



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Calcium Glucoheptonate, 38%

**Other means of identification**

**SDS number** 320039-01

**Recommended use** Not available.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** Harcros Chemicals Inc  
**Address** 5200 Speaker Rd.  
Kansas City, KS 66106  
United States  
**Telephone** Main Telephone Number 1-913-321-3131  
**Website** www.harcros.com  
**E-mail** custserv@harcros.com  
**Emergency phone number** CHEMTREC 1-800-424-9300  
CHEMTREC 1-703-527-3887 (call collect)

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Not classified.

**OSHA defined hazards** Combustible dust Not applicable  
Pyrophoric gas Not applicable  
Simple asphyxiant Not applicable

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** The mixture does not meet the criteria for classification.

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** Not applicable.

## 3. Composition/information on ingredients

**Mixtures**

| Chemical name                            | Common name and synonyms | CAS number | %         |
|--|--------------------------|------------|-----------|
| Calcium Glucoheptonate                   |                          | 17140-60-2 | 38        |
| Sodium Chloride                          |                          | 7647-14-5  | 10 - < 20 |
| Other components below reportable levels |                          |            | 50 - < 60 |

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

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

|   |  |
|---|--|
| <b>Skin contact</b>   | Wash off with soap and water. Get medical attention if irritation develops and persists.                         |
| <b>Eye contact</b>  | Rinse with water. 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>                     | Direct contact with eyes may cause temporary irritation.   |
| <b>Indication of immediate medical attention and special treatment needed</b> | Treat symptomatically.   |
| <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>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).                      |
| <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>                    | During fire, gases hazardous to health may be formed.   |
| <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>                          | Move containers from fire area if you can do so without risk.                                 |
| <b>Specific methods</b>  | Move containers from fire area if you can do so without risk.                                 |
| <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. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.   |
| <b>Methods and materials for containment and cleaning up</b>               | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.<br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.<br>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>   | Avoid discharge into drains, water courses or onto the ground.   |

## 7. Handling and storage

|   |  |
|---|--|
| <b>Precautions for safe handling</b>                                | Observe good industrial hygiene practices. |
| <b>Conditions for safe storage, including any incompatibilities</b> | Not available.                             |

## 8. Exposure controls/personal protection

|  |  |
|--|--|
| <b>Occupational exposure limits</b>  | No exposure limits noted for ingredient(s).  |
| <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. It is recommended that users of this product perform a risk assessment to determine the appropriate PPE. |
| <b>Individual protection measures, such as personal protective equipment</b> |  |
| <b>Eye/face protection</b>   | If contact is likely, safety glasses with side shields are recommended. Eye Wash Fountain should be available.   |
| <b>Hand protection</b>   | For prolonged or repeated skin contact use suitable protective gloves.   |
| <b>Skin protection</b>   |  |

|                                       |   |
|---------------------------------------|---|
| <b>Other</b>                          | Wear suitable protective clothing.  |
| <b>Respiratory protection</b>         | In case of insufficient ventilation, wear suitable respiratory equipment.   |
| <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>                                   | Colored Liquid. |
| <b>Physical state</b>                               | Liquid.         |
| <b>Form</b>   | Liquid.         |
| <b>Color</b>  | Brown           |
| <b>Odor</b>   | Caramel         |
| <b>Odor threshold</b>                               | Not available.  |
| <b>pH</b>   | 6.8             |
| <b>Melting point/freezing point</b>                 | 6.8 °F (-14 °C) |
| <b>Initial boiling point and boiling range</b>      | Not available.  |
| <b>Flash point</b>                                  | Does not burn.  |
| <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>                    | Not available.  |
| <b>Viscosity</b>                                    | Not available.  |
| <b>Other information</b>                            |                 |
| <b>Molecular formula</b>                            | C7H14O8.1/2Ca   |
| <b>Specific gravity</b>                             | 1.268           |

## 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>                | Not available.  |
| <b>Incompatible materials</b>             | Strong oxidizing agents.  |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |   |
|---------------------|---|
| <b>Ingestion</b>    | Due to lack of data the classification is not possible. |
| <b>Inhalation</b>   | Due to lack of data the classification is not possible. |
| <b>Skin contact</b> | May be irritating to the skin.                          |
| <b>Eye contact</b>  | May be irritating to eyes.                              |

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

#### Acute toxicity

| Product                                   | Species | Test Results               |
|---|---------|----------------------------|
| Calcium Glucoheptonate, 38% (CAS Mixture) |         |                            |
| <b>Acute</b>                              |         |                            |
| <i>Oral</i>                               |         |                            |
| LD50                                      | Mouse   | 36363.6367 mg/kg estimated |
|   | Rat     | 27272.7266 mg/kg estimated |
| <i>Other</i>                              |         |                            |
| LD50                                      | Mouse   | 23654.5449 mg/kg estimated |
| Components                                | Species | Test Results               |

|                                 |       |            |
|---------------------------------|-------|------------|
| Sodium Chloride (CAS 7647-14-5) |       |            |
| <b>Acute</b>                    |       |            |
| <i>Oral</i>                     |       |            |
| LD50                            | Mouse | 4000 mg/kg |
|                                 | Rat   | 3000 mg/kg |
| <i>Other</i>                    |       |            |
| LD50                            | Mouse | 2602 mg/kg |

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

|   |  |
|---|--|
| <b>Skin corrosion/irritation</b>  | Not available.   |
| <b>Serious eye damage/eye irritation</b>                                  | Due to lack of data the classification is not possible.  |
| <b>Respiratory or skin sensitization</b>                                  |  |
| <b>Respiratory sensitization</b>  | Due to lack of data the classification is not possible.  |
| <b>Skin sensitization</b>   | Not available.   |
| <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>  | Due to lack of data the classification is not possible.  |
| <b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |  |
| Not listed.   |  |
| <b>Reproductive toxicity</b>  | Due to lack of data the classification is not possible.  |
| <b>Specific target organ toxicity - single exposure</b>                   | Due to lack of data the classification is not possible.  |
| <b>Specific target organ toxicity - repeated exposure</b>                 | Due to lack of data the classification is not possible.  |
| <b>Aspiration hazard</b>  | Due to lack of data the classification is not possible.  |

## 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                        |
|---|---------|--------------------------------------|-------------------------------------|
| Calcium Glucoheptonate, 38% (CAS Mixture) |         |                                      |                                     |
| Crustacea                                 | EC50    | Daphnia                              | 8344.5459 mg/l, 48 hours estimated  |
| Fish                                      | LC50    | Fish                                 | 78232.3516 mg/l, 96 hours estimated |
| Components                                | Species |                                      | Test Results                        |
| Sodium Chloride (CAS 7647-14-5)           |         |                                      |                                     |
| <b>Aquatic</b>                            |         |                                      |                                     |
| Crustacea                                 | EC50    | Water flea (Daphnia magna)           | 340.7 - 469.2 mg/l, 48 hours        |
| Fish                                      | LC50    | Fathead minnow (Pimephales promelas) | 6020 - 7070 mg/l, 96 hours          |

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

|                                      |   |
|--------------------------------------|---|
| <b>Persistence and degradability</b> | No data is available on the degradability of this product.  |
| <b>Bioaccumulative potential</b>     | No data available.  |
| <b>Mobility in soil</b>              | No data available.  |
| <b>Other adverse effects</b>         | 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

|  |  |
|--|--|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site.   |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.   |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| <b>Waste from residues / unused products</b> | 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). |
| <b>Contaminated packaging</b>                | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.       |

### 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 available.

### 15. Regulatory information

#### US federal regulations

**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.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

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

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

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**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

### US. Massachusetts RTK - Substance List

Not regulated.

### US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

### US. Pennsylvania RTK - Hazardous Substances

Not regulated.

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

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)             | No                     |
| 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)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| 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** 02-25-2014

**Version #** 01

**HMIS® ratings**

Health: 1  
Flammability: 0  
Physical hazard: 0

**NFPA ratings**

Health: 0  
Flammability: 0  
Instability: 0

**Disclaimer**

The information provided in this Material Safety Data Sheet has been obtained from sources believed to be reliable. Harcros Chemicals Inc., provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. Harcros Chemicals Inc., knows of no medical condition, other than those noted on this Material Safety Data Sheet, which are generally recognized as being aggravated by exposure to this product.

**Revision Information**

Product and Company Identification: Product and Company Identification  
Fire-fighting measures: Specific methods  
Accidental release measures: Methods and materials for containment and cleaning up  
Toxicological information: Symptoms related to the physical, chemical and toxicological characteristics  
Ecological information: Ecotoxicity  
Ecological information: Bioaccumulative potential  
Ecological information: Mobility in soil  
Disposal considerations: Local disposal regulations  
Regulatory Information: United States  
HazReg Data: North America