

## Safety Data Sheet

### SECTION 1: Identification

#### 1.1 Product identifier

Product name **MetalSafe Encapsulated Machine Dish Detergent**  
Product number 137  
Brand Crown Chemical, Inc.

#### 1.2 Other means of identification

MetalSafe Encapsulated Machine Dish Detergent

#### 1.3 Recommended use of the chemical and restrictions on use

Machine dishwashing

#### 1.4 Supplier's details

Name Crown Chemical, Inc.  
Address 4701 W. 136th. St.  
Crestwood, Illinois 60418  
U.S.A.  
Telephone 708-371-6990  
Fax 708-371-6992  
email info@crown-chem.com

#### 1.5 Emergency phone number(s)

800-535-5053

### SECTION 2: Hazard identification

#### General hazard statement

Causes serious eye damage; Causes severe skin burns and eye damage; Harmful if swallowed

#### 2.1 Classification of the substance or mixture

##### GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Skin corrosion/irritation, Cat. 1A
- Eye damage/irritation, Cat. 1
- Acute toxicity, oral, Cat. 4

#### 2.2 GHS label elements, including precautionary statements

##### Pictogram



1. Corrosion; 2. Exclamation mark

##### Signal word

**Danger**

##### Hazard statement(s)

H302 Harmful if swallowed  
H314 Causes severe skin burns and eye damage  
H318 Causes serious eye damage

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### Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands & skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER /doctor if you feel unwell.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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/doctor for treatment advice.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents and container in accordance with all local, state, national and international regulations.

### 2.3 Other hazards which do not result in classification

None identified

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Corrosive Mixture

#### Components

##### 1. Sodium hydroxide

Concentration	20 - 40 % (By Weight)
EC no.	215-185-5
CAS no.	1310-73-2
Index no.	011-002-00-6

- Skin corrosion/irritation, Cat. 1A

H314 Causes severe skin burns and eye damage

##### 2. Sodium metasilicate pentahydrate

Concentration	20 - 40 % (weight)
EC no.	229-912-9
CAS no.	6834-92-0
Index no.	014-010-00-8

- Specific target organ toxicity (single exposure), Cat. 3

- Skin corrosion/irritation, Cat. 1B

H314 Causes severe skin burns and eye damage

H335 May cause respiratory irritation

#### Trade secret statement (OSHA 1910.1200(i))

The specific chemical identities and/or actual concentrations for one or more components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

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### SECTION 4: First-aid measures

#### 4.1 Description of necessary first-aid measures

General advice	Causes serious eye damage; Causes severe skin burns and eye damage; Harmful if swallowed
If inhaled	Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.
In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Wash contaminated clothing before reuse.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
If swallowed	Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.
Personal protective equipment for first-aid responders	Treat exposure symptomatically. In all cases of eye contact, ingestion, or inhalation, contact a doctor or Poison Control Center immediately.

#### 4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat exposure symptomatically. In all cases of eye contact, ingestion, or inhalation, contact a doctor or Poison Control Center immediately.

### SECTION 5: Fire-fighting measures

#### 5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Specific hazards arising from the chemical

None known

#### 5.3 Special protective actions for fire-fighters

Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

#### Further information

Use water spray to cool unopened containers.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Initiate spill containment procedures immediately using containment or absorption methods. Keep people away from area. Put on appropriate protective equipment (see Section 8).

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### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Do not allow spilled material to enter sewers, waterways or soil. Neutralize with water. Mop, sweep or otherwise collect spilled material and hold for disposal. Consult local government authorities for allowable disposal methods. After removal, rinse area completely with water to remove residue.

#### Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with eyes, skin or clothing. Avoid inhalation of dust or mists. Use in a well ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

### 7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

#### Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 1. Sodium hydroxide (CAS: 1310-73-2)

PEL (Inhalation): 2 mg/m<sup>3</sup>; USA (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): (C) 2 mg/m<sup>3</sup>; USA (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): (C) 2 mg/m<sup>3</sup>; USA (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

TLV® (Inhalation): (C) 2 mg/m<sup>3</sup>; USA (ACGIH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

### 8.2 Appropriate engineering controls

Use with adequate ventilation to maintain exposure limits below listed thresholds.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Pictograms



#### Eye/face protection

Wear chemical splash goggles or face shield when using this product.

#### Skin protection

Wear protective rubber gloves, a long sleeve shirt and, if necessary, a rubber apron to prevent contact.

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### Body protection

Wear chemical splash goggles or face shield when using this product. Wear protective rubber gloves, a long sleeve shirt and, if necessary, a rubber apron to prevent contact. Wear a NIOSH respirator approved for corrosive dusts or mists.

### Respiratory protection

Wear a NIOSH respirator approved for corrosive dusts or mists.

### Thermal hazards

No data available.

### Environmental exposure controls

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	White Powder
Odor	Characteristic
Odor threshold	No data available.
pH	>11.5 (1% solution)
Melting point/freezing point	No data available.
Initial boiling point and boiling range	N/A
Flash point	Non-Combustible
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	Not Determined
Solubility(ies)	100% in 120°F Water
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

### Other safety information

No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Product may react when diluted with water to produce heat up to boiling temperature. Product is highly reactive with acids. Reactions may produce hazardous conditions, including violent splattering of corrosive materials. NEVER mix this product with other chemicals. Mix this product ONLY with water.

### 10.2 Chemical stability

Product is stable under normal storage and usage conditions.

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

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### 10.5 Incompatible materials

Acid, metals.

### 10.6 Hazardous decomposition products

None are expected under normal storage and usage conditions.

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

#### Skin corrosion/irritation

Irritation, pain, redness, blistering.

#### Serious eye damage/irritation

Irritation, pain, redness, watering.

#### Respiratory or skin sensitization

Coughing, choking, respiratory tract irritation, breathing difficulty.

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

No data available.

#### Summary of evaluation of the CMR properties

No known significant effects or critical hazards.

#### STOT-single exposure

No data available.

#### STOT-repeated exposure

No data available.

#### Aspiration hazard

No data available.

#### Additional information

No known significant effects or critical hazards.

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### SECTION 12: Ecological information

#### Toxicity

No specific data available for this mixture. Sodium Dichloroisocyanurate is known to be toxic to aquatic life. Disodium Trioxosilicate is known to be moderately toxic to aquatic life.

#### Persistence and degradability

No data available on product

#### Bioaccumulative potential

No data available on product

#### Mobility in soil

No data available.

#### Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### Other adverse effects

No known significant effects or critical hazards.

### SECTION 13: Disposal considerations

#### Disposal of the product

Avoid disposal of this product. Use complete contents according to directions. Do not release contents into a municipal sewer except through normal dilution and usage. Do not release contents onto the ground or into any body of water. Dispose of empty container by offering for recycling if available, or into a landfill. Follow all applicable state and local regulations.

#### Disposal of contaminated packaging

Dispose of as unused product.

### SECTION 14: Transport information

#### DOT (US)

UN Number: 3262

Class: 8

Packing Group: II

Proper Shipping Name: UN 3262, Corrosive Solid, Basic, Inorganic, N.O.S., 8, PG II (Contains Sodium Hydroxide)

Reportable quantity (RQ): Sodium Hydroxide

**Note:** Certain package sizes of this product may qualify for exceptions to DOT's packaging, labeling and other requirements, and thus may have different DOT shipping names. For bulk shipments, see the shipping documents.

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations specific for the product in question

##### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

##### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

##### SARA 311/312 Hazards

Acute Health Hazard

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### Massachusetts Right To Know Components

Sodium hydroxide, CAS number: 1310-73-2

### New Jersey Right To Know Components

SODIUM HYDROXIDE, CAS number: 1310-73-2

Disodium metasilicate pentahydrate, CAS-No. 10213-79-3

### Pennsylvania Right To Know Components

Sodium hydroxide, CAS number: 1310-73-2

Disodium metasilicate pentahydrate, CAS-No. 10213-79-3

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## SECTION 16: Other information

The information herein is believed to be correct, but is given without warranty or guaranty of any kind, express or implied. The hazards provided in this Safety Data Sheet apply to the product in its concentrated form, and may differ significantly after dilution.

### 16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Crown Chemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Crown Chemical, Inc. has been advised of the possibility of such damages.