

Safety Data Sheet

SECTION 1: Identification

1.1 Product identifier

Product name	Solid MetalStar Machine Dish Detergent
Product number	106
Brand	Crown Chemical, Inc.

1.2 Other means of identification

Solid MetalStar 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)

- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1A
- 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.
P321	Specific treatment (see details on label).
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 metasilicate pentahydrate

Concentration	20 - 40 % (By 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).

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Do not breathe dust or mists. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective rubber gloves and chemical splash goggles or face shield when using this product. If inhalable particles of dusts or mists may occur during use, wear NIOSH approved respiratory protection. Mix ONLY with water.
If inhaled	Remove person to fresh air and keep comfortable for breathing. Call a Poison Control Center or doctor for treatment advice.

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In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a Poison Control Center or doctor for treatment advice.
In case of eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison Control Center or doctor for treatment advice.
If swallowed	Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Personal protective equipment for first-aid responders	Treat exposure symptomatically. In all cases where large quantities have been ingested or inhaled, 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

No data available.

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

Wear self-contained breathing apparatus for firefighting if necessary.

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).

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.

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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 in a locked location inaccessible to small children. Keep container closed when not in use. Store in a well ventilated area between 60-100°F (15- 38°C).

Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

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

Eye/face protection

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

Skin protection

Wear protective rubber gloves and a long sleeved shirt to prevent contact.

Body protection

Wash thoroughly after use and before eating, smoking, or using the bathroom. Avoid contamination of clothing or shoes, and wash any contaminated items before reuse. If possible, avoid wearing contact lenses when using this product.

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 Solid
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	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	N/A
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	N/A
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	>1.0 (H ₂ O = 1.0)

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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	N/A
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 is not reactive under normal storage and usage conditions. 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.

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, watering.

Serious eye damage/irritation

Eye contact may cause irritation or pain, redness and watering.

Respiratory or skin sensitization

Inhalation may cause coughing, choking and respiratory tract irritation. Ingestion may cause stomach and throat pain.

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.

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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 data available.

SECTION 12: Ecological information

Toxicity

No specific data available for this mixture. 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

Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Disposal of contaminated packaging

Dispose of as unused product.

Other disposal recommendations

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.

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SECTION 14: Transport information

DOT (US)

UN number: 3262

Class: 8 Packing group: III

Proper shipping name: UN 3262, Corrosive Solid, Basic, Inorganic, N.O.S., 8, PG III (Contains Disodium Trioxosilicate)

Reportable Quantity (RQ): None

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

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

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

New Jersey Right To Know Components

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.