

# SAFETY DATA SHEET

Date Prepared : 05/20/2015

SDS No : Nichols\_Astound

Astound

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Astound

**GENERAL USE:** For commercial laundry use only. Consult product label or contact supplier for more information.

**PRODUCT DESCRIPTION:** Chlorinated Caustic Machine Detergent

**CHEMICAL FAMILY:** Alkali/bleachdetergent Blend

### DISTRIBUTOR

Nichols

1391 Judson Road

Spring Lake, MI 49456

**Emergency Phone:** 231-799-2120

**Customer Service:** 800-442-0213

### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEM-TEL (Medical and Transportation):** 800-255-3924

**POISON CONTROL CENTER (Medical):** 800-222-1222

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATIONS

#### Health:

Skin Corrosion, Category 1A

Eye Corrosion, Category 1

Acute Toxicity (Oral), Category 4

### GHS LABEL



Corrosion



Exclamation  
mark

**SIGNAL WORD:** DANGER

### HAZARD STATEMENTS

H314: Causes severe skin burns and eye damage.

H302: Harmful if swallowed.

### PRECAUTIONARY STATEMENT(S)

#### Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P261: Avoid breathing fume, gas, mist, vapors, or spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P234: Keep only in original packaging.

P273: Avoid release to the environment.

#### Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P362: Take off contaminated clothing.

P363: Wash contaminated clothing before reuse.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P331: Do NOT induce vomiting.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

**Storage:**

P405: Store locked up.

P406: Store in a corrosion resistant plastic container or a metal container with a resistant inner liner.

**Disposal:**

P501: Dispose of contents/container according to all local, state and Federal regulations.

**EMERGENCY OVERVIEW**

**PHYSICAL APPEARANCE:** Light yellow

**IMMEDIATE CONCERNS:** Causes irreversible eye damage and skin burns.

**POTENTIAL HEALTH EFFECTS**

**EYES:** Corrosive, contact causes severe eye burns.

**SKIN:** Corrosive, causes skin burning.

**SKIN ABSORPTION:** Not Established

**INGESTION:** Harmful if swallowed.

**INHALATION:** Vapors are irritating to eyes and respiratory tract.

**REPRODUCTIVE TOXICITY**

**REPRODUCTIVE EFFECTS:** No known significant effects or critical hazards.

**TERATOGENIC EFFECTS:** No known significant effects or critical hazards.

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

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

**ROUTES OF ENTRY:** Eye, skin, ingestion, Inhalation.

**TARGET ORGAN STATEMENT:** No known significant effects or critical hazards.

**CANCER STATEMENT:** None

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

**WARNING CAUTION LABELS:** Corrosive

**PHYSICAL HAZARDS:** May be corrosive to certain metals.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

| Chemical Name           | Wt.%    | CAS       |
|-------------------------|---------|-----------|
| Potassium Hydroxide     | 10 - 15 | 1310-58-3 |
| Sodium Tripolyphosphate | 5 - 10  | 7758-29-4 |
| Sodium Hypochlorite     | 1 - 5   | 7681-52-9 |
| Water                   | 75 - 80 | 7732-18-5 |

**4. FIRST AID MEASURES**

**EYES:** Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

**SKIN:** Remove contaminated clothing. Immediately flush with water followed by washing with mild soap. Seek medical attention.

**INGESTION:** Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

**INHALATION:** Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

**EYES:** Severe burning sensation, damage marked by burns.

**SKIN:** Burning sensation, redness, swelling and possible blistering.

**SKIN ABSORPTION:** Not Established

**INGESTION:** Irritation of mouth, throat, along with stomach upset, vomiting.

**INHALATION:** Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

**ACUTE TOXICITY:** Corrosive to eyes and skin. Harmful if inhaled. Harmful if swallowed

**NOTES TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

## 5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** None

**EXTINGUISHING MEDIA:** Use an extinguishing agent suitable for the surrounding fire.

**EXPLOSION HAZARDS:** None

**FIRE FIGHTING PROCEDURES:** Use an extinguishing agent suitable for surrounding fire.

**FIRE FIGHTING EQUIPMENT:** NA = Not Applicable

**HAZARDOUS DECOMPOSITION PRODUCTS:** Not Established

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Avoid runoff into storm sewers and ditches which lead to waterways.

**LARGE SPILL:** Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Avoid discharges into open waterways.

**LAND SPILL:** Avoid discharge to soil.

**AIR SPILL:** NA = Not Applicable

**GENERAL PROCEDURES:** Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.

**RELEASE NOTES:** Product may be harmful to aquatic life.

**SPECIAL PROTECTIVE EQUIPMENT:** Eye protection, rubber gloves, rubber boots to protect feet.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Close container after use.

**HANDLING:** Avoid contact with skin and eyes. Wash hands before eating, drinking, smoking or using toilet facilities.

**STORAGE:** Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store product away from food and water sources. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

**STORAGE TEMPERATURE:** Store at ambient temperatures.

**STORAGE PRESSURE:** Store at ambient atmospheric pressure.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE GUIDELINES**

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) |      |                 |                     |           |                     |              |                     |
|---|------|-----------------|---------------------|-----------|---------------------|--------------|---------------------|
|   |      | EXPOSURE LIMITS |                     |           |                     |              |                     |
|   |      | OSHA PEL        |                     | ACGIH TLV |                     | Supplier OEL |                     |
| Chemical Name                               |      | ppm             | mg/m <sup>3</sup>   | ppm       | mg/m <sup>3</sup>   | ppm          | mg/m <sup>3</sup>   |
| Potassium Hydroxide                         | TWA  |                 | 2 mg/m <sup>3</sup> |           |                     |              |                     |
|   | STEL |                 |                     |           | 2 mg/m <sup>3</sup> |              |                     |
| Sodium Hypochlorite                         | TWA  |                 | 2 mg/m <sup>3</sup> |           | 2 mg/m <sup>3</sup> |              |                     |
|   | STEL |                 |                     |           |                     |              | 2 mg/m <sup>3</sup> |

**ENGINEERING CONTROLS:** No special requirements.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Chemical splash goggles and full face-shield.

**SKIN:** Rubber or other chemical resistant gloves.

**RESPIRATORY:** A respirator is not needed under normal and intended conditions of product use.

**PROTECTIVE CLOTHING:** Chemical resistant outerwear (tyvek) if contact with spray or mist is anticipated.

**WORK HYGIENIC PRACTICES:** Wash with soap and water after handling. Do not eat, drink or smoke while using product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE:** Liquid

**ODOR:** Chlorine bleach

**ODOR THRESHOLD:** Not Established

**COLOR:** Light yellow

**pH:** > 13.5

**PERCENT VOLATILE:** >90

**FLASH POINT AND METHOD:** None

**FLAMMABLE LIMITS:** N/A

**AUTOIGNITION TEMPERATURE:** NA = Not Applicable

**VAPOR PRESSURE:** ~ 20 mm Hg at 20°C (68°F)

**VAPOR DENSITY:** ~ 1 Air = 1

**BOILING POINT:** 212° F; 100° C

**FREEZING POINT:** 32° F; 0° C

**MELTING POINT:** NA = Not Applicable

**THERMAL DECOMPOSITION:** Not Available

**SOLUBILITY IN WATER:** Complete

**EVAPORATION RATE:** (Water =1) 1.0

**DENSITY:** ~ 9.56 at 20°C (68°F)

**SPECIFIC GRAVITY:** 1.14 to 1.150 grams/ml. at 20°C (68°F)

**VISCOSITY:** Water thin.

**(VOC):** None

**10. STABILITY AND REACTIVITY**

**REACTIVITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur.

**STABILITY:** Stable under normal storage and use conditions.

**CONDITIONS TO AVOID:** Reacts violently with strong acids.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Reacts violently with strong inorganic acid materials.

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

**INCOMPATIBLE MATERIALS:** Strong acids, oxidizers.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

| Chemical Name       | ORAL LD <sub>50</sub><br>(rat) | DERMAL LD <sub>50</sub><br>(rabbit) |
|---------------------|--------------------------------|-------------------------------------|
| Potassium Hydroxide | 273 mg/kg (rat)                | N/A                                 |
| Sodium Hypochlorite | 3000 to 5000<br>mg/kg (rat)    | > 2000 mg/kg<br>(rabbit)            |

**EYES:** Not Established

**DERMAL LD<sub>50</sub>:** Not Established

**ORAL LD<sub>50</sub>:** ~ 273 mg/kg Rat

**INHALATION LC<sub>50</sub>:** Not Established

**EYE EFFECTS:** Corrosive to eyes. Permanent damage may occur.

**SKIN EFFECTS:** Corrosive to skin.

### CARCINOGENICITY

**IARC:** No listed substance

**IRRITATION:** Irritant

**CORROSIVITY:** Corrosive

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

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

**GENETIC EFFECTS:** No known significant effects or critical hazards.

**REPRODUCTIVE EFFECTS:** No known significant effects or critical hazards.

**TARGET ORGANS:** No known significant effects or critical hazards.

**TERATOGENIC EFFECTS:** No known significant effects or critical hazards.

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

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Not Established

**ECOTOXICOLOGICAL INFORMATION:** This material is harmful to aquatic life.

**DISTRIBUTION:** Not Established

**AQUATIC TOXICITY (ACUTE):** Not Established

**CHEMICAL FATE INFORMATION:** Not Established

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If discarded, this material and its containers should be treated as hazardous waste based on the characteristics of corrosivity as defined under federal RCRA regulations (40 CFR 261). Consult local authorities for disposal into public sewer.

**FOR LARGE SPILLS:** Consult with local and state authorities for large volume disposal.

**PRODUCT DISPOSAL:** Any method in accordance with local, state, and federal laws. Best method is to recycle or reuse for

intended purpose.

**EMPTY CONTAINER:** Rinse container with clear water. Offer container for recycling, or dispose of in trash.

**RCRA/EPA WASTE INFORMATION:** Corrosive

**RCRA HAZARD CLASS:** D002

#### 14. TRANSPORT INFORMATION

##### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Compound, Cleaning Liquid

**TECHNICAL NAME:** Potassium Hydroxide Solution

**PRIMARY HAZARD CLASS/DIVISION:** 8

**UN/NA NUMBER:** 1760

**PACKING GROUP:** III

**PLACARDS:** Corrosive

**LABEL:** Certain package sizes determine the proper labeling of containers. Consult manufacturer for specific information regarding proper labeling.

**OTHER SHIPPING INFORMATION:** Certain shipping modes and packaging sizes may have exceptions from the transport regulations. The classifications/information provided above may not reflect applicable exceptions. Contact the manufacturer for more specific information on the proper shipping of this material.

**U.S. CUSTOMS HARMONIZATION NUMBER:** 3402.90.10.00

##### AIR (ICAO/IATA)

**SHIPPING NAME:** Corrosive liquid, basic, inorganic, n.o.s.

**TECHNICAL NAME:** Potassium Hydroxide Solution

**UN/NA NUMBER:** 3266

**PRIMARY HAZARD CLASS/DIVISION:** 8

**PACKING GROUP:** II

**ERG:** 8L

**PLACARDS:** Corrosive

**LABEL:** Corrosive

##### VESSEL (IMO/IMDG)

**SHIPPING NAME:** Corrosive liquid, basic, inorganic, n.o.s.

**TECHNICAL NAME:** Potassium Hydroxide Solution

**UN/NA NUMBER:** 3266

**PRIMARY HAZARD CLASS/DIVISION:** 8

**PACKING GROUP:** II

**EmS:** F-A,S-B

**MARINE POLLUTANT #1:** No

**PLACARDS:** Corrosive

**LABEL:** Corrosive

#### 15. REGULATORY INFORMATION

##### UNITED STATES

##### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** Health Hazard - Acute; Reactivity Hazard

**FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** Yes **ACUTE:** Yes **CHRONIC:** No

**313 REPORTABLE INGREDIENTS:** No listed substance

**302/304 EMERGENCY PLANNING**

**EMERGENCY PLAN:** No listed substance

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

**CERCLA REGULATORY:** Potassium Hydroxide

| Chemical Name       | Wt.%    | CERCLA RQ |
|---------------------|---------|-----------|
| Potassium Hydroxide | 10 - 15 | 1,000     |
| Sodium Hypochlorite | 1 - 5   | 100 lbs.  |

**CERCLA RQ:** 1000 lbs.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

**TSCA REGULATORY:** All ingredients are listed on the TSCA Chemical Inventory.

**STATES WITH SPECIAL REQUIREMENTS**

| Chemical Name       | Requirements  |
|---------------------|---|
| Potassium Hydroxide | Massachusetts Right to Know Substance<br>Pennsylvania Right to Know Substance<br>New Jersey Right To Know Substance<br>Rhode Island Right to Know Substance |
| Sodium Hypochlorite | Massachusetts Right to Know Substance<br>New Jersey Right To Know Substance<br>Pennsylvania Right to Know Substance<br>Rhode Island Right to Know Substance |

**CALIFORNIA PROPOSITION 65:** No listed substance

**CARCINOGEN:** No listed substance

**16. OTHER INFORMATION**

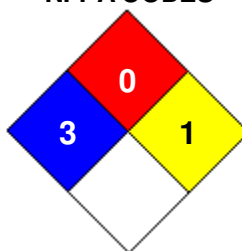
**PREPARED BY:** Regulatory Affairs Department

**Date Prepared:** 05/20/2015

**HMIS RATING**

|                     |  |   |
|---------------------|--|---|
| HEALTH              |  | 3 |
| FLAMMABILITY        |  | 0 |
| PHYSICAL HAZARD     |  | 1 |
| PERSONAL PROTECTION |  | D |

**NFPA CODES**



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