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

Product Name
PROTECT SM

Other means of identification
Product Code 365
UN/ID No. UN3253
Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use General Cleaner.
Uses advised against No information available

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

Emergency telephone number
Chemetrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification
Acute toxicity - Oral Category 4
Acute toxicity - Inhalation (Dusts/Mists) Category 4
Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1
Specific target organ toxicity (single exposure) Category 3 - (H335)

Label elements

Appearance dry, free flowing granules
Physical state powder
Odor None

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection
Use only in well-ventilated areas
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: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Other Information

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>6834-92-0</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

*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. If irritation persists after rinsing, 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.

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

**Symptoms**
Corrosive to eyes, skin, and digestive tract. Causes eye and skin burns. Dust corrosive to respiratory tract. Corrosive to mouth, esophagus, and stomach. May cause permanent eye damage.

**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 None known.

Specific hazards arising from the chemical
No information available.

Hazardous combustion products
If stock solution container breaks, the product should be handled with care as it is corrosive. Under fire conditions, toxic, corrosive fumes are emitted. Direct contact with water can cause an exothermic reaction.

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.

Environmental precautions
See Section 12 for additional ecological information. Prevent run-off into ground or surface waters or sewers.

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

Methods for cleaning up
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

Advice on safe handling
Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wear appropriate protective clothing/equipment. Do not breathe dust. Use with adequate ventilation. Do not ingest.

Conditions for safe storage, including any incompatibilities

Storage Conditions
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.

Incompatible materials
Avoid strong oxidizing agents. Reacts with strong acids, generating heat and carbon dioxide. May react with ammonium salt solutions. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc. Carbon monoxide may be produced on contact with reducing sugars.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
### Control parameters

#### Exposure Guidelines

**Appropriate engineering controls**

- Showers
- Eyewash stations
- Ventilation systems.

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

- **Eye/face protection**: Wear safety glasses with side shields (or goggles).
- **Skin and body protection**: If contact is anticipated, wear protective clothing appropriate to use conditions.
- **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

- Handle in accordance with good industrial hygiene and safety practice.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>powder</td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>dry, free flowing granules</td>
<td></td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>white</td>
<td></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
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</tr>
<tr>
<td><strong>pH</strong></td>
<td>12.0</td>
<td>1% Solution</td>
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<tr>
<td><strong>Melting point/freezing point</strong></td>
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</tr>
<tr>
<td><strong>Boiling point / boiling range</strong></td>
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</tr>
<tr>
<td><strong>Flash point</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
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</tr>
<tr>
<td><strong>Flammability Limit in Air</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Upper flammability limit:</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Lower flammability limit:</strong></td>
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</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
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</tr>
<tr>
<td><strong>Vapor density</strong></td>
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</tr>
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<td><strong>Specific Gravity</strong></td>
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</tr>
<tr>
<td><strong>Water solubility</strong></td>
<td>Soluble in water</td>
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</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
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</tr>
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<td><strong>Partition coefficient</strong></td>
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</tr>
<tr>
<td><strong>Autoignition temperature</strong></td>
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</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
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</tr>
<tr>
<td><strong>Kinematic viscosity</strong></td>
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<tr>
<td><strong>Dynamic viscosity</strong></td>
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</tr>
<tr>
<td><strong>Explosive properties</strong></td>
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<tr>
<td><strong>Oxidizing properties</strong></td>
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<tr>
<td><strong>Other Information</strong></td>
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<tr>
<td><strong>Softening point</strong></td>
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</tr>
<tr>
<td><strong>Molecular weight</strong></td>
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</tr>
<tr>
<td><strong>VOC Content (%)</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Density</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Bulk density</strong></td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
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
Avoid extreme heat. dust formation. Humidity.

Incompatible materials
Avoid strong oxidizing agents. Reacts with strong acids, generating heat and carbon dioxide. May react with ammonium salt solutions. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc. Carbon monoxide may be produced on contact with reducing sugars.

Hazardous Decomposition Products

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
No data available

   Inhalation
   May cause irritation of respiratory tract.

   Eye contact
   Moderately irritating to the eyes. Risk of serious damage to eyes.

   Skin Contact
   Contact causes severe skin irritation and possible burns.

   Ingestion
   Ingestion causes burns of the upper digestive and respiratory tracts.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>= 4090 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>6834-92-0</td>
<td>= 600 mg/kg (Rat)</td>
<td>-</td>
</tr>
</tbody>
</table>

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.

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

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 1775 mg/kg
ATEmix (dermal) 79479 mg/kg
ATEmix (inhalation-dust/mist) 3.8 mg/l
12. ECOLOGICAL INFORMATION

Ecotoxicity

10% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>242: 120 h Nitzschia mg/L EC50</td>
<td>300: 96 h Lepomis macrochirus mg/L LC50 static 310 - 1220: 96 h Pimephales promelas mg/L LC50 static</td>
<td>265: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>-</td>
<td>210: 96 h Brachydanio rerio mg/L LC50 semi-static 210: 96 h Brachydanio rerio mg/L LC50</td>
<td>216: 96 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>Corrosive</td>
</tr>
<tr>
<td>497-19-8</td>
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</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
Regulated
UN/ID No.
UN3253
Proper shipping name
Disodium trioxosilicate, Mixture
Hazard Class
8
Packing Group
III

15. REGULATORY INFORMATION

International Inventories
TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS  Complies
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)

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

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information
EPA Pesticide Registration Number  Not Applicable

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health hazards</td>
<td>Flammability</td>
<td>Physical hazards</td>
<td>Personal protection</td>
</tr>
</tbody>
</table>

Prepared By  lmt
Issue Date  10-Apr-2015
Revision Date 10-Apr-2015
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