



# SAFETY DATA SHEET

Issue Date 19-Mar-2014

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Version 2

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

**Product Name** PROTECT

### Other means of identification

**Product Code** 210  
**UN/ID No.** NA1760  
**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Warewashing detergent with corrosion inhibitors.  
**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                |

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Causes severe skin burns and eye damage



**Appearance** No information available      **Physical state** liquid      **Odor** Odorless Slight chlorine

#### **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

#### **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician  
Specific treatment (see Section 4 on this label)  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Immediately call a POISON CENTER or doctor/physician  
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

•Very toxic to aquatic life with long lasting effects

•Very toxic to aquatic life

Unknown Acute Toxicity 4.9% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Chemical Name       | CAS No.   | Weight-% | Trade Secret |
|---------------------|-----------|----------|--------------|
| Sodium hydroxide    | 1310-73-2 | 6.5      |              |
| Sodium hypochlorite | 7681-52-9 | 2.6      |              |

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

**4. FIRST AID MEASURES****First aid measures**

**General advice** Immediate medical attention is required.

**Eye contact** Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

**Skin Contact** Flush with water for 15 minutes. Get medical attention. Remove contaminated clothing and wash before reuse.

**Inhalation** Remove victim to fresh air. If breathing difficulty occurs or persists, get medical attention.

**Ingestion** Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

**Self-protection of the first aider** Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Causes severe irritation and or burns.

**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.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical**

If the stock solution container breaks, the solution should be handled with care as it is corrosive. Direct contact with water can cause a violent exothermic reaction.

**Hazardous combustion products** Toxic fumes of sodium oxide.

**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. Cool containers with flooding quantities of water until well after fire is out.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

|                                  |                                                                                                                                                                                                                                                        |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>      | Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment.                                                                                                                                                       |
| <b>Environmental precautions</b> | See Section 12 for additional ecological information. Prevent run-off into ground or surface waters or sewers.                                                                                                                                         |
| <b>Methods for containment</b>   | Completely contain spilled material with dikes or sand bags, etc.                                                                                                                                                                                      |
| <b>Methods for cleaning up</b>   | Recover as much material as possible into containers for disposal or reuse. Remaining material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal. |

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

|                                |                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Advice on safe handling</b> | 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. NEVER add water to product. ALWAYS add product, with constant stirring, slowly to surface of water to minimize heat generation and spattering. |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Conditions for safe storage, including any incompatibilities**

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Conditions</b>     | Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored.                                                                                                                                                                                                                                   |
| <b>Incompatible materials</b> | Acids, halogenated compounds, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys. Avoid contact with leather, wool, organic nitro compounds. Acids, ammonia, ether, halogenated compounds, oxidizing agents, reducing agents, oxidizable or combustible materials such as wood, cloth or organic materials, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys. Avoid contact with heavy metal such as iron, magnesium, aluminum, manganese, chromium, nickel and their alloys. Avoid contact with leather, wool, organic nitro compounds. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

| Chemical Name                 | ACGIH TLV                    | OSHA PEL                                                           | NIOSH IDLH                                                 |
|-------------------------------|------------------------------|--------------------------------------------------------------------|------------------------------------------------------------|
| Sodium hydroxide<br>1310-73-2 | Ceiling: 2 mg/m <sup>3</sup> | TWA: 2 mg/m <sup>3</sup><br>(vacated) Ceiling: 2 mg/m <sup>3</sup> | IDLH: 10 mg/m <sup>3</sup><br>Ceiling: 2 mg/m <sup>3</sup> |

#### Appropriate engineering controls

Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

|                                 |                                                                                                                                                                                                                                                                                                                         |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye/face protection</b>      | Wear safety glasses with side shields (or goggles).                                                                                                                                                                                                                                                                     |
| <b>Skin and body protection</b> | If contact is anticipated, wear protective clothing appropriate to use conditions.                                                                                                                                                                                                                                      |
| <b>Respiratory protection</b>   | 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** Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                       |                          |                       |                          |
|-----------------------|--------------------------|-----------------------|--------------------------|
| <b>Physical state</b> | liquid                   | <b>Odor</b>           | Odorless Slight chlorine |
| <b>Appearance</b>     | No information available | <b>Odor threshold</b> | No information available |
| <b>Color</b>          | clear light yellow       |                       |                          |

| Property                      | Values                   | Remarks • Method |
|-------------------------------|--------------------------|------------------|
| pH                            | >13                      |                  |
| 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              | 1.176                    |                  |
| 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

Will react with some metals forming flammable hydrogen gas. Will react with acids to produce chlorine gas.

### Incompatible materials

Acids, halogenated compounds, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys. Avoid contact with leather, wool, organic nitro compounds. Acids, ammonia, ether, halogenated compounds, oxidizing agents, reducing agents, oxidizable or combustible materials such as wood, cloth or organic materials, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys. Avoid contact with heavy metal such as iron, magnesium, aluminum, manganese, chromium, nickel and their alloys. Avoid contact with leather, wool, organic nitro compounds.

### Hazardous Decomposition Products

Toxic fumes of sodium oxide, HOCL, chlorine, HCl, NaCl, sodium chlorate and oxygen.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                     |                    |
|---------------------|--------------------|
| Product Information | No data available  |
| Inhalation          | No data available. |
| Eye contact         | No data available. |
| Skin Contact        | No data available. |
| Ingestion           | No data available. |

| Chemical Name                    | Oral LD50            | Dermal LD50              | Inhalation LC50 |
|----------------------------------|----------------------|--------------------------|-----------------|
| Sodium hydroxide<br>1310-73-2    | -                    | = 1350 mg/kg ( Rabbit )  | -               |
| Sodium hypochlorite<br>7681-52-9 | = 8200 mg/kg ( Rat ) | > 10000 mg/kg ( Rabbit ) | -               |

### 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 |
|---------------|-------|------|-----|------|
|---------------|-------|------|-----|------|

|                                  |   |         |   |   |
|----------------------------------|---|---------|---|---|
| Sodium hypochlorite<br>7681-52-9 | - | Group 3 | - | - |
|----------------------------------|---|---------|---|---|

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

#### Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 4.9% of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

8.9% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name                    | Algae/aquatic plants                          | Fish                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Crustacea                                                                                  |
|----------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Sodium hydroxide<br>1310-73-2    | -                                             | 45.4: 96 h Oncorhynchus mykiss<br>mg/L LC50 static                                                                                                                                                                                                                                                                                                                                                                                                       | -                                                                                          |
| Sodium hypochlorite<br>7681-52-9 | 0.095: 24 h Skeletonema costatum<br>mg/L EC50 | 0.06 - 0.11: 96 h Pimephales<br>promelas mg/L LC50 flow-through<br>4.5 - 7.6: 96 h Pimephales promelas<br>mg/L LC50 static 0.4 - 0.8: 96 h<br>Lepomis macrochirus mg/L LC50<br>static 0.28 - 1: 96 h Lepomis<br>macrochirus mg/L LC50<br>flow-through 0.05 - 0.771: 96 h<br>Oncorhynchus mykiss mg/L LC50<br>flow-through 0.03 - 0.19: 96 h<br>Oncorhynchus mykiss mg/L LC50<br>semi-static 0.18 - 0.22: 96 h<br>Oncorhynchus mykiss mg/L LC50<br>static | 2.1: 96 h Daphnia magna mg/L<br>EC50 0.033 - 0.044: 48 h Daphnia<br>magna 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** Rinse empty container and offer for recycling.

| Chemical Name                 | California Hazardous Waste Status |
|-------------------------------|-----------------------------------|
| Sodium hydroxide<br>1310-73-2 | Toxic<br>Corrosive                |

## 14. TRANSPORT INFORMATION

#### DOT

-

|                       |                                                      |
|-----------------------|------------------------------------------------------|
| UN/ID No.             | NA1760                                               |
| Proper shipping name  | Sodium Hydroxide Solution Compounds, Cleaning Liquid |
| Hazardous ingredients | (Sodium Hydroxide/Sodium Hypochlorite)               |
| Hazard Class          | 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 | No  |
| 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)

| Chemical Name                    | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|----------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sodium hydroxide<br>1310-73-2    | 1000 lb                     | -                      | -                         | X                          |
| Sodium hypochlorite<br>7681-52-9 | 100 lb                      | -                      | -                         | X                          |

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)                  |
|----------------------------------|--------------------------|----------------|-------------------------------------------|
| Sodium hydroxide<br>1310-73-2    | 1000 lb                  | -              | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |
| Sodium hypochlorite<br>7681-52-9 | 100 lb                   | -              | RQ 100 lb final RQ<br>RQ 45.4 kg final RQ |

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 |
|----------------------------------|------------|---------------|--------------|
| Sodium hydroxide<br>1310-73-2    | X          | X             | X            |
| Sodium hypochlorite<br>7681-52-9 | X          | X             | X            |

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

|      |                  |                |                    |                                    |
|------|------------------|----------------|--------------------|------------------------------------|
| NFPA | Health hazards 2 | Flammability 0 | Instability 1      | Physical and Chemical Properties - |
| HMIS | Health hazards 2 | Flammability 0 | Physical hazards 1 | Personal protection X              |

Prepared By lmt  
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Revision Date 05-Jun-2014  
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