



PRECISE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : PRECISE
Product code : MCS-177

1.2. Relevant identified uses of the substance or mixture and uses advised against

Dishmachine detergent: non-phosphate solid. Use only in an approved dispenser. Safe for use on Aluminum or Pewter.

1.3. Details of the supplier of the safety data sheet

Beacon Labs
19 Elmwood Avenue
Kansas City, 66103 - USA
T 1-800-643-9070; 1-913-713-4120

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Corr. 1A H314

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS-US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
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
P321 - Specific treatment (see ... on this label)
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/container according to local, state, and federal regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture



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Name	Product identifier	%	Classification (GHS-US)
sodium carbonate	(CAS No) 497-19-8	Trade Secret	Skin Corr. 1A, H314
sodium metasilicate, anhydrous	(CAS No) 6834-92-0	6-25	Skin Corr. 1A, H314 STOT SE 3, H335

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact: Immediately flush eye with copious amounts of cool, running water. Remove contact lenses if applicable, and continue flushing for at least 15 minutes, holding eyelids apart to ensure thorough rinsing of the entire eye. GET IMMEDIATE MEDICAL ATTENTION.

Skin contact: Immediately flush skin with copious amounts of cool, running water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before re-use.

Inhalation: Move victim to fresh air and keep at rest position. If qualified give oxygen or artificial respiration as needed.

Ingestion: DO NOT induce vomiting. Give large amounts of water if victim is conscious. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

First-aid: DO NOT use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration

With the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

4.2. Most important symptoms and effects, both acute and delayed

Skin/eye burns. Corrosive to mouth and throat. Ingestion can cause severe and rapid burning of mouth, throat and digestive tract. Mucous membrane irritant.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician: If ingested, probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: Firefighting measures

5.1. Extinguishing media

The material is not combustible. Use extinguishing media appropriate for surrounding fire. Use water spray or fog, foam, dry chemical, carbon dioxide, alcohol foam, if product is involved. Use of water spray when fighting fire may be inefficient.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Wet product is slippery. Avoid physical contact with wet material; highly caustic. Wear self-contained positive pressurized breathing apparatus MSHA/NIOSH approved or equivalent to maintain TLV.

Explosion Data

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Ensure adequate ventilation. Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Avoid breathing dust, fume, gas, mist, vapors, and spray. Wash face, hands and any exposed skin thoroughly after handling.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Sweep up solids, soak up if liquified. Transfer to appropriate waste container. Neutralize residue with mild acid and flush with water. Dispose of in accordance with local, state, and federal regulations.

6.4. Reference to other sections

For further information refer to section 13.



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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Do not eat, drink or smoke when using this product. Always use personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Keep container in well-ventilated area. Keep container tightly closed when not in operation. Store away from incompatible materials. Keep out of the reach of children. Avoid alkalines.

7.3. Specific end use(s)

Dishmachine detergent: non-phosphate solid. Use only in an approved dispenser. Safe for use on Aluminum or Pewter.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PRECISE	
ACGIH	Not applicable
OSHA	Not applicable
sodium metasilicate, anhydrous (6834-92-0)	
ACGIH	Not applicable
OSHA	Not applicable
sodium carbonate (497-19-8)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Engineering controls: Ensure adequate ventilation and that running water is available for washing eyes and skin.

Individual protection: Personal Protective Equipment (PPE)

Eye/Face Protection: Splash-proof chemical goggles or face shield.

Skin/Body Protection: Impervious rubber, alkali-proof protective gloves. Impervious rubber boots and apron.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: Remove and wash contaminated clothing before re-use.

Environmental release measures: Avoid release into environment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Color	: White
Odor	: There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): Irritating/pungent odour Mild odour Odourless
Odor threshold	: No data available
pH	: 11.2
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available



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Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Solubility	: Water: Solubility in water of component(s) of the mixture : • : > 18 g/100ml • : 77 g/100ml • : • : 22 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Avoid alkaline substances.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Avoid alkaline substances.

10.4. Conditions to avoid

Avoid alkaline substances.

10.5. Incompatible materials

Avoid alkaline substances.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

sodium metasilicate, anhydrous (6834-92-0)	
LD50 dermal rat	> 5000 mg/kg body weight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
sodium carbonate (497-19-8)	
LD50 oral rat	2800 mg/kg (Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Experimental value)
ATE US (oral)	2800.000 mg/kg body weight

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 11.2
Serious eye damage/irritation	: Not classified pH: 11.2
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified



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SECTION 12: Ecological information

12.1. Toxicity

sodium metasilicate, anhydrous (6834-92-0)	
LC50 fish 1	210 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 1	216 mg/l (96 h; Daphnia magna; GLP)
LC50 fish 2	2320 mg/l (96 h; Gambusia affinis)
EC50 Daphnia 2	632 mg/l (96 h; Lymnaea sp.)
Threshold limit algae 1	207 mg/l (72 h; Scenedesmus subspicatus; GLP)
sodium carbonate (497-19-8)	
LC50 fish 1	300 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	< 424 mg/l (48 h; Daphnia magna)
EC50 other aquatic organisms 1	14 mg/l (168 h; Plankton)
LC50 fish 2	740 mg/l (96 h; Gambusia affinis)
EC50 Daphnia 2	265 mg/l (48 h; Daphnia magna)
TLM fish 1	300 ppm (96 h; Lepomis macrochirus)
TLM other aquatic organisms 1	500 ppm (96 h; Daphnia magna)
Threshold limit algae 1	242 mg/l (5 days; Algae)

12.2. Persistence and degradability

sodium metasilicate, anhydrous (6834-92-0)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
sodium carbonate (497-19-8)	
Persistence and degradability	Biodegradability: not applicable. Low potential for adsorption in soil.
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

sodium metasilicate, anhydrous (6834-92-0)	
Bioaccumulative potential	Bioaccumulation: not applicable.
sodium carbonate (497-19-8)	
Log Pow	-6.19 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of contents/container according to local, state, and federal regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1759 Corrosive solids, n.o.s., 8, II

UN-No.(DOT) : UN1759

Proper Shipping Name (DOT) : Corrosive solids, n.o.s.



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Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
 Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger
 DOT Packaging Non Bulk (49 CFR 173.xxx) : 212
 DOT Packaging Bulk (49 CFR 173.xxx) : 240
 DOT Symbols : G - Identifies PSN requiring a technical name
 DOT Special Provisions (49 CFR 172.102) : 128 - Regardless of the provisions of §172.101(c)(12), aluminum smelting by-products and aluminum remelting by-products described under this entry, meeting the definition of Class 8, Packing Group II and III may be classed as a Division 4.3 material and transported under this entry. The presence of a Class 8 hazard must be communicated as required by this Part for subsidiary hazards
 IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
 IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.
 IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.
 T3 - 2.65 178.274(d)(2) Normal..... 178.275(d)(2)
 TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.
 DOT Packaging Exceptions (49 CFR 173.xxx) : 154
 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 15 kg
 DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 50 kg
 DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

UN-No. (IMDG) : 1759
 Proper Shipping Name (IMDG) : CORROSIVE SOLID, N.O.S.
 Class (IMDG) : 8 - Corrosive substances
 Packing group (IMDG) : II - substances presenting medium danger

Air transport

UN-No. (IATA) : 1759
 Proper Shipping Name (IATA) : Corrosive solid, n.o.s.
 Class (IATA) : 8 - Corrosives
 Packing group (IATA) : II - Medium Danger



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SECTION 15: Regulatory information

15.1. US Federal regulations

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Not listed on the United States TSCA (Toxic Substances Control Act) inventory

sodium metasilicate, anhydrous (6834-92-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

sodium carbonate (497-19-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

National regulations

No additional information available

15.3. US State regulations

SECTION 16: Other information

Full text of H-phrases:

Skin Corr. 1A	Skin corrosion/irritation Category 1A
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product