

Issue Date 04/03/2015

Revision Date 08/27/2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Hydro Power

Other means of identification

Product Code 1275

Details of the supplier of the safety data sheet

Company Name Blue Cardinal Chemical, LLC
3670 Scarlet Oak Blvd.
St. Louis, MO 63122
800-325-3312

Emergency telephone number

Emergency Telephone CHEMTEL 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

Skin Irrit. 2	H315
Eye Dam. 1	H318

Full text of H-phrases: see section 16

Label elements

Emergency Overview

DANGER

Hazard statements

Causes skin irritation.
Causes serious eye damage.



Appearance: Clear

Physical state: Liquid

Odor: Citrus



Precautionary Statements - Prevention

Wash thoroughly after handling.
Wear eye protection, protective clothing, protective gloves.

Precautionary Statements - Response

If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Precautionary Statements - Storage

Meet the legal requirements. Store in a cool area. Store in a well-ventilated place. Store away from heat.

Precautionary Statements - Disposal

Dispose in a safe manner in accordance with local/national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET	CLASSIFICATION (GHS-US)
Hydrogen Peroxide	7722-84-1	3-7	*	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Undeceth-5	90218-35-2	1-5	*	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Ethoxylated Coco Ammonium Chloride	61791-10-4	1-5		Skin Irrit. 2, H315 Eye Dam. 1, H318

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice	If you feel unwell, seek medical advice (show the label where possible).
Skin Contact	Take off contaminated clothing and wash it before reuse. Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
Inhalation	Remove the victim into fresh air.
Ingestion	Rinse mouth with water. Do NOT induce vomiting. Consult a doctor/medical service if you feel unwell.

Most important symptoms and effect, both acute and delayed

Symptoms	Not expected to present a significant hazard under anticipated conditions of normal use. Inhalation: May cause respiratory irritation. Skin Contact: Causes skin irritation. Eye Contact: Causes serious eye damage. Ingestion: Gastrointestinal complaints. Nausea. Cramps.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

All extinguishing media allowed.

Specific hazards arising from the chemical

This product contains an oxidizer. Mixtures with combustible or flammable materials may ignite easily, burn fiercely, or may explode in contaminated, closed containers.

Protective equipment and precautions for firefighters

Do not enter fire area without proper protective equipment, including respiratory protection. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Isolate from fire, if possible, without unnecessary risk.

For non-emergency personnel: Protective goggles. Gloves. Protective clothing. Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

For emergency responders: Equip cleanup crew with proper protection. Stop leak if safe to do so. Stop release. Ventilate area.

Environmental precautions

Environmental precautions

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

Methods and material for containment and cleaning up

Methods for containment & cleaning up

Contain released substance, pump into suitable containers. This material and its container must be disposed of in a safe way, and as per local legislation.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Incompatible materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

HYDROGEN PEROXIDE (7722-84-1)		
ACGIH	ACGIH TWA (ppm)	1 ppm
ACGIH	ACGIH STEL (ppm)	1 ppm

Individual protection measures, such as personal protective equipment**Personal Protective Equipment**

Use appropriate personal protective equipment when risk assessment indicates this is necessary. Protective goggles. Protective clothing. Gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear, colorless liquid
Color	Colorless
Odor	Citrus
Odor Threshold	No data available

<u>Property</u>	<u>Values</u>
pH	9 - 10
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	> 210 °F Closed Cup
Relative evaporation rate (butyl acetate=1)	No data available
Flammability (solid, gas)	No data available
Explosion limits	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Vapor pressure	No data available
Relative density	No data available
Relative vapor density at 20 °C	No data available
Specific gravity / density	1.01 g/ml
Solubility	Soluble in water.
Log Pow	No data available
Log Kow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
VOC content	< 0.5 %

10. STABILITY AND REACTIVITY

Reactivity

Upon combustion: CO and CO₂ are formed. Thermal decomposition generates : Heat. steam. oxygen gas.

Chemical Stability

Stable under normal conditions.

Possibility Of Hazardous Reactions

Refer to section 10.1 on Reactivity.

Conditions to Avoid

No additional information available.

Incompatible Materials

No additional information available.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity Not classified

UNDECETH-5 (34398-01-1)	
LD50 oral rat	> 1400 mg/kg

ETHOXYLATED COCO AMMONIUM CHLORIDE (61791-10-4)	
LD50 oral rat	> 2000 mg/kg

HYDROGEN PEROXIDE (7722-84-1)	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h

Symptoms

Inhalation: May cause respiratory irritation.
 Skin Contact: Causes skin irritation.
 Eye Contact: Causes serious eye damage.
 Ingestion: Gastrointestinal complaints. Nausea. Cramps.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes skin irritation.
pH: 9 - 10

Serious eye damage/irritation Causes serious eye damage.
pH: 9 - 10

Respiratory or skin sensitisation 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 Not classified

STOT-repeated exposure Not classified

Aspiration hazard Not classified

12. ECOLOGICAL INFORMATION

Ecotoxicity

UNDECETH-5 (34398-01-1)	
LC50 fish 1	< 10 mg/l
EC50 Daphnia 1	< 10 mg/l
ErC50 (algae)	< 10 mg/l

ETHOXYLATED COCO AMMONIUM CHLORIDE (61791-10-4)	
LC50 fish 1	10 - 20 mg/l
ErC50 (algae)	1 - 5 mg/l

HYDROGEN PEROXIDE (7722-84-1)	
LC50 fish 1	16.4 mg/l (96 h; Pimephales promelas; Solution >=50%)
EC50 Daphnia 1	2.4 mg/l (48 h; Daphnia pulex; Solution >=50%)
EC50 other aquatic organisms 1	2.5 mg/l (72 h; Chlorella vulgaris)
LC50 fish 2	37.4 mg/l (96 h; Ictalurus punctatus; Solution >=50%)

Persistence and Degradability

HYDROGEN PEROXIDE (7722-84-1)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available. Photolysis in the air.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Bioaccumulation

HYDROGEN PEROXIDE (7722-84-1)	
Log Pow	-1.36
Bioaccumulative potential	Bioaccumulation: not applicable.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**Disposal of Wastes**

Dispose in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport.

Additional information

Other information

No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

15. REGULATORY INFORMATION

International Inventories

TSCA All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

UNDECETH-5 (34398-01-1)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

HYDROGEN PEROXIDE (7722-84-1)	
Not listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

California Proposition 65 - This product does not contain substances known to the state of California to cause cancer and/or reproductive toxicity.

16. OTHER INFORMATION

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Ox. Liq. 1	Oxidizing liquids Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H271	May cause fire or explosion; strong oxidizer
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation

NFPA	Health hazards	2	Flammability	0	Reactivity	0	Other	
HMIS	Health hazards	2	Flammability	0	Reactivity	0	Personal protection	

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Revision Note

N/A = Not Applicable; N/D = Not Determined

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

End of Safety Data Sheet