

## 1. Identification

|                                                        |                                                                                                            |                       |  |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------|--|
| Product identifier                                     | SODIUM CARBONATE, ANHYDROUS, GRANULAR, REAGENT (ACS)                                                       |                       |  |
| Other means of identification                          |                                                                                                            |                       |  |
| Product code                                           | 3594                                                                                                       |                       |  |
| CAS number                                             | 497-19-8                                                                                                   |                       |  |
| Synonyms                                               | SODA ASH                                                                                                   |                       |  |
| Recommended use                                        | professional, scientific and technical activities: other professional, scientific and technical activities |                       |  |
| Recommended restrictions                               | None known.                                                                                                |                       |  |
| Manufacturer/Importer/Supplier/Distributor information |                                                                                                            |                       |  |
| Manufacturer                                           |                                                                                                            |                       |  |
| Company name                                           | GFS Chemicals, Inc.                                                                                        |                       |  |
| Address                                                | P.O. Box 245                                                                                               |                       |  |
|                                                        | Powell, OH 43065                                                                                           |                       |  |
|                                                        | United States                                                                                              |                       |  |
|                                                        |                                                                                                            |                       |  |
| Telephone                                              | Phone                                                                                                      | 740-881-5501          |  |
|                                                        | Toll Free                                                                                                  | 800-858-9682          |  |
|                                                        | Fax                                                                                                        | 740-881-5989          |  |
| Website                                                | www.gfschemicals.com                                                                                       |                       |  |
| E-mail                                                 | service@gfschemicals.com                                                                                   |                       |  |
| Emergency phone number                                 | Emergency Assistance                                                                                       | Chemtrec 800-424-9300 |  |

## 2. Hazard(s) identification

|                              |                                   |             |
|------------------------------|-----------------------------------|-------------|
| <b>Physical hazards</b>      | Not classified.                   |             |
| <b>Health hazards</b>        | Serious eye damage/eye irritation | Category 2A |
| <b>Environmental hazards</b> | Not classified.                   |             |
| <b>OSHA defined hazards</b>  | Not classified.                   |             |

### Label elements



|                                                  |                                                                                                                                                                                                                                                      |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Signal word</b>                               | Warning                                                                                                                                                                                                                                              |
| <b>Hazard statement</b>                          | Causes serious eye irritation.                                                                                                                                                                                                                       |
| <b>Precautionary statement</b>                   |                                                                                                                                                                                                                                                      |
| Prevention                                       | Wash thoroughly after handling. Wear eye protection/face protection.                                                                                                                                                                                 |
| Response                                         | Get medical attention if irritation develops or persists. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| Storage                                          | Store away from incompatible materials.                                                                                                                                                                                                              |
| Disposal                                         | Dispose of waste and residues in accordance with local authority requirements.                                                                                                                                                                       |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None known.                                                                                                                                                                                                                                          |
| <b>Supplemental information</b>                  | None.                                                                                                                                                                                                                                                |

## 3. Composition/information on ingredients

### Substances

| Chemical name    | Common name and synonyms | CAS number | %   |
|------------------|--------------------------|------------|-----|
| SODIUM CARBONATE | SODA ASH                 | 497-19-8   | 100 |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

|                   |                                                                     |
|-------------------|---------------------------------------------------------------------|
| <b>Inhalation</b> | Move to fresh air. Call a physician if symptoms develop or persist. |
|-------------------|---------------------------------------------------------------------|

Material name: SODIUM CARBONATE, ANHYDROUS, GRANULAR, REAGENT (ACS)

|                                                                               |                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Skin contact</b>                                                           | Wash off with soap and water. Get medical attention if irritation develops and persists.                                                                                                                             |
| <b>Eye contact</b>                                                            | Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| <b>Ingestion</b>                                                              | Rinse mouth. Get medical attention if symptoms occur.                                                                                                                                                                |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Dusts may irritate the respiratory tract, skin and eyes.                                                       |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.                                                                                               |
| <b>General information</b>                                                    | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.                                                                                                     |

## 5. Fire-fighting measures

|                                                                      |                                                                                               |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>                                  | Use extinguishing agent suitable for type of surrounding fire.                                |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| <b>Specific hazards arising from the chemical</b>                    | None known.                                                                                   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                          | Use water spray to cool unopened containers.                                                  |
| <b>Specific methods</b>                                              | Use standard firefighting procedures and consider the hazards of other involved materials.    |
| <b>General fire hazards</b>                                          | No unusual fire or explosion hazards noted.                                                   |

## 6. Accidental release measures

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Methods and materials for containment and cleaning up</b>               | <p>Stop leak if you can do so without risk. Avoid the generation of dusts during clean-up. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. This product is miscible in water. Should not be released into the environment. Prevent entry into waterways, sewer, basements or confined areas. Clean up in accordance with all applicable regulations.</p> <p>Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.</p> <p>Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p> |
| <b>Environmental precautions</b>                                           | Avoid discharge into drains, water courses or onto the ground.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## 7. Handling and storage

|                                                                     |                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautions for safe handling</b>                                | Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
| <b>Conditions for safe storage, including any incompatibilities</b> | Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).                                                                                      |

## 8. Exposure controls/personal protection

|                                     |                                                                      |
|-------------------------------------|----------------------------------------------------------------------|
| <b>Occupational exposure limits</b> | This substance has no PEL, TLV, or other recommended exposure limit. |
| <b>Biological limit values</b>      | No biological exposure limits noted for the ingredient(s).           |

|                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Provide eyewash station. |
| <b>Individual protection measures, such as personal protective equipment</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Eye/face protection</b>                                                   | Do not get this material in contact with eyes. Wear chemical goggles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Skin protection</b>                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Hand protection</b>                                                       | Wear appropriate chemical resistant gloves.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Other</b>                                                                 | Wear suitable protective clothing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Respiratory protection</b>                                                | No personal respiratory protective equipment normally required. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Wear respirator if there is dust formation.                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Thermal hazards</b>                                                       | Wear appropriate thermal protective clothing, when necessary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>General hygiene considerations</b>                                        | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.                                                                                                                                                                                                                                                                                                                                                                                    |

## 9. Physical and chemical properties

|                                                     |                      |
|-----------------------------------------------------|----------------------|
| <b>Appearance</b>                                   |                      |
| <b>Physical state</b>                               | Solid.               |
| <b>Form</b>                                         | Granular.            |
| <b>Color</b>                                        | White.               |
| <b>Odor</b>                                         | Odorless.            |
| <b>Odor threshold</b>                               | Not available.       |
| <b>pH</b>                                           | 11.4 - 11.7          |
| <b>Melting point/freezing point</b>                 | 1563.8 °F (851 °C)   |
| <b>Initial boiling point and boiling range</b>      | Not available.       |
| <b>Flash point</b>                                  | Not available.       |
| <b>Evaporation rate</b>                             | Not available.       |
| <b>Flammability (solid, gas)</b>                    | Not available.       |
| <b>Upper/lower flammability or explosive limits</b> |                      |
| <b>Flammability limit - lower (%)</b>               | Not available.       |
| <b>Flammability limit - upper (%)</b>               | Not available.       |
| <b>Explosive limit - lower (%)</b>                  | Not available.       |
| <b>Explosive limit - upper (%)</b>                  | Not available.       |
| <b>Vapor pressure</b>                               | Not available.       |
| <b>Vapor density</b>                                | Not available.       |
| <b>Relative density</b>                             | Not available.       |
| <b>Solubility(ies)</b>                              |                      |
| <b>Solubility (water)</b>                           | soluble              |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.       |
| <b>Auto-ignition temperature</b>                    | Not available.       |
| <b>Decomposition temperature</b>                    | 752 °F (400 °C)      |
| <b>Viscosity</b>                                    | Not available.       |
| <b>Other information</b>                            |                      |
| <b>Density</b>                                      | 2.53 g/cm3 estimated |
| <b>Explosive properties</b>                         | Not explosive.       |
| <b>Molecular formula</b>                            | Na2CO3               |
| <b>Molecular weight</b>                             | 105.99 g/mol         |

|                             |                |
|-----------------------------|----------------|
| <b>Oxidizing properties</b> | Not oxidizing. |
| <b>Specific gravity</b>     | 2.53           |

## 10. Stability and reactivity

|                                           |                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.                                                   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials. Hygroscopic, protect from moisture and moist air.        |
| <b>Incompatible materials</b>             | Strong oxidizing agents.                                                                      |
| <b>Hazardous decomposition products</b>   | Carbon oxides.                                                                                |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |                                        |
|---------------------|----------------------------------------|
| <b>Inhalation</b>   | Dust may irritate respiratory system.  |
| <b>Skin contact</b> | Dust or powder may irritate the skin.  |
| <b>Eye contact</b>  | Causes serious eye irritation.         |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard. |

|                                                                                     |                                                                                                                                                                |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Dusts may irritate the respiratory tract, skin and eyes. |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Information on toxicological effects

|                       |            |
|-----------------------|------------|
| <b>Acute toxicity</b> | Not known. |
|-----------------------|------------|

| Product                         | Species    | Test Results         |
|---------------------------------|------------|----------------------|
| SODIUM CARBONATE (CAS 497-19-8) |            |                      |
| <b>Acute</b>                    |            |                      |
| <b>Inhalation</b>               |            |                      |
| LC50                            | Guinea pig | 0.8 mg/l, 2 Hours    |
|                                 | Mouse      | 1.2 mg/l, 2 Hours    |
|                                 | Rat        | 2.3 mg/l, 2 Hours    |
| <b>Oral</b>                     |            |                      |
| LD50                            | Rat        | 4090 mg/kg           |
| <b>Other</b>                    |            |                      |
| LD50                            | Mouse      | 2210 mg/kg           |
|                                 |            | 116.6 mg/kg, 30 Days |

\* Estimates for product may be based on additional component data not shown.

|                                  |                                                        |
|----------------------------------|--------------------------------------------------------|
| <b>Skin corrosion/irritation</b> | Prolonged skin contact may cause temporary irritation. |
|----------------------------------|--------------------------------------------------------|

|                                          |                                |
|------------------------------------------|--------------------------------|
| <b>Serious eye damage/eye irritation</b> | Causes serious eye irritation. |
|------------------------------------------|--------------------------------|

### Respiratory or skin sensitization

|                                  |                                                           |
|----------------------------------|-----------------------------------------------------------|
| <b>Respiratory sensitization</b> | Not a respiratory sensitizer.                             |
| <b>Skin sensitization</b>        | This product is not expected to cause skin sensitization. |

|                               |                                                                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Germ cell mutagenicity</b> | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
|-------------------------------|------------------------------------------------------------------------------------------------------------------|

|                        |                                                   |
|------------------------|---------------------------------------------------|
| <b>Carcinogenicity</b> | Not classifiable as to carcinogenicity to humans. |
|------------------------|---------------------------------------------------|

### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

### US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

|                              |                                                                              |
|------------------------------|------------------------------------------------------------------------------|
| <b>Reproductive toxicity</b> | This product is not expected to cause reproductive or developmental effects. |
|------------------------------|------------------------------------------------------------------------------|

|                                                         |                 |
|---------------------------------------------------------|-----------------|
| <b>Specific target organ toxicity - single exposure</b> | Not classified. |
|---------------------------------------------------------|-----------------|

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product                         | Species |                                 | Test Results                 |
|---------------------------------|---------|---------------------------------|------------------------------|
| SODIUM CARBONATE (CAS 497-19-8) |         |                                 |                              |
| Aquatic                         |         |                                 |                              |
| Crustacea                       | EC50    | Water flea (Ceriodaphnia dubia) | 156.6 - 298.9 mg/l, 48 hours |
| Fish                            | LC50    | Bluegill (Lepomis macrochirus)  | 300 mg/l, 96 hours           |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** None known.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Dilute waste in large quantities of water and flush into sewer connected to wastewater treatment system in compliance with applicable laws and regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312**  
**Hazardous chemical** Yes

**SARA 313 (TRI reporting)**  
Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations** California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

| Country(s) or region        | Inventory name                                                         | On inventory (yes/no)* |
|-----------------------------|------------------------------------------------------------------------|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)                                         | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | Yes                    |
| Korea                       | Existing Chemicals List (ECL)                                          | Yes                    |
| New Zealand                 | New Zealand Inventory                                                  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** June-07-2013

**Revision date** June-22-2017

**Version #** 02

**Disclaimer** 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. GFS Chemicals, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.