SAFETY DATA SHEETS

This SDS packet was issued with item:

070909655

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

070909754 070909762 070909770 070909788

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 11.28.2017

Revision date: 07.05.2023

Patterson Ultrasonic Solution

SECTION 1: Identification

Product Identifier

Product Name: Patterson Ultrasonic Solution

Product code: 070909655, 070909754, 070909762, 070909770, 070909788

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: General purpose ultrasonic cleaner.

Uses Advised Against: Not determined or not applicable.

Reasons Why Uses Advised Against: Not determined or not applicable.

Manufacturer or Supplier Details

Manufacturer:

United States

Patterson Companies, Inc.
1031 Mendota Heights Road
St. Paul, MN 55120
1-800-328-5536
www.pattersoncompanies.com

Emergency Telephone Number:

United States

CHEMTREC
Within USA and Canada: 1-800-424-9300 (24 hours)

SECTION 2: Hazard(s) Identification

GHS Classification:

Flammable liquids, category 3
Serious eye damage, category 1

Label elements

Hazard Pictograms:

Signal Word: Danger

Hazard statements:

H226 Flammable liquid and vapor
H318 Causes serious eye damage

Precautionary Statements:

P210 Keep away from heat, sparks, open flames and hot surfaces. 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
P280 Wear protective gloves, protective clothing, eye protection and face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 Immediately call a POISON CENTER or doctor
P403+P235 Store in a well-ventilated place. Keep cool
P501 Dispose of contents and container in accordance with local regulations.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 68130-47-2	Poly(oxy-1,2-ethanediyl), alpha-hydro-omega-hydroxy-, mono-C8-10-alkyl ethers, phosphates	1-5
CAS Number: 497-19-8	Sodium carbonate	1-5
CAS Number: 67-63-0	Propan-2-ol	1-5

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance.

After Inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

After Skin Contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After Eye Contact:

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

After Swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse

mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Product is flammable. Exposure to sources of ignition may cause physical injury.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision.

Delayed Symptoms and Effects:

Effects are dependent on exposure (dose, concentration, contact time).

Immediate Medical Attention and Special Treatment

Specific Treatment:

In case of eye contact, seek prompt medical attention while rinsing is continued.

Notes for the Doctor:

Treat symptomatically.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable Extinguishing Media:

Do not use water jet.

Specific Hazards During Fire-Fighting:

Flammable liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation.

Special Protective Equipment for Firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. All equipment used

when handling the product must be grounded. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and Material for Containment and Cleaning Up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. A vapor-suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to Other Sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating and lighting equipment. Take action to prevent static discharges. Handle containers with caution. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	Sodium carbonate	497-19-8	8-Hour TWA-PEL: 15 mg/m³ (total dust [Mineral Dusts])
	Sodium carbonate	497-19-8	8-Hour TWA-PEL: 5 mg/m³ (respirable dust [Mineral Dusts])
	Propan-2-ol	67-63-0	8-Hour TWA-PEL: 980 mg/m³ (400 ppm)
ACGIH	Sodium carbonate	497-19-8	8-Hour TWA: 10 mg/m³ (inhalable particles [Recommended for insoluble particles with low toxicity and no established TLV])
	Sodium carbonate	497-19-8	8-Hour TWA: 3 mg/m³ (respirable particles [Recommended for insoluble particles with low toxicity and no established TLV])

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Propan-2-ol	67-63-0	15-Minute STEL: 400 ppm
	Propan-2-ol	67-63-0	8-Hour TWA: 200 ppm
United States(California)	Sodium carbonate	497-19-8	8-Hour TWA-PEL: 10 mg/m³ (total dust)
	Sodium carbonate	497-19-8	8-Hour TWA-PEL: 5 mg/m³ (respirable fraction)
	Propan-2-ol	67-63-0	8-Hour TWA-PEL: 980 mg/m³ (400 ppm)
NIOSH	Propan-2-ol	67-63-0	IDLH: 2000 ppm
	Propan-2-ol	67-63-0	15-Minute STEL: 500 ppm (1,225 mg/m³)
	Propan-2-ol	67-63-0	REL-TWA: 400 ppm (980 mg/m³ - up to 10 hrs.)

Biological Limit Values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	Propan-2-ol	67-63-0	Acetone	Urine	EOS/EOW	40 mg/L

Information on Monitoring Procedures:

Not determined or not applicable.

Appropriate Engineering Controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal Protection Equipment

Eye and Face Protection:

Use safety glasses with side shields or goggles. Consider the use of a face shield for splash protection. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and Body Protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Full body protection should be worn. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General Hygienic Measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks,

and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Transparent blue liquid
Odor	Mild chemical
Odor threshold	Not determined or not available.
pH	11.5 - 12.2
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	213°F (101°C)
Flash point (closed cup)	126 °F (54°C) Tag Closed Cup (T.C.C)
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	1.06 (Ref: water = 1)
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other Information

Percent volatile	90.5%

SECTION 10: Stability and Reactivity

Reactivity:
Not reactive under recommended handling and storage conditions.

Chemical Stability:
Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions:
Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to Avoid:
Extreme heat, open flames, hot surfaces, sparks, ignition sources, static electricity and incompatible materials. Vapor accumulation in low or confined areas.

Incompatible Materials:
Avoid contact with strong acids, metals, such as aluminum and tin.

Hazardous Decomposition Products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

Acute Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Route	Result
Sodium carbonate	oral	LD50 Rat: 2800 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
Propan-2-ol	oral	LD50 Rat: 5840 mg/kg
	dermal	LD50 Rabbit: 12,800 mg/kg
	inhalation	LC50 Rat: 72.6 mg/L (4 hr - Vapor)

Skin Corrosion/Irritation

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Poly(oxy-1,2-ethanediyl), alpha-hydro-omega-hydroxy-, mono-C8-10-alkyl ethers, phosphates	Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation

Assessment:

Causes serious eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
Poly(oxy-1,2-ethanediyl), alpha-hydro-omega-hydroxy-, mono-C8-10-alkyl ethers, phosphates	Causes serious eye damage.
Sodium carbonate	Causes serious eye irritation.
Propan-2-ol	Causes serious eye irritation.

Respiratory or Skin Sensitization

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Propan-2-ol	Group 3

National Toxicology Program (NTP): None of the ingredients are listed.

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Specific Target Organ Toxicity (Single Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Propan-2-ol	May cause drowsiness or dizziness.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Information on Likely Routes of Exposure:

Eye contact; skin contact; inhalation; ingestion.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

See section 4 of this SDS.

Other Information:

No data available.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Sodium carbonate	Fish LC50 Lepomis macrochirus: 300 mg/L (96 hr)
	Aquatic Plants EC50 Sellaphora seminulum: 242 mg/L (96 hr)
	Aquatic Invertebrates EC50 Ceriodaphnia sp: 200 mg/L (48 hr [mobility])
Propan-2-ol	Fish LC50 Pimephales promelas: 10,000 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >10,000 mg/L (48 hr [immobilization])

Chronic (Long-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Propan-2-ol	Aquatic Invertebrates NOEC Daphnia magna: 141 mg/L (16 d [growth])

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Propan-2-ol	The substance has a BOD5/ThOD ratio of 0.50, and is therefore considered to be readily degradable.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Sodium carbonate	Substance dissociates fully in water; does not bioaccumulate.
Propan-2-ol	Bioaccumulation is not expected. BCF (aquatic species): 1.015 L/kg ww [QSAR]

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Propan-2-ol	The substance is highly mobile in soil with a low potential for adsorption to soil and sediment. Koc at 20 °C: 3.478

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment:

Sodium carbonate	PBT assessment does not apply to inorganic substances.
Propan-2-ol	This substance is not PBT.

vPvB assessment:

Sodium carbonate	vPvB assessment does not apply to inorganic substances.
Propan-2-ol	This substance is not vPvB.

Other Adverse Effects: No data available.

SECTION 13: Disposal Considerations

Disposal Methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	1993
UN Proper Shipping Name	Flammable liquid, n.o.s. (Propan-2-ol)
UN Transport Hazard Class(es)	3 
Packing Group	III
Environmental Hazards	None
Special Precautions for User	None
Passenger Air/Rail	60 L
Cargo Aircraft Only	220 L
Stowage Category	A

International Maritime Dangerous Goods (IMDG)

UN Number	1993
UN Proper Shipping Name	Flammable liquid, n.o.s. (Propan-2-ol)
UN Transport Hazard Class(es)	3 
Packing Group	III
Environmental Hazards	None
Special Precautions for User	None
EmS Number	F-E, S-E
Stowage Category	A
Excepted Quantities	E1
Limited Quantity	5 L

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	1993
UN Proper Shipping Name	Flammable liquid, n.o.s. (Propan-2-ol)
UN Transport Hazard Class(es)	3 
Packing Group	III
Environmental Hazards	None
Special Precautions for User	None

ERG Code	3L
Excepted Quantities	E1
Passenger and Cargo	60 L
Cargo Aircraft Only	220 L
Limited Quantity	10 L

SECTION 15: Regulatory Information

United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.

SARA Section 313 Toxic Chemicals:

67-63-0	Propan-2-ol	Listed

CERCLA: None of the ingredients are listed.

RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

67-63-0	Propan-2-ol	Listed

New Jersey Right to Know:

67-63-0	Propan-2-ol	Listed

New York Right to Know:

67-63-0	Propan-2-ol	Listed

Pennsylvania Right to Know:

67-63-0	Propan-2-ol	Listed

California Proposition 65: None of the ingredients are listed.

Additional information: Not determined.

SECTION 16: Other Information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

Initial Preparation Date: 11.28.2017

Revision date: 07.05.2023

End of Safety Data Sheet