

SAFETY DATA SHEETS

This SDS packet was issued with item:

071116573

N/A

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 1 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

SECTION 1: Identification

Product identifier

Product name: Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose
Product ID: 071116573

Recommended use of the product and restriction on use

Relevant identified uses: Ultrasonic Cleaning Solution, diluted as per instructions
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:

Skin irritation, category 2
Eye irritation, category 2A

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H315 Causes skin irritation
H319 Causes serious eye irritation

Precautionary statements:

P264 Wash skin thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 IF ON SKIN: Wash with plenty of water
P321 Specific treatment (see supplemental first aid instructions on this label)
P332+P313 If skin irritation occurs: Get medical advice/attention
P362 Take off contaminated clothing and wash it before reuse
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 2 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

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

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7732-18-5	Water	35-45
CAS number: 1303-96-4	Sodium Tetraborate	0.8-1.6
CAS number: 9004-83-5	Dodecyl mercaptan, ethoxylated	1-4
CAS number: 34590-94-8	Dipropylene Glycol Methyl Ether	11-18
CAS number: 68412-54-4	Ethoxylated Nonphenol Branched	1-10
CAS number: 68603-25-8	Ethoxylated,Propoxylated C8- C10	1-3
CAS number: 1310-73-2	Sodium hydroxide	0.4-0.8
CAS number: 67-63-0	Isopropyl Alcohol	0.2-0.8
CAS number: 68650-39-5	Disodium Cocoamphodiacetate	10-15

Additional Information:

The specific chemical identity and/or exact percentages (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:

Not determined or not applicable.

After inhalation:

If respiratory irritation or distress occurs, move victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

After skin contact:

Not determined or not applicable.

After eye contact:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

After swallowing:

Seek immediate medical attention. Induce vomiting as directed by medical personnel.

Most important symptoms and effects, both acute and delayed

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 3 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

Acute symptoms and effects:

Skin contact may result in redness, pain, burning and inflammation.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing.

Breathing high concentrations of vapors or mists may cause irritation to the nose and drowsiness.

Will cause irritation to the digestive tract and signs of nervous system depression.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate existing skin disease.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Extinguish with dry chemical, CO2 or a BC/ABC extinguisher.

Unsuitable extinguishing media:

Do not use water jet as an extinguisher.

Specific hazards during fire-fighting:

Product will burn under fire conditions. Closed containers may explode due to build pressure when exposed to extreme heat.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA)

Special precautions:

Hazardous Decomposition Materials: (under fire conditions) Oxides of nitrogen, carbon and sulfur.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Mop up spill and dispose of by dilution to a sanitary sewer system as permitted by local, state and federal regulations.

Reference to other sections:

For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes or clothing

Conditions for safe storage, including any incompatibilities:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 4 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

Minimum/Maximum Storage Temperatures: 39 to 1000 F Protect from freezing

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
ACGIH	Sodium Tetraborate	1303-96-4	8-Hour TWA: 2 mg/m ³
	Sodium Tetraborate	1303-96-4	15-Minute STEL: 6 mg/m ³
	Dipropylene Glycol Methyl Ether	34590-94-8	8-Hour TWA: 100 ppm
	Dipropylene Glycol Methyl Ether	34590-94-8	15-Minute STEL: 150 ppm
	Sodium hydroxide	1310-73-2	Ceiling Limit: 2 mg/m ³
	Isopropyl Alcohol	67-63-0	STEL: 400 ppm
	Isopropyl Alcohol	67-63-0	TWA: 200 ppm
NIOSH	Sodium Tetraborate	1303-96-4	REL: 5 mg/m ³
	Dipropylene Glycol Methyl Ether	34590-94-8	REL: 100 ppm
	Dipropylene Glycol Methyl Ether	34590-94-8	REL: 600 mg/m ³
	Dipropylene Glycol Methyl Ether	34590-94-8	STEL: 150 ppm
	Dipropylene Glycol Methyl Ether	34590-94-8	STEL: 900 mg/m ³
	Dipropylene Glycol Methyl Ether	34590-94-8	IDLH: 600 ppm
	Sodium hydroxide	1310-73-2	Ceiling Limit: 2 mg/m ³ (REL)
	Sodium hydroxide	1310-73-2	IDLH: 10 mg/m ³
	Isopropyl Alcohol	67-63-0	IDLH: 2000 ppm
	Isopropyl Alcohol	67-63-0	STEL: 500 ppm (1,225 mg/m ³)
	Isopropyl Alcohol	67-63-0	TWA: 400 ppm (980 mg/m ³)
OSHA	Sodium Tetraborate	1303-96-4	TWA: 10 mg/m ³
	Dipropylene Glycol Methyl Ether	34590-94-8	TWA: 100 ppm
	Dipropylene Glycol Methyl Ether	34590-94-8	TWA: 600 mg/m ³
	Dipropylene Glycol Methyl Ether	34590-94-8	STEL: 150 ppm
	Dipropylene Glycol Methyl Ether	34590-94-8	STEL: 900 mg/m ³
	Sodium hydroxide	1310-73-2	8-Hour TWA-PEL: 2 mg/m ³
	Isopropyl Alcohol	67-63-0	PEL: 400 ppm (OSHA PEL TWA 980 mg/m ³)
United States(California)	Sodium hydroxide	1310-73-2	Ceiling Limit: 2 mg/m ³
	Isopropyl Alcohol	67-63-0	PEL: 980 mg/m ³ (400 ppm)
	Isopropyl Alcohol	67-63-0	STEL: 1225 mg/m ³ (500 ppm)

Biological limit values:

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

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

These recommendations provide general guidance for handling of this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 5 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

intended application. When developing safe handling procedures, do not overlook the need to clean and dispose of the material. Waste resulting from the use of this product should be handled in accordance with Section 13: Disposal Considerations
Normal room ventilation.

Personal protection equipment

Eye and face protection:

Safety glasses to protect from splashing.

Skin and body protection:

Rubber or plastic gloves to avoid drying and irritation to the skin.

Respiratory protection:

For reasonable uses of this material, respiratory protection should not be necessary.

General hygienic measures:

Normal hygiene in the work area should be taken when working with or handling this product.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Honey colored clear liquid
Odor	Characteristic odor
Odor threshold	Not determined or not available.
pH	9.6
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Approx. 210 degrees F
Flash point (closed cup)	None
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 established
Vapor density	Not established
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Soluble
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 by volume:	Approximately 60% by volume
V.O.C. (calculated):	Concentrate: 1.71 lbs./ gal or 204.9 grams /l. Diluted as directed: 0.015 lbs/gal or .6 g/l.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 6 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable

Possibility of hazardous reactions:

Will not occur

Conditions to avoid:

Heat, open flame

Incompatible materials:

Strong acids and oxidizing agents

Hazardous decomposition products:

Oxides of carbon, nitrogen and sulfur

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 Tetraborate	oral	LD50 Rat: 2660 mg/kg
Ethoxylated Nonphenol Branched	oral	LD50 Rat: 1310 mg/kg
	dermal	LD50 Rabbit: 4.49 mg/kg
	inhalation	LC50 Rat: 29 mg/kg (8 h)
Isopropyl Alcohol	oral	LD50 Rabbit: 6410 mg/kg
	dermal	LD50 Rabbit: 12,800 mg/kg
	inhalation	LD50 Rabbit: 72.6 mg/L (4 H)

Skin corrosion/irritation

Assessment:

Causes skin irritation.

Product data:

No data available.

Substance data:

Name	Result
Dodecyl mercaptan, ethoxylated	Causes skin irritation.
Ethoxylated Nonphenol Branched	Causes skin irritation.
Sodium hydroxide	Causes severe skin burns.
Disodium Cocoamphodiacetate	Causes skin irritation

Serious eye damage/irritation

Assessment:

Causes serious eye irritation.

Product data:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 7 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

No data available.

Substance data:

Name	Result
Dodecyl mercaptan, ethoxylated	Causes serious eye irritation.
Ethoxylated Nonphenol Branched	Causes serious eye damage.
Ethoxylated, Propoxylated C8-C10	Causes serious eye damage.
Sodium hydroxide	Causes serious eye damage.
Isopropyl Alcohol	Causes serious eye irritation.
Disodium Cocoamphodiacetate	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
Water	Not Applicable
Sodium hydroxide	Not Applicable
Isopropyl Alcohol	Group 3

National Toxicology Program (NTP):

Name	Classification
Water	Not Applicable
Sodium hydroxide	Not Applicable
Isopropyl Alcohol	Not Applicable

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:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 8 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

Name	Result
Sodium Tetraborate	May damage fertility or the unborn child.

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
Isopropyl Alcohol	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:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

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
Ethoxylated Nonphenol Branched	LC50 Pimephales promelas : 0.218 mg/L mg/L (96 h (Experimental))
	EC50 Lepomis macrochirus: 1.3 mg/L mg/L (96 h (Experimental))
	EC50 Ceriodaphnia dubia: 0.328 mg/L mg/L (48 h (Experimental))
	EC50 Green algae: 37.4 mg/L mg/L (5 d - static (Experimental))

Chronic (long-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result
Ethoxylated Nonphenol Branched	NOEC Oncorhynchus mykiss: 0.048 mg/L mg/L (21 d (Experimental))
	NOEC Daphnia magna : 1.0 mg/L mg/L (6 d - prolonged study (Experimental))
	NOEC Green algae): 96 h NOEC = 8.0 mg/L mg/L (96 h (Experimental))

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 9 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Dipropylene Glycol Methyl Ether	Readily biodegradable in water.
Isopropyl Alcohol	Readily biodegradable in water.

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Sodium hydroxide	The substance has a low potential for bioaccumulation.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

This product can be disposed in sanitary sewer system, where permitted by local, federal and state regulations.

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	Do not stack cartons more than five high

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	Do not stack cartons more than five high

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

UN number	Not regulated
UN proper shipping name	Not regulated

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 10 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	Do not stack cartons more than five high

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

7732-18-5	Water	Listed
1303-96-4	Sodium Tetraborate	Listed
9004-83-5	Dodecyl mercaptan, ethoxylated	Listed
34590-94-8	Dipropylene Glycol Methyl Ether	Listed
68412-54-4	Ethoxylated Nonphenol Branched	Listed
68603-25-8	Ethoxylated,Propoxylated C8- C10	Listed
1310-73-2	Sodium hydroxide	Listed
67-63-0	Isopropyl Alcohol	Listed
68650-39-5	Disodium Cocoamphodiacetate	Listed

Significant New Use Rule (TSCA Section 5):

68412-54-4	Ethoxylated Nonphenol Branched	Listed
------------	--------------------------------	--------

Export notification under TSCA Section 12(b):

68412-54-4	Ethoxylated Nonphenol Branched	Listed
------------	--------------------------------	--------

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

7732-18-5	Water	Not Listed
1303-96-4	Sodium Tetraborate	Not Listed
9004-83-5	Dodecyl mercaptan, ethoxylated	Not Listed
34590-94-8	Dipropylene Glycol Methyl Ether	Not Listed
68412-54-4	Ethoxylated Nonphenol Branched	Listed
68603-25-8	Ethoxylated,Propoxylated C8- C10	Not Listed
1310-73-2	Sodium hydroxide	Not Listed
67-63-0	Isopropyl Alcohol	Listed
68650-39-5	Disodium Cocoamphodiacetate	Not Listed

CERCLA:

1310-73-2	Sodium hydroxide	Listed	1000 lbs
-----------	------------------	--------	----------

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 11 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

Massachusetts Right to Know:

7732-18-5	Water	Not Listed
1303-96-4	Sodium Tetraborate	Listed
9004-83-5	Dodecyl mercaptan, ethoxylated	Not Listed
34590-94-8	Dipropylene Glycol Methyl Ether	Listed
68412-54-4	Ethoxylated Nonphenol Branched	Listed
68603-25-8	Ethoxylated,Propoxylated C8- C10	Not Listed
1310-73-2	Sodium hydroxide	Listed
67-63-0	Isopropyl Alcohol	Listed
68650-39-5	Disodium Cocoamphodiacetate	Not Listed

New Jersey Right to Know:

7732-18-5	Water	Not Listed
1303-96-4	Sodium Tetraborate	Not Listed
9004-83-5	Dodecyl mercaptan, ethoxylated	Not Listed
34590-94-8	Dipropylene Glycol Methyl Ether	Listed
68412-54-4	Ethoxylated Nonphenol Branched	Listed
68603-25-8	Ethoxylated,Propoxylated C8- C10	Not Listed
1310-73-2	Sodium hydroxide	Listed
67-63-0	Isopropyl Alcohol	Listed
68650-39-5	Disodium Cocoamphodiacetate	Not Listed

New York Right to Know:

7732-18-5	Water	Not Listed
1303-96-4	Sodium Tetraborate	Not Listed
9004-83-5	Dodecyl mercaptan, ethoxylated	Not Listed
34590-94-8	Dipropylene Glycol Methyl Ether	Listed
68412-54-4	Ethoxylated Nonphenol Branched	Listed
68603-25-8	Ethoxylated,Propoxylated C8- C10	Not Listed
1310-73-2	Sodium hydroxide	Listed
67-63-0	Isopropyl Alcohol	Listed
68650-39-5	Disodium Cocoamphodiacetate	Not Listed

Pennsylvania Right to Know:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2020

Page 12 of 12

Patterson Super Concentrated Ultrasonic Cleaning Solution - General Purpose

7732-18-5	Water	Not Listed
1303-96-4	Sodium Tetraborate	Listed
9004-83-5	Dodecyl mercaptan, ethoxylated	Not Listed
34590-94-8	Dipropylene Glycol Methyl Ether	Listed
68412-54-4	Ethoxylated Nonphenol Branched	Listed
68603-25-8	Ethoxylated, Propoxylated C8- C10	Not Listed
1310-73-2	Sodium hydroxide	Listed
67-63-0	Isopropyl Alcohol	Listed
68650-39-5	Disodium Cocoamphodiacetate	Not Listed

California Proposition 65: None of the ingredients are listed.

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.

NFPA: 2-1-0

HMIS: 2-1-0

Initial preparation date: 01.31.2020

End of Safety Data Sheet