## Material Safety Data Sheet

**Number: DMN-350**

**Product Name: DISH MACHINE DETERGENT 350 (DMD 350)**

A liquid detergent with bleach.

**Revised:** 5/9/00

**Damon Industries, Inc.**
**Box 2120**
**Alliance, OH 44601**

**24 hour Emergency Only phone: 1-800-535-5053**
**Information phone: 1-800-362-9850 or 330-821-5310**
**fax: 330-821-6355**

### Section 2 - Composition / Information on Hazardous Ingredients

| Ingredient | Cas No. | Percent | Carcinogen |
|---|---|---|---|
| Potassium Hydroxide | 1310-58-3 | 2 - 5% | No |
| Sodium Hypochlorite | 7681-52-9 | 2% | No |

### Section 3 - Hazards Identification

**Emergency Overview:** Liquid is corrosive to all body parts. Excessive inhalation of fumes is irritating to the nose, throat and lungs. Mixing with acids produces chlorine gas. Product is water based and presents little hazard in a fire. Product has a high pH and large amounts should not be allowed into sewers (sanitary or storm) without neutralizing. A light yellow liquid with chlorine odor.

**Health Hazards:** Corrosive, Irritant **Physical Hazards:** Reactive

**Primary Routes of Entry:** X Through Skin X Inhalation X Ingestion

**Potential Health Effects:**

**Eyes** - causes severe irritation and damage, redness, tearing, blurred vision, may cause blindness.
**Skin** - causes severe irritation. Prolonged contact can cause permanent damage to skin.
**Swallowing** - causes gastrointestinal irritation and burns, nausea, vomiting, diarrhea.
**Breathing** - excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, nausea.

### Section 4 - First Aid Measures

**Eye Contact:** Immediately flush eyes with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention immediately.

**Skin Contact:** Immediately flush exposed skin with running water for 15 minutes. Remove contaminated clothing and shoes. If irritation persists, call a physician. Wash clothing before reuse.

**Inhalation:** If affected, move exposed person to fresh air. If irritation persists get medical attention.

**Ingestion:** If the product is swallowed, do NOT induce vomiting. If affected person is conscious, give a glass of water or milk to drink. Get medical attention immediately.

### Section 5 - Fire-Fighting Measures

**Flash Point:** None (ASTM D-56 closed cup)
**Lower Explosive Limit:** Not Applicable **Upper Explosive Limit:** Not Applicable
**Extinguishing Media:** Do not use soda-acid extinguishers.
**Special Fire Fighting Procedures:** None.
**Unusual Fire And Explosion Hazards:** None.

### Section 6 - Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Clean up small spills with a rag or mop. Spills of 4 gallons or less can be washed to a sanitary sewer with plenty of water. Larger spills should diked to prevent spreading and then collected into clean pails or drums. Wear proper personal protective equipment.

### Section 7 - Handling and Storage

Empty containers retain product residue and may be hazardous. Observe all precautions given in this data sheet.

Store separate from acids in a cool, well ventilated area. Remove leaking containers.

Contains bleach. Do not mix with other cleaners, especially those containing ammonia or acids, because this could produce a dangerous gas (chlorine). If this product is only used with an automatic chemical feed system there should never be a hazard. However, if hooked up improperly, spilled or misused, gas could accidentally be produced. If gas is accidentally produced immediately flush the mixture down a drain with lots of running water if this is safely possible. Immediately open windows if possible, and if gas is irritating to eyes or lungs, leave the immediate area of the accident. The smell of chlorine is not itself hazardous. If the smell is strong enough to cause any symptoms of irritation or nausea it is hazardous. Avoid prolonged breathing of even slight amounts of

gas. In many cases evacuation of the building is NOT necessary unless a large quantity of gas was produced. However, any area where irritation occurs to occupants should be evacuated. Re-enter areas only when gas has dissipated or with proper protective equipment. If adequate ventilation is not available to dissipate the gas or more than a small amount of chemical was mixed call 911. Assistance is available through our 24 hour emergency 800 number. This paragraph is provided for your information only. Your facility should decide upon the appropriate emergency action plan for accidental release of chlorine as a part of your emergency preparedness plan. Contact Damon Industries if more information or assistance is needed.

## Section 8 - Exposure Controls / Personal Protection

| Ingredient | C.A.S. No. | Percent | TWA(source) | STEL | Ceiling |
|---|---|---|---|---|---|
| Potassium Hydroxide | 1310-58-3 | 2 - 5% | 2 $mg/m^3$(2) | - | 2 $mg/m^3$(3,4) |
| Sodium Hypochlorite | 7681-52-9 | 2% | no established limits are available | | |

Since these are both solids they cannot become airborne from the liquid product.

(1)=OSHA (2)=NIOSH (3)=ACGIH (4)=CANADA TWA=8 hr Time Weighted Average STEL=15 minute TWA Ceiling=Instantaneous

**Ventilation:** Good room ventilation. Four air changes per hour should be adequate.
**Respiratory Protection**: None when used as directed.
**Gloves:** Wear rubber or latex gloves when changing containers, handling open containers or cleaning up spills.
**Eye Protection:** Wear safety glasses with side shields or chemical goggles or a face shield when changing containers, handling open containers or cleaning up spills.
**Other Protective Equipment:** When changing containers, handling open containers or cleaning up spills wear a vinyl or rubber apron and impervious shoes (not tennis shoes or sneakers). An eyewash station should be located within 10 seconds travel time.

## Section 9 - Physical and Chemical Properties

**Boiling Point:** 215° F.
**Specific Gravity:** 1.28
**Percent Volatiles:** 62%
**Solubility In Water:** Complete
**Vapor Pressure:** Not Available
**Vapor Density:** Not Available
**Evaporation Rate:** Not Available
**pH:** 1% solution 12.5 ± 0.5
**Appearance and Odor:** Light yellow liquid with chlorine (bleach) odor.

## Section 10 - Stability and Reactivity

**Incompatibility:** Acids, ammonia
Chlorine

**Hazardous Decomposition Products:**

Examples of products containing acids are de-limer / de-mineralizers, bowl cleaners and phenolic disinfectants. Many window cleaners and floor strippers contain ammonia.

## Section 11 - Toxicological Information

**Target Organs:** None.

## Section 12 - Ecological Information

Do not dispose of in the environment.

## Section 13 - Disposal Considerations

**Waste Disposal Method:** Dispose of up to 4 gallons of concentrate in the sanitary sewer with a large amount of water. Some sewage departments may allow you to dispose of larger quantities without neutralizing. Call them for approval. Larger amounts may have to be neutralized to within the pH limits of your waste water treatment system before disposal. Call Damon Industries at 1-800-362-9850 if you need neutralizing instructions.

## Section 14 - Transport Information

**D.O.T. Hazard Class:** Potassium Hydroxide, Solution, 8, UN 1814, P.G. II

## Section 15 - Regulatory Information

The components of this product are on the TSCA inventory of chemical substances.

## Section 16 - Other Information

| NFPA / HMIS Estimates: | Health: 3 | Flammability: 0 | Reactivity: 1 |
|---|---|---|---|
| 0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe | | | |

Replaces sheet dated 11/19/99. Corrected Sodium Hypochlorite percentage from 12% to 2%. Corrected percent volatiles. The information accumulated herein is believed to be accurate but is not warranted to be. Recipients are advised to confirm in advance that the information is current, applicable, and suitable to their circumstances.