# Material Safety Data Sheet

Laundry Powder Detergent

## 1. Product and company identification

| | | |
|---|---|---|
| **Product name** | : | Laundry Powder Detergent |
| **Supplier** | : | Betco Corporation<br>1001 Brown Avenue<br>Toledo, Ohio 43607<br>(800) 333-2156 |
| **Manufacturer** | : | Betco Corporation<br>1001 Brown Avenue<br>Toledo, Ohio 43607 |
| **Code** | : | 464 |
| **MSDS #** | : | 464 |
| **Validation date** | : | 10/8/2013. |
| **Print date** | : | 10/8/2013. |
| **In case of emergency** | : | Chemtrec (800) 424-9300 |
| **Product type** | : | Powder. |

## 2. Hazards identification

**Emergency overview**

| | | |
|---|---|---|
| **Physical state** | : | Solid. [Powder.] |
| **Color** | : | White. |
| **Odor** | : | Lemon-like. |
| **Signal word** | : | WARNING! |
| **Hazard statements** | : | CAUSES EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. |
| **Precautionary measures** | : | Do not breathe dust. Do not ingest. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. |
| **OSHA/HCS status** | : | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| **Routes of entry** | : | Dermal contact. Eye contact. Ingestion. |

**Potential acute health effects**

| | | |
|---|---|---|
| **Inhalation** | : | Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. |
| **Ingestion** | : | Harmful if swallowed. |
| **Skin** | : | Severely irritating to the skin. |
| **Eyes** | : | Severely irritating to eyes. Risk of serious damage to eyes. |

**Potential chronic health effects**

| | | |
|---|---|---|
| **Chronic effects** | : | Contains material that may cause target organ damage, based on animal data. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. |
| **Carcinogenicity** | : | No known significant effects or critical hazards. |
| **Mutagenicity** | : | No known significant effects or critical hazards. |
| **Teratogenicity** | : | No known significant effects or critical hazards. |
| **Developmental effects** | : | No known significant effects or critical hazards. |
| **Fertility effects** | : | No known significant effects or critical hazards. |
| **Target organs** | : | Contains material which may cause damage to the following organs: skin, eyes, stomach. |

## 2. Hazards identification

**Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

**See toxicological information (Section 11)**

## 3. Composition/information on ingredients

| Name | CAS number | % |
|---|---|---|
| sodium chloride | 7647-14-5 | 60 - 80 |
| sodium carbonate | 497-19-8 | 10 - 20 |
| disodium metasilicate | 6834-92-0 | 1 - 5 |
| pentasodium triphosphate | 7758-29-4 | 1 - 5 |

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

## 4. First aid measures

**Eye contact** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

**Skin contact** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

**Inhalation** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Ingestion** Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5. Fire-fighting measures

**Flammability of the product** : Fine dust clouds may form explosive mixtures with air.

**Extinguishing media**

**Suitable** : Use dry chemical powder.

**Not suitable** : Do not use water jet.

**Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
phosphorus oxides
halogenated compounds
metal oxide/oxides

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# 6. Accidental release measures

**Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods for cleaning up**

**Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

**Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

# 7. Handling and storage

**Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# 8. Exposure controls/personal protection

**Consult local authorities for acceptable exposure limits.**

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

# 8. Exposure controls/personal protection

**Personal protection**

**Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. <1 hours (breakthrough time): disposable vinyl

**Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If operating conditions cause high dust concentrations to be produced, use dust goggles. Recommended: safety glasses

**Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Personal protective equipment (Pictograms)** :

# 9. Physical and chemical properties

**Physical state** : Solid. [Powder.]

**Flash point** : Closed cup: Not applicable. [Product does not sustain combustion.]

**Color** : White.

**Odor** : Lemon-like.

**pH** : >10 [Conc. (% w/w): 1%]

**Dispersibility properties** : Easily dispersible in the following materials: cold water and hot water.

**Solubility** : Easily soluble in the following materials: cold water and hot water.

# 10. Stability and reactivity

**Chemical stability** : The product is stable.

**Conditions to avoid** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

**Incompatible materials** : Reactive or incompatible with the following materials:
oxidizing materials

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

# 11. Toxicological information

## Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| sodium chloride | LD50 Oral | Rat | 3000 mg/kg | - |
| sodium carbonate | LD50 Oral | Rat | 4090 mg/kg | - |
| disodium metasilicate | LD50 Oral | Rat | 1153 mg/kg | - |
| pentasodium triphosphate | LD50 Oral | Rat | 3120 mg/kg | - |

**Conclusion/Summary** : Not available.

## Chronic toxicity

**Conclusion/Summary** : Not available.

## Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| sodium chloride | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | 10 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| sodium carbonate | Eyes - Mild irritant | Rabbit | - | 0.5 minutes 100 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 50 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| disodium metasilicate | Skin - Moderate irritant | Guinea pig | - | 24 hours 250 milligrams | - |
| | Skin - Severe irritant | Human | - | 24 hours 250 milligrams | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 250 milligrams | - |
| pentasodium triphosphate | Skin - Moderate irritant | Rabbit | - | 24 hours 500 milligrams | - |

**Conclusion/Summary** : Not available.

## Sensitizer

**Conclusion/Summary** : Not available.

## Carcinogenicity

**Conclusion/Summary** : Not available.

## Mutagenicity

**Conclusion/Summary** : Not available.

## Teratogenicity

**Conclusion/Summary** : Not available.

## Reproductive toxicity

**Conclusion/Summary** : Not available.

# 12. Ecological information

**Ecotoxicity** : No known significant effects or critical hazards.

**Aquatic ecotoxicity**

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| sodium chloride | Acute EC50 2430000 ug/L Fresh water | Algae - Navicula seminulum | 96 hours |
| | Acute EC50 402600 ug/L Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 1042 mg/L Fresh water | Crustaceans - Ceriodaphnia dubia - <24 hours | 48 hours |
| | Acute LC50 1000000 ug/L Fresh water | Fish - Morone saxatilis - Larvae | 96 hours |
| | Chronic NOEC 0.314 g/L Fresh water | Daphnia - Daphnia pulex | 21 days |
| | Chronic NOEC 100 mg/L Fresh water | Fish - Gambusia holbrooki - Adult | 8 weeks |
| sodium carbonate | Acute EC50 242000 ug/L Fresh water | Algae - Navicula seminulum | 96 hours |
| | Acute LC50 176000 ug/L Fresh water | Crustaceans - Amphipoda | 48 hours |
| | Acute LC50 265000 ug/L Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 300000 ug/L Fresh water | Fish - Lepomis macrochirus - 3.88 cm - 0.96 g | 96 hours |
| disodium metasilicate | Acute EC50 33.53 mg/L Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate - <24 hours | 48 hours |
| pentasodium triphosphate | Acute EC50 276.61 mg/L Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate - <24 hours | 48 hours |

**Conclusion/Summary** : Not available.

**Persistence/degradability**

**Conclusion/Summary** : Not available.

# 13. Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

**Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.**

# 14. Transport information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|---|---|---|---|---|---|---|
| DOT Classification | Not regulated. | - | - | - | | - |
| TDG Classification | Not regulated. | - | - | - | | - |
| Mexico Classification | Not regulated. | - | - | - | | - |
| ADR/RID Class | Not regulated. | - | - | - | | - |

## 14. Transport information

| | | | | | | |
|---|---|---|---|---|---|---|
| **IMDG Class** | Not regulated. | - | - | - | | - |
| **IATA-DGR Class** | Not regulated. | - | - | - | | - |

PG* : Packing group

## 15. Regulatory information

**HCS Classification** : Irritating material
Target organ effects

**U.S. Federal regulations** : **TSCA 8(a) PAIR**: Agral 90; Citronellal
**TSCA 8(a) IUR Exempt/Partial exemption**: Not determined
**United States inventory (TSCA 8b)**: All components are listed or exempted.
**TSCA 8(d) H and S data reporting**: Citronellal

**SARA 302/304/311/312 extremely hazardous substances**: No products were found.
**SARA 302/304 emergency planning and notification**: No products were found.
**SARA 302/304/311/312 hazardous chemicals**: sodium chloride; sodium carbonate; pentasodium triphosphate; disodium metasilicate
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification**: sodium chloride: Immediate (acute) health hazard, Delayed (chronic) health hazard; sodium carbonate: Immediate (acute) health hazard, Delayed (chronic) health hazard; pentasodium triphosphate: Immediate (acute) health hazard; disodium metasilicate: Immediate (acute) health hazard, Delayed (chronic) health hazard

**Clean Water Act (CWA) 307**: Diethyl phthalate

**Clean Water Act (CWA) 311**: pentasodium triphosphate; trisodium trimetaphosphate

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**State regulations**

**Massachusetts** : The following components are listed: TRIPHOSPHORIC ACID, PENTASODIUM SALT

**New York** : The following components are listed: Sodium phosphate, tribasic

**New Jersey** : None of the components are listed.

**Pennsylvania** : The following components are listed: TRIPHOSPHORIC ACID, PENTASODIUM SALT

**Canada inventory** : All components are listed or exempted.

**International regulations**

**International lists** : **Australia inventory (AICS)**: All components are listed or exempted.
**China inventory (IECSC)**: All components are listed or exempted.
**Japan inventory**: Not determined.
**Korea inventory**: All components are listed or exempted.
**New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
**Philippines inventory (PICCS)**: All components are listed or exempted.

## 15. Regulatory information

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## 16. Other information

**Label requirements** : CAUSES EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

**Hazardous Material Information System (U.S.A.)** :

| | | |
|---|---|---|
| Health | * | 2 |
| Flammability | | 0 |
| Physical hazards | | 0 |

**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

**National Fire Protection Association (U.S.A.)** :

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**Prepared by** : Not available.

**Indicates information that has changed from previously issued version.**

**Notice to reader**

# 16. Other information

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**