

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : PERACID CLEAR
Product code : 1462

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Bleaching Agent
Recommended use : Laundry
Restrictions on use : For professional use only

1.3. Supplier

UNX-Christeyns, LLC
707 E Arlington Blvd.
Greenville, NC 27858
USA
T 252-756-8616 / 800.869.6171
www.unxchristeyns.com - info@unxchristeyns.com

1.4. Emergency telephone number

Emergency number : VELOCITY EHS (800) 255-3924 (24 HOURS)
(For use only in the event of emergencies involving a spill, leak, fire, exposure, or accident involving chemicals)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Oxidizing liquids Category 2	H272	May intensify fire; oxidizer
Corrosive to metals Category 1	H290	May be corrosive to metals
Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Acute toxicity (dermal) Category 4	H312	Harmful in contact with skin
Acute toxicity (inhalation) Category 4	H332	Harmful if inhaled
Skin corrosion/irritation Category 1	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation
Hazardous to the aquatic environment – Acute Hazard Category 1	H400	Very toxic to aquatic life
Full text of H statements : see section 16		

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

PERACID CLEAR

Safety Data Sheet

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

Hazard statements (GHS US)	: H272 - May intensify fire; oxidizer H290 - May be corrosive to metals H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage H335 - May cause respiratory irritation H400 - Very toxic to aquatic life
Precautionary statements (GHS US)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 - Keep only in original container. P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep 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. P310 - Immediately call a poison center or doctor. P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Hydrogen Peroxide	CAS-No.: 7722-84-1	10-30
Acetic Acid	CAS-No.: 64-19-7	5-10
Peracetic Acid	CAS-No.: 79-21-0	3-5

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Remove victims into fresh air. If not breathing, give artificial respiration. Remove contaminated clothing immediately. . Warning: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, Infectious, or corrosive.
----------------------------	--

PERACID CLEAR

Safety Data Sheet

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

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Treat symptomatically. Get medical attention if symptoms occur.
First-aid measures after skin contact	: Rinse skin with plenty of water.
First-aid measures after eye contact	: Rinse immediately with water for 15 minutes, occasionally lifting upper and lower eyelids. Remove contact lenses, if present, and easy to do. Continue rinsing; Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth with water if the person is conscious. Do not induce vomiting unless directed by medical personnel. Get medical attention immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing).
Symptoms/injuries after skin contact	: Burns. irritation (itching, redness, blistering).
Symptoms/injuries after eye contact	: Corrosive to eyes. (redness, itching, tears).
Symptoms/injuries after ingestion	: Harmful if swallowed. Burns to the gastric/intestinal mucosa. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water in large amounts.

5.2. Specific hazards arising from the chemical

Fire hazard	: May cause fire or explosion; strong oxidizer.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

Protective equipment : Wear recommended personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. Prevent liquid from entering sewers, watercourses, underground or low areas. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Do not absorb in sawdust, paper, cloth or other combustible absorbents. Clean contaminated surfaces with an excess of water.

PERACID CLEAR

Safety Data Sheet

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

6.4. Reference to other sections

Concerning personal protective equipment to use, see item 8. See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: May be corrosive to metals.
Precautions for safe handling	: Use only outdoors or in a well-ventilated area. Never return unused material to original container. Handle in accordance with good industrial hygiene and safety procedures. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep away from ignition sources. Store in a well-ventilated place. Keep cool. Store in original container.
Incompatible products	: Strong bases. Strong acids.
Storage temperature	: < 35 °C
Storage area	: Never mix with other materials.
Packaging materials	: Keep only in the original container in a cool, well-ventilated place away from combustible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PERACID CLEAR	
USA - ACGIH - Occupational Exposure Limits	
Local name	Peracetic acid
ACGIH OEL STEL	0.4 ppm
Remark (ACGIH)	A4 (Not classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories)
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Acetic acid
OSHA PEL TWA	25 mg/m ³ 10 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Hydrogen Peroxide (7722-84-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Hydrogen peroxide
ACGIH OEL TWA	1 ppm

PERACID CLEAR

Safety Data Sheet

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

Hydrogen Peroxide (7722-84-1)

Remark (ACGIH)	TLV® Basis: Eye, URT, & skin irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
----------------	--

Regulatory reference	ACGIH 2024
----------------------	------------

USA - OSHA - Occupational Exposure Limits

Local name	Hydrogen peroxide
------------	-------------------

OSHA PEL TWA	1.4 mg/m ³
--------------	-----------------------

	1 ppm
--	-------

Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
--------------------------------	--------------------------

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Dustproof clothing. Gloves. Use respiratory protection.

Hand protection:

Chemical resistant PVC gloves

Eye protection:

safety glasses with side shields

Skin and body protection:

Wear suitable protective clothing. Long sleeved protective clothing.

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Extra personal protection: A/P2 filter respirator for organic vapor and harmful dust.

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: acrid and pungent
Odor threshold	: No data available
pH	: 0.5 ± 0.2 (100%); 3.4 ± 0.5 (0,3%)
Melting point	: No data available
Freezing point	: No data available
Boiling point	: ≥ 100 °C

PERACID CLEAR

Safety Data Sheet

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

Flash point	: > 96 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.115
Density	: 1.1 g/ml
Solubility	: No data available
Log Pow	: No data available
Autoignition temperature	: > 250 °C
Decomposition temperature	: ≥ 60 °C (SADT for ≤1000L and 26m3 non-insulated tank)
Viscosity, kinematic	: < 27.273 mm ² /s
Viscosity, dynamic	: < 30 mPa·s
Explosion limits	: No data available
Explosive properties	: Heating may cause a fire.
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

Contact with alkaline products gives exothermic reaction. Heating may cause a fire or explosion.

10.4. Conditions to avoid

Direct sunlight. Heat. Sparks. Open flame.

10.5. Incompatible materials

Iron or steel. Copper and copper alloys. Galvanized steel. Strong acids. Strong bases. Metals. Organic materials. Never mix with other materials.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Harmful if inhaled.

PERACID CLEAR

ATE US (oral)	881.615 mg/kg body weight
ATE US (dermal)	1144.898 mg/kg body weight

PERACID CLEAR

Safety Data Sheet

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

PERACID CLEAR	
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Hydrogen Peroxide (7722-84-1)	
LD50 oral rat	431 mg/kg
LD50 dermal rabbit	6440 mg/kg
ATE US (oral)	431 mg/kg body weight
ATE US (dermal)	6440 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Peracetic Acid (79-21-0)	
LD50 dermal rabbit	56.1 mg/kg
ATE US (oral)	85 mg/kg body weight
ATE US (dermal)	56.1 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Acetic Acid (64-19-7)	
ATE US (oral)	3310 mg/kg body weight
Skin corrosion/irritation	: Causes severe skin burns. pH: 0.5 ± 0.2 (100%); 3.4 ± 0.5 (0,3%)
Serious eye damage/irritation	: Causes serious eye damage. pH: 0.5 ± 0.2 (100%); 3.4 ± 0.5 (0,3%)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Hydrogen Peroxide (7722-84-1)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
Hydrogen Peroxide (7722-84-1)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: < 27.273 mm ² /s
Symptoms/injuries after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing).
Symptoms/injuries after skin contact	: Burns. irritation (itching, redness, blistering).
Symptoms/injuries after eye contact	: Corrosive to eyes. (redness, itching, tears).
Symptoms/injuries after ingestion	: Harmful if swallowed. Burns to the gastric/intestinal mucosa. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

PERACID CLEAR

Safety Data Sheet

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

SECTION 12: Ecological information

12.1. Toxicity

PERACID CLEAR	
LC50 - Fish [1]	> 1000 mg/l
EC50 - Crustacea [1]	> 300 mg/l
EC50 - Other aquatic organisms [1]	> 1000 mg/l waterflea
ErC50 algae	> 300 mg/l
Hydrogen Peroxide (7722-84-1)	
LC50 - Fish [1]	16.4 mg/l Source: ECHA
EC50 - Other aquatic organisms [1]	7.7 mg/l waterflea
EC50 - Other aquatic organisms [2]	1.38 mg/l
EC50 72h - Algae [1]	1.38 mg/l Source: ECHA
LOEC (chronic)	1.25 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.63 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

PERACID CLEAR	
Persistence and degradability	Biodegradable.
Hydrogen Peroxide (7722-84-1)	
Persistence and degradability	Not rapidly degradable
Peracetic Acid (79-21-0)	
Persistence and degradability	Not rapidly degradable
Acetic Acid (64-19-7)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

PERACID CLEAR	
Bioaccumulative potential	No bioaccumulation potential.
Hydrogen Peroxide (7722-84-1)	
Log Pow	-1.36 Source: IPCS
Peracetic Acid (79-21-0)	
Partition coefficient n-octanol/water (Log Kow)	-0.26 (20°C)
Acetic Acid (64-19-7)	
Partition coefficient n-octanol/water (Log Kow)	-0.17 @ 25 °C and pH 7

12.4. Mobility in soil

No additional information available

PERACID CLEAR

Safety Data Sheet

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

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of this material and its container at hazardous or special waste collection point.
Product/Packaging disposal recommendations : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

DOT NA No : UN3149

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Hydrogen peroxide and peroxyacetic acid mixtures, stabilized

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 5.1 (8)
Hazard labels (DOT) : 5.1, 8



14.4. Packing group

Packing group (DOT) : II

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes



Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN3149

PERACID CLEAR

Safety Data Sheet

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

DOT Special Provisions (49 CFR 172.102)	: 145 - This entry applies to formulations that neither detonate in the cavitated state nor deflagrate in laboratory testing, show no effect when heated under confinement, exhibit no explosive power, and are thermally stable (self-accelerating decomposition temperature (SADT) at 60 C (140 F) or higher for a 50 kg (110.2 lbs.) package). Formulations not meeting these criteria must be transported under the provisions applicable to the appropriate entry in the Organic Peroxide Table in 173.225 of this subchapter. A2 - Single packaging are not permitted on aircraft. A3 - For combination packaging, if glass inner packaging (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packaging. A6 - For combination packaging, if plastic inner packaging are used, they must be packed in tightly closed metal receptacles before packing in outer packaging. B53 - Packaging must be made of either aluminum or steel. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. IP5 - IBCs must have a device to allow venting. The inlet to the venting device must be located in the vapor space of the IBC under maximum filling conditions. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively. TP6 - The tank must be equipped with a pressure release device which prevent a tank from bursting under fire engulfment conditions (the conditions prescribed in CGA pamphlet S1.2 (see 171.7 of this subchapter) or alternative conditions approved by the Associate Administrator may be used to consider the fire engulfment condition), taking into account the properties of the hazardous material to be transported. TP24 - The portable tank may be fitted with a device to prevent the build up of excess pressure due to the slow decomposition of the hazardous material being transported. The device must be in the vapor space when the tank is filled under maximum filling conditions. This device must also prevent an unacceptable amount of leakage of liquid in the case of overturning.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 152
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 243
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 5 L
DOT Vessel Stowage Location	: D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.
DOT Vessel Stowage Other	: 25 - Protected from sources of heat,66 - Stow "separated from" flammable solids,75 - Stow "separated from" permanganates

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

PERACID CLEAR

Safety Data Sheet

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

SECTION 15: Regulatory information

15.1. US Federal regulations

PERACID CLEAR

CERCLA RQ	5000 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	500 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Hydrogen Peroxide	7722-84-1	Present	Active	
Peracetic Acid	79-21-0	Present	Active	
Acetic Acid	64-19-7	Present	Active	

Hydrogen Peroxide (7722-84-1)

Not subject to reporting requirements of the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

Peracetic Acid (79-21-0)

Subject to reporting requirements of United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	500 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

Acetic Acid (64-19-7)

Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ	5000 lb
-----------	---------

15.2. International regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

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

PERACID CLEAR

Safety Data Sheet

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

Full text of H-phrases	
H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

Safety Data Sheet (SDS), USA ML

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.