

Issue Date 30-Jul-2014

Revision Date 27-Sep-2016

Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name PROPEL

Other means of identification

Product Code 209
UN/ID No. LTD QTY
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Concentrated Laundry Performance Booster
Uses advised against No information available

Manufacturer Address

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1 |
| Oxidizing liquids | Category 3 |
| Oral: Acute Toxicity | Category 4 |
| Specific target organ toxicity-single exposure | Category 3 |

Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage
 May intensify fire; oxidizer
 Harmful if swallowed
 May cause respiratory irritation



Appearance aqueous solution

Physical state liquid

Odor Slight Pungent

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Take any precaution to avoid mixing with combustibles.
 Keep/Store away from clothing/combustible materials
 Do not eat, drink or smoke when using this product
 Use only in well ventilated areas

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray may be used to keep fire exposed containers cool.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical

Oxidizer. Hydrogen peroxide itself is noncombustible. On decomposition, it releases oxygen which may support combustion or intensify a fire. Oxidizing materials may cause spontaneous ignition with combustible materials. Contact with flammables may cause fire or explosion. Risk of explosion if heated under confinement. Sealed containers may rupture when heated.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment. Approach spill from upwind.

Environmental precautions See Section 12 for additional ecological information. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

Methods for containment Completely contain spilled material with dikes or sand bags, etc.

Methods for cleaning up If safe to do so, stop leakage. Recover as much material as possible into containers (do not use original containers) for disposal. Dilute with large quantities of water. Avoid incompatible materials. In case of contact with clothing or combustible materials, avoid product drying out by submersion in or rinsing with water. If allowed to dry out on organic materials or combustibles, ignition may result.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Operate and store in cool, well-ventilated area. Keep away from heat sources. Keep away from incompatible products. Prevent all contact with organics and combustible substances. Use equipment and containers which are compatible with the substance. Before all operations, passivate the piping circuits and vessels. Never return unused product to storage container. Containers and equipment used to handle hydrogen peroxide should be used exclusively for hydrogen peroxide. Hydrogen peroxide should not be stored in an unvented container. Keep in original container, closed. Provide containment for storage of the package. Regularly check condition and temperature of containers. Ensure adequate supply of water in the event of an accident.

Incompatible materials Acids, bases, metals, salts of metals, reducing agents, organic materials, flammable substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------------|------------|--|--|
| Hydrogen peroxide 7722-84-1 | TWA: 1 ppm | TWA: 1 ppm TWA: 1.4 mg/m ³ (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m ³ | IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m ³ |

Appropriate engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Suitable protective clothing. Rubber gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|------------------|-----------------------|--------------------------|
| Physical state | liquid | Odor | Slight Pungent |
| Appearance | aqueous solution | Odor threshold | No information available |
| Color | clear colorless | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------------|--------------------------|-------------------------|
| pH | No information available | |
| Melting point/freezing point | No information available | |
| Boiling point / boiling range | No information available | |
| Flash point | No information available | |
| Evaporation rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |

| | |
|-------------------------------------|--------------------------|
| Vapor pressure | No information available |
| Vapor density | No information available |
| Specific Gravity | 1.070 |
| Water solubility | Soluble in water |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Kinematic viscosity | No information available |
| Dynamic viscosity | No information available |
| Explosive properties | No information available |
| Oxidizing properties | No information available |

Other Information

| | |
|-------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Density | No information available |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Excessive heat and contamination of any kind.

Incompatible materials

Acids, bases, metals, salts of metals, reducing agents, organic materials, flammable substances.

Hazardous Decomposition Products

Oxygen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| | |
|----------------------------|---|
| Product Information | No data available |
| Inhalation | May cause irritation of respiratory tract. |
| Eye contact | Risk of serious damage to eyes. |
| Skin Contact | Contact causes severe skin irritation and possible burns. |
| Ingestion | Harmful if swallowed. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|---------------------|---|----------------------------------|
| Hydrogen peroxide 7722-84-1 | = 801 mg/kg (Rat) | = 4060 mg/kg (Rat) = 2000 mg/kg (Rabbit) | = 2 g/m ³ (Rat) 4 h |

Information on toxicological effects

Symptoms No information available.

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

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--------------------------------|-------|---------|-----|------|
| Hydrogen peroxide 7722-84-1 | A3 | Group 3 | - | - |

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Toxic to aquatic life with long lasting effects

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|--------------------------------|--|--|--|
| Hydrogen peroxide 7722-84-1 | 2.5: 72 h <i>Chlorella vulgaris</i> mg/L EC50 | 16.4: 96 h <i>Pimephales promelas</i> mg/L LC50 18 - 56: 96 h <i>Lepomis</i> <i>macrochirus</i> mg/L LC50 static 10.0 - 32.0: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static | 7.7: 24 h <i>Daphnia magna</i> mg/L EC50 18 - 32: 48 h <i>Daphnia magna</i> mg/L EC50 Static |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

| Chemical Name | California Hazardous Waste Status |
|--------------------------------|---|
| Hydrogen peroxide 7722-84-1 | Toxic Corrosive Ignitable Reactive |

14. TRANSPORT INFORMATION

| | |
|-----------------------------|-------------------------------------|
| DOT | Regulated |
| UN/ID No. | UN2014 |
| Proper shipping name | Hydrogen Peroxide, Aqueous Solution |
| Hazard Class | 5.1 (8) |
| Packing Group | II |

15. REGULATORY INFORMATION

International Inventories

| | |
|----------------------|-----------------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Does not comply |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| | |
|--|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | Yes |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|--------------------------------|--------------------------|----------------|--------------------------|
| Hydrogen peroxide 7722-84-1 | - | 1000 lb | - |

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| Hydrogen peroxide 7722-84-1 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

| |
|------------------------------|
| 16. OTHER INFORMATION |
|------------------------------|

| | | | | |
|-------------|------------------|----------------|--------------------|-------------------------------------|
| NFPA | Health hazards 3 | Flammability 0 | Instability 1 | Physical and Chemical Properties OX |
| HMIS | Health hazards 3 | Flammability 0 | Physical hazards 1 | Personal protection X |

Prepared By lmt
 Issue Date 08-Aug-2014
 Revision Date 27-Sep-2016

Revision Note

No information available

Disclaimer

The information provided in this Material 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