

SAFETY DATA SHEET

In accordance with Annex II of Regulations (EC) 1907/2006 as amended by Regulation (EU) 830/2015

1 IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

1.1 Product identifier

Product Name: METSO

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

Laundry Booster - For professional use only

Uses advised against:

Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Company Name: Gannon Chemicals Ltd
Ballindine, Claremorris
Co. Mayo, Ireland
Email address of SDS author: paul@gannonchemicals.ie

1.4 Emergency Telephone Number

Members of Public: +353 (1) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Metal Corr. 1 H290: May be corrosive to metals.
Skin Corr. 1B / Eye Dam. 1 H314: Causes severe skin burns and eye damage.
STOT SE 3 H335: May cause respiratory irritation

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation

Precautionary statement(s)

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P262: Do not get in eyes, on skin, or on clothing.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard: CLP
Heat may cause pressure rise in tanks/drums: explosion risk
Harmful to fish
Toxic to invertebrates (Daphnia)

2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Product/Ingredient Name	CAS No.	Weight %	EC Number	Regulation (EC) No 1272/2008 [CLP]
Sodium metasilicate pentahydrate	10213-79-3	100 %	600-279-4	Metal Corr. 1 – H290 Skin Corr. 1B1 – H314 STOT SE 3 – H335

3.2 Mixtures:

Not applicable

4 FIRST AID MEASURES

4.1 Description of first aid measures:

General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Rinse with water. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist.

After ingestion:

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

AFTER INHALATION OF DUST: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

After skin contact:

Not irritating.

After eye contact:

Inflammation/damage of the eye tissue. Corrosion of the eye tissue.

After ingestion:

Nausea. Vomiting.

4.2.2 Delayed symptoms

No effects known.

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media:

In case of fire use extinguishing media (Carbon dioxide. Dry powder. Water spray jet), appropriate to surrounding conditions. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

Upon combustion: CO and CO₂ are formed. Take precautions to protect personnel from exposure.

5.3 Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

5.4 Additional information

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, chapter 8.

6.2 Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Prevent dust cloud formation. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7 HANDLING AND STORAGE

- | | | |
|------------|--|---|
| 7.1 | Precautions for safe handling | Ensure there is sufficient ventilation of the area. Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Remove contaminated clothing immediately. Do not discharge the waste into the drain. |
| 7.2 | Conditions for safe storage, including any incompatibilities | Store at normal room temperature and keep container tightly closed. Keep out of reach of children. No special precautions necessary for protection against fire and explosion. Store away from strong acids. |
| 7.3 | Precautions for safe handling | For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed. |

8.1. Control parameters

Components with occupational exposure limits
No occupational exposure limits known.

8.2. Exposure controls

The following information applies for the uses indicated in subsection 1.2. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product: Covering activities such as filling and transfer of product to application equipment, flasks or buckets

If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) - 0.4 mm coating thickness.

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

Respiratory protection:

No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product

Recommended maximum concentration (%): 5

Appropriate engineering controls:

Use only in well ventilated areas.

Appropriate organisational controls:

No special requirements under normal use conditions.

Personal protective equipment

Eye / face protection:

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

Hand protection:

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

Body protection:

No special requirements under normal use conditions.

Respiratory protection:

No special requirements under normal use conditions.

Environmental exposure controls:

No special requirements under normal use conditions.

9	PHYSICAL AND CHEMICAL PROPERTIES
----------	---

9.1. Information on basic physical and chemical properties

(a)	Form	Powder
(b)	Colour	White
(c)	Odour	Odourless
(d)	pH value(1% solution)	12.4-12.8
(e)	Melting point/range (°C):	72 C°
(f)	Initial boiling point/range (°C):	Not Determined
(g)	Decomposition temperature (°C)	Not Determined
(h)	Flash point (°C):	Not Applicable
(i)	Ignition temperature (°C)	Not Determined
(j)	Vapour pressure (hPa) at ...°C)	Not Determined
(k)	Vapour density (air=1)	Not Determined
(l)	Density (g/cm ³) at 20°C	Not Determined
(m)	Bulk density (kg/m ³)	0,85 – 1,05 kg/l
(n)	Water solubility (20°C in g/l)	Soluble
(o)	Solubility(ies):	Not Determined
(p)	Partition coefficient	Not Determined
(q)	Viscosity, dynamic (mPa s):	Not Determined

9.2 Other information

Oxidising solid

10	STABILITY AND REACTIVITY
-----------	---------------------------------

10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2 Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

10.4 Conditions to avoid

See MSDS section 7 - Handling and storage.

10.5 Incompatible materials

Substances to avoid: Halogens, Acids, Reactive Chemicals

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11	TOXICOLOGICAL INFORMATION
-----------	----------------------------------

11.2.2 Mixtures

No test data is available on the mixture.

Substance data, where relevant and available, are listed below

Substance	Acute toxicity	Skin corrosion/irritation	Serious eye damage/eye irritation	Respiratory or skin sensitisation
Sodium metasilicate pentahydrate	LD50 Oral - rat - 847 mg/kg	Material will cause chemical burns. Dermal LD50 (rat) > 5000 mg/kg	Material will cause chemical burns.	Buehler test Result: Does not cause skin sensitisation.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

12 ECOLOGICAL INFORMATION

Substance	Toxicity	Persistence and Degradability	Bioaccumulative potential	Mobility in soil
Sodium metasilicate pentahydrate	Acute fish toxicity (Brachydanio rerio): LC50 (96 hour): 210 mg/l Acute invertebrates toxicity (Daphnia magna): EC50 (48 hour): 1700 mg/l Algae / cyanobacteria (Scenedesmus subspicatus): EC50 (72 h, biomass): 207 mg/L, EC50 (72 h, growth rate): > 345.4 mg/L	No Data Available	No Data Available	Low potential for adsorption in soil

Results of PBT and vPvB assessment

The product does not fulfil the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

13 DISPOSAL

This product does not contain any prescribed substance under the Environmental Protection Act (Prescribed Processes and Substances) Regulations 1991 and is not classified as special waste under the Control of Substances (Special Waste) Regulations 1996, but is classified as controlled waste under the Environmental Protection Act 1990. For small quantities, dilute with water to at least 2.5% w/v (25 g/litre) and pour down a wastewater drain (foul sewer). Rinse out containers at least twice and recycle if facilities exist or dispose of as commercial waste. For larger quantities dispose of safely as commercial waste. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

14 TRANSPORT INFORMATION

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

- 14.1 UN number: 3253
- 14.2 UN proper shipping name: DISODIUM TRIOXOSILICATE
- 14.3 Transport hazard class(es): 8
- 14.4 Packing group: III
Labels 8
- 14.5 Environmental hazards: Non-dangerous goods
- 14.6 Special precautions for user: Non-dangerous goods
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16 OTHER INFORMATION

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Abbreviations and acronyms:

- STOT - Specific Target Organ Toxicity
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

Date 30/11/2020

Revision Number: 8

Author: Paul Gannon