

# Safety Data Sheet

Issue date: 5/25/2016

## Section 1: Product and Company Information

Product Identifier: **ACS Select Encapsulated Mechanical Detergent**

Product Code/SKU: 200255

Recommended Use: Industrial/Institutional Metal Safe Warewash Detergent


Restrictions on Use: Use only for purpose found on label.

Product Dilution Information: Normal usage range 0.023% - 0.0765%

Manufacturer: **American Chemical Systems II, LLC**  
**2520 South Sheridan St.**  
**Wichita, KS USA 67217**  
**(800)889-3489**  
**americanchemicalsystems.com**

Emergency Telephone: Chemtrec 1-800-424-9300 USA and Canada

## Section 2: Hazard Identification

|                           | Product as Sold   | Product at use Dilution  |
|---------------------------|---|--|
| GHS Classification:       | Skin irritation/corrosion<br>Eye irritation/eye damage  | Not classified   |
| GHS Labeling Element      |   |  |
| Signal Word:              | Danger  | No signal word   |
| Symbol:                   |               | No symbol  |
| Hazard Statement:         | Causes skin and eye damage  | No known significant effects or hazards                                |
| Precautionary Statements: |   |  |
| Prevention:               | Wear protective clothing, gloves, and eye and face protection.                                    | Wash hands with water after handling                                   |
| Response:                 |   |  |
| If swallowed:             | Rinse mouth, do not induce vomiting.  | Seek medical assistance if symptoms persist.                           |
| If on skin:               | Wash with water, remove contaminated clothing.  |  |
| Inhalation:               | Remove person to fresh air - administer artificial respiration if not breathing.                  |  |
| If in eye:                | Flush continuously with water - remove contacts and continue flushing with water.                 |  |
| Treatment:                | Seek medical assistance if symptoms persist.  |  |
| Storage:                  | Keep product stored in original container, in an upright position, with container tightly closed. |  |
| Disposal:                 | Dispose of contents/container according to local/regional regulations.                            | Dispose of contents/container according to local/regional regulations. |
| Other Hazards:            | None known  | None known   |

## Section 3: Composition/Information on Ingredients

|                    | Product as Sold    | Product at use Dilution             |
|--------------------|--------------------|-------------------------------------|
| Substance/Mixture: | Mixture            |                                     |
| Chemical name      | Product Identifier | %                                   |
| Sodium Hydroxide   | CAS 1310-73-2      | <3%                                 |
|                    |                    | Within the current knowledge of the |

|                                       |               |        |   |
|---------------------------------------|---------------|--------|---|
| Sodium Carbonate                      | CAS 497-19-8  | 20-40% | manufacturer and in the concentrations applicable, there are no hazardous ingredients that would require reporting. |
| Sodium Metasilicate                   | CAS 6834-92-0 | 5-10%  |   |
| Dichloroisocyanuric acid, sodium salt | CAS 2893-78-9 | 1-5%   |   |

There are no additional ingredients present which, within the current knowledge of the manufacturer and in the concentrations applicable, are classified as hazardous to health or to the environment and hence require reporting in this section. Concentration percentages are given as a claim for a trade secret is being made.

#### Section 4: First Aid Measures

| First Aid Measures:                                    | Product as Sold  | Product at use Dilution  |
|--|--|--|
| General:   | Never give anything by mouth to an unconscious person. If you feel unwell, then seek medical assistance.   | Never give anything by mouth to an unconscious person. If you feel unwell, then seek medical assistance. |
| If swallowed:  | Rinse mouth, do not induce vomiting.   | Seek medical assistance if symptoms persist.   |
| If on skin:  | Wash with water, remove contaminated clothing.   | No known effect after skin contact. Rinse w/ water.  |
| Inhalation:  | Remove person to fresh air - administer artificial respiration if not breathing.   | No specific measures required.   |
| If in eye:   | Flush continuously with water - remove contacts and continue flushing with water.  | No know effect with eye contact. Flush with water.   |
| Treatment:   | Seek medical assistance if symptoms persist.   |  |
| Important Symptoms and Effects, both Acute and Delayed |  |  |
| Symptoms/Injuries:                                     | Causes severe skin burns and eye damage. Effects of exposure may be delayed.   |  |
| If swallowed:  | Ingestion is likely to be harmful and have adverse health effects.   | Seek medical assistance if symptoms persist.   |
| If on skin:  | Causes skin burns.   |  |
| Inhalation:  | Symptoms may cause irritation to the respiratory tract.  |  |
| If in eye:   | Causes eye damage.   |  |
| Recommendation:  | Seek medical assistance if symptoms persist or concerns are present.   | Seek medical assistance if symptoms persist or concerns are present.                                     |
| First Aid Providers                                    | All first aid providers should receive proper training before performing any first aid act that would involve personal risk. Wash contaminated clothing with water thoroughly before removal or wear gloves. |  |

#### Section 5: Firefighting Measures

|                             |   |
|-----------------------------|---|
| Suitable Fire Extinguishing |   |
| Media:                      | No special media necessary. Use extinguishing media appropriate for surrounding fire.   |
| Special Hazards:            | Product is non flammable and is not explosive. Product is corrosive to metals as sold.  |
| Advice for Firefighters:    | Exercise caution when fighting any chemical fire. Use a water spray to cool containers. Do not enter fire area without proper protective equipment, including respiratory protection. |

#### Section 6: Accidental Release Measures

|                            |  |
|----------------------------|--|
| Personal Precautions:      | Initiate company's spill procedures. Do not walk through or touch spilled product. Do not get on skin, in eyes, or on clothing. Put on appropriate personal protection equipment.  |
| Environmental Precautions: | Avoid runoff into public waterways, sewers, or onto soil.  |
| Methods for Clean Up:      | Follow company's spill procedures. Put on appropriate protective clothing. Neutralize/ absorb spilled product with inert material. Dispose of inert material by placing in suitable container. Dispose of waste safely. Rinse with water for a final clean up. |

#### Section 7: Handling and Storage

|                                |  |
|--------------------------------|--|
| Precautions for Safe Handling: | Do not get on skin, in eyes, or on clothing. Do not breathe vapor or mist. Do not handle until all safety procedures have been read and understood. Wash hands and other exposed areas with soap and water after handling. |
| Conditions for Safe Storage:   | Keep product in original container, in an upright position, with container tightly closed. Keep out of reach of children.  |

#### Section 8: Exposure Controls/Personal Protection

Control parameters:

| Ingredient Name  | Exposure Limits   |                     |
|------------------|-------------------|---------------------|
| Sodium Hydroxide | USA ACGIH Ceiling | 2 mg/m <sup>3</sup> |
|                  | NIOSH REL         | 2 mg/m <sup>3</sup> |
|                  | OSHA PEL (TWA)    | 2 mg/m <sup>3</sup> |

|                         | Product as Sold  | Product at use Dilution                                       |
|-------------------------|--|---|
| Engineering Controls:   | Use adequate ventilation. Keep vapor/fumes below statutory limits. Provide availability to water to flush skin or eyes in case of exposure.                  | Normal ventilation should be adequate to control vapor/fumes. |
| Personal Protection:    |  |   |
| Hand protection:        | Wear chemical resistant gloves   | None needed under normal use conditions                       |
| Eye protection:         | Use chemical splash goggles. For severe exposure, wear face shield.  | None needed under normal use conditions                       |
| Skin protection:        | Wear suitable protective clothing.   | None needed under normal use conditions                       |
| Respiratory protection: | Not necessary under normal operating and intended use of this product.   | None needed under normal use conditions                       |
| General:                | Wash hands, face, and arms after handling chemical products and before eating, drinking, or using restroom. Wash contaminated clothing before wearing again. |   |

**Section 9: Physical and Chemical Properties**

|                            | Product as Sold   | Product at use Dilution |
|----------------------------|-------------------|-------------------------|
| Physical state:            | Powder            | Liquid                  |
| Color:                     | White             | Clear                   |
| Odor:                      | Chemical          | Chemical                |
| pH:                        | 12-14             | 12-14                   |
| Evaporation rate:          | No data available |                         |
| Melting point:             | No data available |                         |
| Freezing point:            | No data available |                         |
| Boiling point:             | No data available |                         |
| Flash point:               | No data available |                         |
| Explosion limits:          | No data available |                         |
| Flammability (solid/gas):  | No data available |                         |
| Vapor pressure:            | No data available |                         |
| Vapor density:             | No data available |                         |
| Relative density:          | >1 (water=1)      |                         |
| Solubility:                | No data available |                         |
| Decomposition temperature: | No data available |                         |

**Section 10: Stability and Reactivity**

|                                   |  |
|-----------------------------------|--|
| Reactivity:                       | Thermal decomposition may occur.   |
| Chemical stability:               | Stable.  |
| Hazardous Reactions:              | Hazardous polymerization will not occur.   |
| Conditions to Avoid:              | Direct sunlight. Extreme temperatures.   |
| Incompatible Materials:           | Strong acids. Strong bases. Strong oxidizers.  |
| Hazardous Decomposition Products: | Under normal conditions of storage and use, hazardous decomposition products should not occur. |

**Section 11: Toxicological Information**

|                     |   |                                      |
|---------------------|---|--------------------------------------|
| Routes of Exposure: | Ingestion. Skin contact. Inhalation. Eye contact. |                                      |
|                     | <b>Product as Sold</b>                            | <b>Product at use Dilution</b>       |
| Symptoms:           |   |                                      |
| Ingestion:          | Adverse effects: stomach pains                    | No specific data                     |
| Skin Contact:       | Adverse effects: irritation, redness, blisters    | No specific data                     |
| Inhalation:         | Adverse effects: cough, respiratory irritation    | No specific data                     |
| Eye Contact:        | Adverse effects: redness, watering, irritation    | No specific data                     |
| Acute Toxicity:     |   |                                      |
| Ingestion:          | May cause burns to mouth, throat, stomach         | No known effects or critical hazards |
| Skin Contact:       | May cause skin burns                              | No known effects or critical hazards |
| Inhalation:         | May cause respiratory irritation                  | No known effects or critical hazards |
| Eye Contact:        | May cause serious eye damage.                     | No known effects or critical hazards |
| Toxicity Data:      |   |                                      |
|                     | Sodium Hydroxide (1310-73-2)                      | LD50 dermal rabbit 1350 mg/kg        |
|                     | Sodium Carbonate (497-19-8)                       | LD50 oral rat 4090/mg/kg             |

|   |                          |                 |
|---|--------------------------|-----------------|
| Sodium Metasilicate (6834-92-0)                   | LD50 oral rat            | 600 mg/kg       |
| Dichloroisocyanuric acid, sodium salt (2893-78-9) | LD50 oral rat            | 735 mg/kg       |
| Dichloroisocyanuric acid, sodium salt (2893-78-9) | LD 50 dermal rat         | >5000mg/kg      |
| Dichloroisocyanuric acid, sodium salt (2893-78-9) | LD dermal rabbit         | >2000 mg/kg     |
| Dichloroisocyanuric acid, sodium salt (2893-78-9) | LC inhalation rat (mg/l) | >50 mg/l 1 hour |

Carcinogenicity: No known effects or critical hazards  
 Reproductivity: No known effects or critical hazards

### Section 12: Ecological Information

| Toxicity:   |                |               | Exposure | Species                         |
|---|----------------|---------------|----------|---------------------------------|
| Sodium Hydroxide (1310-73-2)                      | LC50 Fish 1    | 45.4 mg/l     | 96 h     | Oncorhynchus mykiss [static]    |
| Sodium Carbonate (497-19-8)                       | LC50 Fish 1    | 300 mg/l      | 96h      | Lepomis Macrochirus [static]    |
| Sodium Carbonate (497-19-8)                       | EC 50 Daphnia  | 265/mg/l      | 48 h     | Daphnia magna                   |
| Sodium Carbonate (497-19-8)                       | EC 50 Other    | 242mg/l       | 120 h    | Nitzschia                       |
| Sodium Carbonate (497-19-8)                       | LC50 Fish 2    | 310-1220 mg/l | 96h      | Pimpephales promelas [static]   |
| Sodium Metasilicate (6834-92-0)                   | LC50 Fish 1    | 210 mg/l      | 96 h     | Brachydanio rerio [semi-static] |
| Sodium Metasilicate (6834-92-0)                   | EC50 Daphnia 1 | 216 mg/l      | 96 h     | Daphnia magna                   |
| Sodium Metasilicate (6834-92-0)                   | LC50 Fish 2    | 210 mg/l      | 96 h     | Brachydanio rerio               |
| Dichloroisocyanuric acid, sodium salt (2893-78-9) | LC50 Fish 1    | .25-1 mg/l    | 96h      | Lepomis Macrochirus [static]    |
| Dichloroisocyanuric acid, sodium salt (2893-78-9) | EC 50 Daphnia  | .00021mg/     | 48 h     | Daphnia magna                   |
| Dichloroisocyanuric acid, sodium salt (2893-78-9) | LC50 Fish 2    | .0389mg/l     | 96h      | Lepomis Macrochirus [flow]      |
| Dichloroisocyanuric acid, sodium salt (2893-78-9) | EC50 Daphnia 1 | 1.16 mg/l     | 48 h     | Daphnia magna                   |

Persistence and degradability: Not established  
 Bioaccumulative potential: Not established  
 Mobility in Soil: Not established  
 Other adverse effects: None noted

### Section 13: Disposal Considerations

|                   | Product as Sold   | Product at use Dilution   |
|-------------------|---|---|
| Disposal methods: | Dispose of waste in accordance with local, regional, and national regulations | Diluted product may be drained to sanitary sewer. Discard empty container into trash. |

### Section 14: Transport Information

In accordance with: ICAO/IATA/DOT/TDG

|                     | Product as Sold  |
|---------------------|--|
| DOT Classification: | UN 1759  |
| DOT Shipping name:  | Corrosive Solid, N.O.S. (Contains Sodium Hydroxide)            |
| Class:              | 8  |
| Packing Group:      | III  |
| Bulk Transport:     | See shipping documents for specific transportation information |
| Marine Pollutant:   | No   |

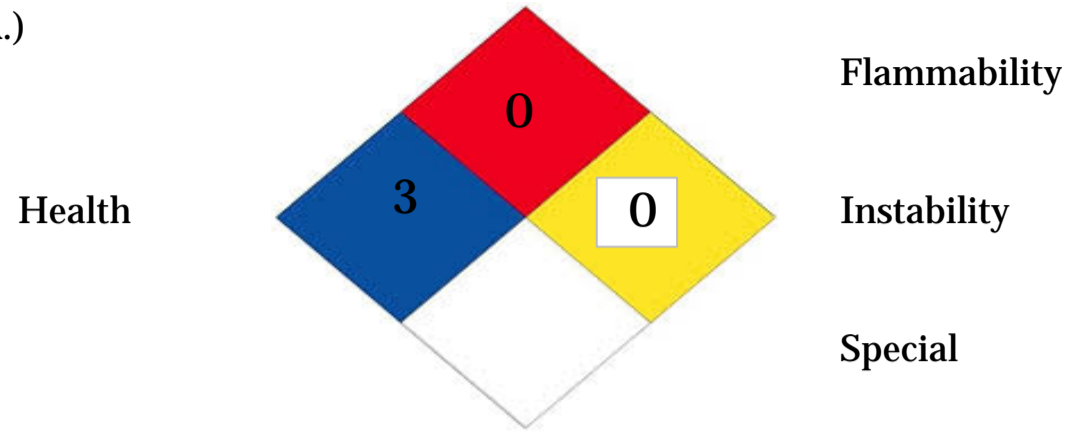
### Section 15: Regulatory Information

| US Federal Regulations: |                                       |
|-------------------------|---------------------------------------|
| TSCA 8(b) Inventory     | All components are listed or exempted |
| SARA 304                | No chemicals subject to reporting     |
| SARA 311/312            | Acute health hazard                   |
| SARA 302                | No chemicals subject to reporting     |
| SARA 313                | No chemicals subject to reporting     |

### Section 16: Other Information

|  | Product as Sold | Product at use Dilution |
|--|-----------------|-------------------------|
| Hazardous Material Information System: |                 |                         |
| Health                                 | 3               | 0                       |
| Flammability                           | 0               | 0                       |
| Physical Hazards                       | 0               | 0                       |

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



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