effects, acute and delayed	Causes severe skin burns and eye damage.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Water. Water Spray or Fog. Dry chemicals. Foam. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. Thermal decomposition or combustion may liberate toxic gases or fumes.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
General fire hazards	Flammable liquid and vapor.
Hazardous combustion products	Ammonia. Carbon oxides. Nitrogen oxides (NO _x). Other unidentified organic compounds.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Absorb spill with vermiculite or other inert material, then place in a sealed container for chemical waste. Large Spills: Flush with plenty of water. Prevent entry into waterways, sewer, basements or confined areas. Dike for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Eliminate all sources of ignition. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Do not breathe mist or vapor. Do not get in eyes, on skin, on clothing. Use only with adequate ventilation. Wash thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Do not store around flammable or combustible materials. Store in tightly closed original container in a well-ventilated place. Keep cool. Store locked up.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ammonia (CAS 1336-21-6)	PEL	35 mg/m ³ 50 ppm
Ethanol (CAS 64-17-5)	PEL	1900 mg/m ³ 1000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Ammonia (CAS 1336-21-6)	STEL TWA	35 ppm 25 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ammonia (CAS 1336-21-6)	STEL TWA	27 mg/m ³ 35 ppm 18 mg/m ³ 25 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m ³ 1000 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Explosion-proof general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Chemical resistant gloves recommended.

Other Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health or safety professional or manufacturer for specific information.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Contact health and safety professional or manufacturer for specific information.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Towelette.
Physical state	Liquid.
Form	Towelette.
Color	Off-white.
Odor	Ammonia-like
Odor threshold	Not available.
pH	> 12
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	78.1 °F (25.6 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 115 mm Hg at 68°F (20°C) for a 10% NH₃OH solution

Vapor density 0.6 for Ammonia

Relative density Not available.

Solubility(ies)

Solubility (water) Soluble.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Specific gravity 0.78 - 1

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable at normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid Keep away from heat, sparks and open flame. High temperatures.

Incompatible materials Strong oxidizing agents. Acids.

Hazardous decomposition products Ammonia. Carbon oxides. Nitrogen oxides (NO_x). Other unidentified organic compounds.

11. Toxicological information

Information on likely routes of exposure

Inhalation Inhalation of high concentrations of vapors, may cause respiratory irritation.

Skin contact Causes severe skin burns.

Eye contact Causes serious eye damage.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Most important symptoms/effects, acute and delayed Causes severe skin burns and eye damage.

Information on toxicological effects

Acute toxicity Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Components	Species	Test Results
Ammonia (CAS 1336-21-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	No Data in Literature
<i>Inhalation</i>		
LC50	Mouse	2115 ppm, 4 hours (ammonia gas)
	Rat	3670 ppm, 4 hours (ammonia gas)
<i>Oral</i>		
LD50	Rat	350 mg/kg
Ethanol (CAS 64-17-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 15800 mg/kg

Components	Species	Test Results
<i>Inhalation</i> LC50	Rat	> 32380 ppm, 4 hours (vapor) > 61 mg/l, 4 hours (vapor)
<i>Oral</i> LD50	Rat	7060 mg/kg
Skin corrosion/irritation	Causes severe skin burns.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
Respiratory sensitization	This product is not expected to cause respiratory sensitization.	
Skin sensitizer	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive effects.	
Specific target organ toxicity - single exposure	Not classified as a specific target organ toxicity -single exposure.	
Specific target organ toxicity - repeated exposure	Not classified as a specific target organ toxicity -repeated exposure.	
Aspiration toxicity	Not expected to be an aspiration hazard.	

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous.

Components	Species	Test Results
Ammonia (CAS 1336-21-6)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 0.66 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 8.2 mg/l, 96 hours
Ethanol (CAS 64-17-5)		
Aquatic		
<i>Acute</i>		
Algae	EC50	Green algae (Selenastrum capricornutum) 1000 mg/l, 96 hours
Crustacea	EC50	Water flea (Daphnia magna) 5012 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

Ethanol -0.31

Mobility in soil Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
D001: Waste Flammable material with a flash point <140 F

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information**DOT**

UN number	UN1170
UN proper shipping name	Ethanol solution (Ethanol RQ = 148 LBS)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Not available.
Special provisions	24, B1, IB3, T2, TP1
Packaging exceptions	4b, 150
Packaging non bulk	203
Packaging bulk	242

IATA

UN number	UN1170
UN proper shipping name	Ethanol Solution (Ethanol)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1170
UN proper shipping name	ETHANOL SOLUTION (Ethanol)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-D
Special precautions for user	Not available.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.

DOT



IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ammonia (CAS 1336-21-6)

Listed.

Ethanol (CAS 64-17-5)

Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Ammonia	1336-21-6	< 15

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Ammonia (CAS 1336-21-6)

Ethanol (CAS 64-17-5)

US. New Jersey Worker and Community Right-to-Know Act

Ammonia (CAS 1336-21-6)

Ethanol (CAS 64-17-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Ammonia (CAS 1336-21-6)

Ethanol (CAS 64-17-5)

US. Rhode Island RTK

Ammonia (CAS 1336-21-6)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Ethanol (CAS 64-17-5)

Listed: April 29, 2011

Listed: July 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Ethanol (CAS 64-17-5)

Listed: October 1, 1987

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

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Revision date	02-23-2015
Version #	02

Disclaimer

Prepared by: ICC The Compliance Center Inc. 1-888-442-9628
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Bibliography

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices (2014)
Canadian Centre for Occupational Health and Safety, CCIInfoWeb Databases, 2014
(Chempendium, RTECs, HSDB, INCHEM)
European Chemicals Bureau, Existing Chemicals Work Area, EINECS Information System, 2014.
Material Safety Data Sheet from manufacturer.
OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2014.