SAFETY DATA SHEET

SOLID METAL PRO

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	SOLID METAL PRO
Other means of identification	:	Not applicable
Recommended use	:	Machine Warewashing Detergent
Product dilution information	:	0,1 % - 0,29 %
Company	:	Ecolab Argentina S.R.L. Street 11 N° 978 Industrial Park Pilar - Pilar, Buenos Aires Argentina Zip Code: B1629MXA +54 (230) 467-1000
Emergency telephone	:	Argentina: CIQUIME: 0800-222-2933 / 11 4552-8747 (24 hours), National Poison Control Center: 0800 333 0160 (24 hours) Uruguay: CIQUIME (+54) 11 0800-222-2933 / (+54) 11 4552-8747 (24 hours). CIAT (Toxicological Information and Advice Center): 1722 (24 hours).
Issuing date	:	29.02.2024

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD

Acute toxicity (Oral)	:	Category 4
Skin corrosion/irritation	:	Category 1
Serious eye damage/eye irritation	:	Category 1

Product AT USE DILUTION

Skin corrosion/irritation	:	Sub-category 1A
Serious eye damage/eye irritation	:	Category 1

GHS label elements

Product AS SOLD

Hazard pictograms :



Signal Word	:	Danger
Hazard Statements	:	Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary Statements	:	**Prevention:** Do not breathe dust. Wash skin thoroughly after handling. Do not eat,

drink or smoke when using this product. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. Wash contaminated clothing before reuse.
Storage:
Store locked up.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Product AT USE DILUTION

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.

Precautionary Statements :
Prevention:
Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. Wash contaminated clothing before reuse.
Storage:
Store locked up.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Product AS SOLD

Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture : Mixture

Chemical name	**CAS-No.**	**Concentration (%)**
disodium metasilicate	6834-92-0	30 - 60
Sodium Carbonate	497-19-8	10 - 30

Product AT USE DILUTION

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

Product AS SOLD

In case of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
In case of skin contact	:	Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	:	Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	:	Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
Protection of first-aiders	:	If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to physician	:	Treat symptomatically.
Most important symptoms and effects, both acute and delayed	:	See Section 11 for more detailed information on health effects and symptoms.

Product AT USE DILUTION

In case of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
In case of skin contact	:	Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	:	Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	:	Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	None known.
Specific hazards during fire fighting	:	Not flammable or combustible.
Hazardous combustion products	:	Decomposition products may include the following materials: Carbon oxides

Nitrogen oxides (NOx)
Sulfur oxides
Oxides of phosphorus

Special protective equipment for fire-fighters	:	Use personal protective equipment.
Specific extinguishing methods	:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed.
Environmental precautions	:	Do not allow contact with soil, surface or ground water.
Methods and materials for containment and cleaning up	:	Sweep up and shovel into suitable containers for disposal.

Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed.
Environmental precautions	:	Do not allow contact with soil, surface or ground water.
Methods and materials for containment and cleaning up	:	Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD

Advice on safe handling	:	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
Conditions for safe storage	:	Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
Storage temperature	:	0 °C to 40 °C

Product AT USE DILUTION

Advice on safe handling	:	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not

		breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
Conditions for safe storage	:	Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD
Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	:	Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection	:	Safety goggles Face-shield
Hand protection	:	Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	:	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Product AT USE DILUTION

Engineering measures	:	Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection	:	Safety goggles Face-shield
Hand protection	:	Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	:	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

		Product AS SOLD	Product AT USE DILUTION
Appearance	:	solid	liquid
Color	:	off-white	colorless
Odor	:	not significant	odorless
pH	:	11,5 - 12,5, (1 %)	10,9 - 11,8
Flash point	:	Not applicable	
Odor Threshold	:	No data available	
Melting point/freezing point	:	No data available	
Initial boiling point and boiling range	:	No data available	
Evaporation rate	:	No data available	
Flammability (solid, gas)	:	Not applicable	
Upper explosion limit	:	No data available	
Lower explosion limit	:	No data available	
Vapor pressure	:	No data available	
Relative vapor density	:	No data available	
Relative density	:	No data available	
Water solubility	:	soluble	
Solubility in other solvents	:	No data available	
Partition coefficient: n-octanol/water	:	No data available	
Autoignition temperature	:	No data available	
Thermal decomposition	:	No data available	
Viscosity, kinematic	:	No data available	
Explosive properties	:	No data available	
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.	
Molecular weight	:	No data available	
VOC	:	No data available	

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	None known.
Incompatible materials	:	Acids
Hazardous decomposition	:	In case of fire hazardous decomposition products may be produced

products	such as: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Eye contact, Skin contact

Potential Health Effects

Product AS SOLD

Eyes	:	Causes serious eye damage.
Skin	:	Causes severe skin burns.
Ingestion	:	Harmful if swallowed. Causes digestive tract burns.
Inhalation	:	May cause nose, throat, and lung irritation.
Chronic Exposure	:	Health injuries are not known or expected under normal use.

Product AT USE DILUTION

Eyes	:	Causes serious eye damage.
Skin	:	Causes severe skin burns.
Ingestion	:	Causes digestive tract burns.
Inhalation	:	May cause nose, throat, and lung irritation.
Chronic Exposure	:	Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact	:	Redness, Pain, Corrosion
Skin contact	:	Redness, Pain, Corrosion
Ingestion	:	Corrosion, Abdominal pain
Inhalation	:	Respiratory irritation, Cough

Product AT USE DILUTION

Eye contact	:	Redness, Pain, Corrosion
Skin contact	:	Redness, Pain, Corrosion
Ingestion	:	Corrosion, Abdominal pain
Inhalation	:	Respiratory irritation, Cough

Toxicity

Product AS SOLD
Product

Acute oral toxicity	:	Acute toxicity estimate : 1.194 mg/kg
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	No data available
Skin corrosion/irritation	:	No data available
Serious eye damage/eye irritation	:	No data available
Respiratory or skin sensitization	:	No data available
Carcinogenicity	:	No data available
Reproductive effects	:	No data available
Germ cell mutagenicity	:	No data available
Teratogenicity	:	No data available
STOT-single exposure	:	The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT-repeated exposure	:	No data available
Aspiration toxicity	:	No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product AS SOLD

Environmental Effects : This product has no known ecotoxicological effects.

Product AT USE DILUTION

Environmental Effects : This product has no known ecotoxicological effects.

Product AS SOLD
Product

Toxicity to fish	:	No data available
Toxicity to daphnia and other aquatic invertebrates	:	No data available
Toxicity to algae	:	No data available

Components

Toxicity to fish : disodium metasilicate
96 h LC50 Fish: 210 mg/l

Sodium Carbonate
96 h LC50 Lepomis macrochirus (Bluegill sunfish): 300 mg/l

Components

Toxicity to daphnia and other aquatic invertebrates : Sodium Carbonate
48 h EC50 Ceriodaphnia (water flea): 213,5 mg/l

Persistence and degradability

Product AT USE DILUTION
Not applicable - inorganic

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD

Disposal methods	:	Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
Disposal considerations	:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

Product AT USE DILUTION

Disposal methods	:	Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
Disposal considerations	:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport

UN number	:	3253
Description of the goods	:	DISODIUM TRIOXOSILICATE
Class	:	8
Packing group	:	III
Environmentally hazardous	:	no

Air transport (IATA)

Contact Regulatory for air freight eligibility

Sea transport (IMDG/IMO)

UN number	:	3253
Proper shipping name	:	DISODIUM TRIOXOSILICATE
Class	:	8
Packing group	:	III
Marine pollutant	:	no

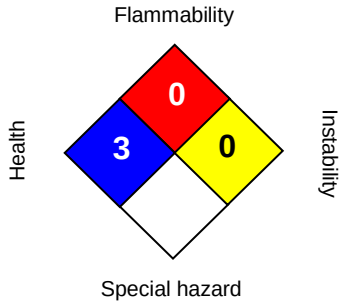
SECTION 15. REGULATORY INFORMATION

Argentina: Our Material Safety Data Sheet (MSDS) complies with the Resolution R.S.T. 801/15.

SECTION 16. OTHER INFORMATION

Product AS SOLD

NFPA:



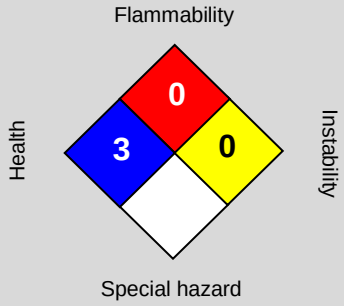
HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Product AT USE DILUTION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Issuing date	:	29.02.2024
Version	:	1.1
Prepared by	:	Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.