SAFETY DATA SHEET

In accordance with 1907/2006 annex II and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)
Issued 2021-02-12
Version number 1.0

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

1.1. Product identifier

Trade name	MAUS Stixx Pro

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

Identified uses	Fire extinguishing agents

1.3. Details of the supplier of the safety data sheet

Company	Falkenheim Invest AB Sockerbruksgatan 20 531 40 Lidköping Sweden
Telephone	08-12 00 51 30
E-mail	info@mausxtin.com

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Ox. Sol. 2, H272
Skin Irrit. 2, H315
Skin. Sens. 1, H317
Eye Irrit. 2, H319
STOT SE 3, H335
(See section 16)

2.2. Label elements

Hazard pictogram

Signal word	Danger
Hazard statements	
H272	May intensify fire; oxidiser
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
Precautionary statements	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P220	Keep away from clothing and other combustible materials
P280	Wear protective gloves and eye protection
P333+P313	If skin irritation or rash occurs: Get medical advice/attention
P501	Dispose of contents and container to authorised waste disposal facility

Supplemental hazard information

Contains: STRONTIUM NITRATE, PHENOLIC RESIN

2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
POTASSIUM NITRATE		
CAS No: 7757-79-1 EC No: 231-818-8 REACH: 01-2119488224-35	Ox. Sol. 3; H272	50 - 75 %
STRONTIUM NITRATE		
CAS No: 10042-76-9 EC No: 233-131-9	Ox. Sol. 1, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H271, H315, H319, H335	20 - 35 %
MELAMINE		
CAS No: 108-78-1 EC No: 203-615-4		10 - 20 %
PHENOLIC RESIN		
CAS No: 9003-35-4 EC No: 500-005-2	Skin. Sens. 1; H317	5 - 15 %
SODIUM HYDROGEN TARTRATE MONOHYDRATE		
CAS No: 526-94-3 EC No: 208-400-9		5 - 15 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: First aid measures

4.1. Description of first aid measures

Generally

Normally, the product constitutes no risk as long as the cover remains intact. First aid measures mentioned below only apply in case of exposure to the product content.
In case of concern, or if symptoms occur, call a doctor/physician.
Never attempt to administer liquid, or anything else, to an unconscious person via the mouth.

Upon breathing in

In case of inhaling large amounts of smoke, fog or dust, flush nose, mouth and throat with water. If symptoms occur seek medical advice.

Upon eye contact

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor.

Upon skin contact

Remove contaminated clothes.
Wash the skin with soap and water.
If symptoms occur, contact a physician.
Wash/clean clothes with large amounts of water, to reduce fire hazard.

Upon ingestion

Rinse mouth out thoroughly first with water, then SPIT OUT the rinse water. Drink at least half a litre of water and seek medical advice. DO NOT INDUCE VOMITING.

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

Upon breathing in

Irritation.

Upon eye contact

Irritation.

Upon skin contact

Irritation.
Allergic reactions.
Burn injuries may occur during contact with heated product.

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

Actions under first aid and the stated symptoms are relevant for incorrect handling of the product causing exposure of the contents.
Symptomatic treatment.
When contacting a physician, take this SDS with you.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

Unsuitable extinguishing agents

May not be extinguished with water dispersed under high pressure.

5.2. Special hazards arising from the substance or mixture

Oxidising agent. May intensify fire. The product itself is not flammable but can support fire, even in the absence of air. When heated, the product melts. At a higher temperature, decomposition takes place, whereby toxic gases such as nitrogen oxides are emitted. When heated in enclosed spaces, decomposition can lead to explosive processes.

5.3. Advice for fire-fighters

Protective measures should be taken regarding other material at the site of the fire.
In case of fire use proper breathing apparatus.
Wear full protective clothing.
Cool closed containers that were exposed to fire with water.
Any extinguishing should be executed from a good distance due to the risk of violent reaction or explosion.
Evacuate all not-authorized personnel.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use recommended safety equipment, see section 8.
Upon larger spills, wear suitable protective gloves and eye protection, as well as fire resistant clothing.
Avoid inhalation and exposure to skin and eyes.
Ensure good ventilation.
Keep unauthorized and unprotected people at a safe distance.

6.2. Environmental precautions

Avoid emissions into soil, water or air.

6.3. Methods and material for containment and cleaning up

Collect spillage in sealable containers and send for disposal. Clean up residue with an appropriate solvent and ventilate the facilty with fresh air.

6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Read and follow the instructions for handling.
Take the necessary preventive and protective measures for safe handling.
Must be handled with care to avoid puncture or damage to the product.
Do not inhale the smoke.
Avoid contact with skin and eyes.
Store this product separately from food items and keep it out of the reach of children and pets.
Do not eat, drink or smoke in premises where this product is handled.
Wash your hands after using the product.
Consider the risk of violent chemical reactions.
Do not use damaged or partially damaged products.

7.2. Conditions for safe storage, including any incompatibilities

Store in dry and cool area.
Store tightly, in original packaging.
Store in a well-ventilated space.
This product should be stored well out of reach of young children and kept safely apart from products intended for consumption.
Take the necessary preventive and protective measures for safe storage.

7.3. Specific end uses

See identified uses in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

All ingredients (cf. Section 3) lack occupational exposure limit values.

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

The risks posed by the product or its constituents must be considered in the task specific risk assessment, in accordance with current working environment legislation. The risk assessment should be reviewed regularly and updated if necessary.

8.2.1. Appropriate engineering controls

The ventilation in the workplace must ensure an air quality that meets the requirements of the current working environment legislation. Local exhaust ventilation should be used to remove airborne contaminants at the source.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

Follow current local regulations for recommending protective gloves.

Wear protective gloves if there is a risk of direct contact.

Respiratory protection

Use an appropriate breathing apparatus for mist forming applications.

The most appropriate respiratory protective equipment should be decided in consultation with the appointed safety representative, taking into account the risk assessment for the specific task.

Based on the physical and chemical properties of the product, the following filter type(s) and/or filter combination(s) are recommended:.

– P2.

Breathing apparatus may be required.

8.2.3. Environmental exposure controls

Work with the product should take place in such a way that the product does not get into drains, waterways, soil and air.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state	solid Form: solid
(b) Colour	brown yellow
(c) Odour	Not indicated
(d) Melting point/freezing point	Not indicated
(e) Boiling point or initial boiling point and boiling range	Not indicated
(f) Flammability	Not indicated
(g) Lower and upper explosion limit	Not indicated
(h) Flash point	Not indicated
(i) Auto-ignition temperature	>500 °C
(j) Decomposition temperature	Not indicated
(k) pH	In working solution the pH value is: 7.5
(l) Kinematic viscosity	Not indicated
(m) Solubility	Not indicated
(n) Partition coefficient n-octanol/water (log value)	Not indicated
(o) Vapour pressure	Not indicated
(p) Density and/or relative density	1.66 g/cm^3
(q) Relative vapour density	Not indicated
(r) Particle characteristics	Not indicated

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not indicated

9.2.2. Other safety characteristics

Not indicated

SECTION 10: Stability and reactivity

10.1. Reactivity

May intensify fire. Oxidising.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

Reacts with metals.

Reacts with reducing agent.

10.4. Conditions to avoid

Avoid heat, sparks and open flames.

Do not let a heated product come in contact with water or other liquids.

10.5. Incompatible materials

Avoid contact with metal powders (Al, Zn, Be, etc.) .
Peroxides.
Titanium.
Fluorine and fluorine compounds.
Cyanides.
Sulphides.
Phosphorus.
Water.
Bases, reducing substances, combustible and organic materials, metal oxides, salts of metals.
Reducing agents.
Antimony.

10.6. Hazardous decomposition products

When thermal decomposition occurs, the following substances are formed:.
Nitrous gases (NOx).
Carbon monoxide (CO).
Carbon dioxide (CO2).

SECTION 11: Toxicological information

The information in this section is only applicable in case of exposure to the product content.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on possible health hazards are based on experience and / or toxicological properties of several components in the product.

Acute toxicity

The product is not classified as acutely toxic.

POTASSIUM NITRATE

LD50 rat 24h: 3750 mg/kg Orally

STRONTIUM NITRATE

LD50 rat 24h: 2750 mg/kg Orally

MELAMINE

LD50 rabbit 24h: > 1000 mg/kg Dermally
LD50 rat 24h: 3161 mg/kg Orally

Skin corrosion/irritation

Irritant to skin.

Serious eye damage/irritation

Eye contact may cause burning pain or irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

The product is not classified as mutagen.

Carcinogenicity

The product is not classified as carcinogenic.

Reproductive toxicity

The product is not classified as a reproductive toxicant.

STOT-single exposure

May cause potent irritation in the airways/lungs.

STOT-repeated exposure

The product is not classified for specific organ toxicity after repeated exposure.

Aspiration hazard

The product is not classified as being toxic for aspiration.

11.2. Information on other hazards
11.2.1. Endocrine disrupting properties

Not indicated.

11.2.2. Other information

Not indicated.

SECTION 12: Ecological information

12.1. Toxicity

The product is not to be labelled as a environmental hazard. However, it is not inconceivable that large emissions, or repeated small emissions, can have a harmful effect on the environment.
Prevent release on land, in water and drains.

12.2. Persistence and degradability

There is no information regarding persistence or degradability.

12.3. Bioaccumulative potential

There is no information regarding bioaccumulation.

12.4. Mobility in soil

Information about mobility in nature is not available.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties

Not indicated.

12.7. Other adverse effects

No known effects or hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste handling of the product

Avoid discharge into sewers.
Discarded products must be disposed of as hazardous waste in accordance with regulations.
Not completely emptied packaging can contain remnants of dangerous substances and should therefore be handled as hazardous waste according to the above. Completely emptied packaging can be recycled.
See directive 2008/98/EC on waste. Observe national or regional provisions on waste management.

SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number

1477

14.2. UN proper shipping name

NITRATES, INORGANIC, N.O.S (POTASSIUM NITRATE, STRONTIUM NITRATE)

14.3. Transport hazard class(es)
Class

5.1: Oxidizing substances

Classification code (ADR/RID)

O2: Oxidizing substances without subsidiary risk or articles containing such substances: Solid

Subsidiary risk (IMDG)

No subsidary risk according to IMDG

Labels

14.4. Packing group

Packing group III

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user
Tunnel restrictions

Tunnel category: E

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

14.8 Other transport information

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres (ADR 1.1.3.6)
Stowage category not indicated (IMDG)

SECTION 15: Regulatory information

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

Not indicated.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: Other information

16a. Indication of where changes have been made to the previous version of the safety data sheet
Revisions of this document

This is the first version

16b. Legend to abbreviations and acronyms used in the safety data sheet
Full texts for Hazard Class and Category Code mentioned in section 3

Ox. Sol. 3	Oxidising Solids, Hazard Category 3 - Ox. Sol. 3, H272 - May intensify fire; oxidiser
Ox. Sol. 1	Oxidising Solids, Hazard Category 1 - Ox. Sol. 1, H271 - May cause fire or explosion; strong oxidiser
Skin Irrit. 2	Skin corrosion/irritation, Hazard Category 2 - Skin Irrit. 2, H315 - Causes skin irritation
Eye Irrit. 2	Serious eye damage/eye irritation, Hazard Category 2 - Eye Irrit. 2, H319 - Causes serious eye irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation - STOT SE 3, H335 - May cause respiratory irritation
Skin. Sens. 1	Respiratory or skin sensitisation, Sensitisation — Skin, hazard category 1 - Skin. Sens. 1, H317 - May cause an allergic skin reaction
Ox. Sol. 2	Oxidising Solids, Hazard Category 2 - Ox. Sol. 2, H272 - May intensify fire; oxidiser

Explanations of the abbreviations in Section 14

ADR	European Agreement concerning the International Transport of Dangerous Goods by Road
RID	Regulations concerning the International Transport of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods Code
ICAO	International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)
IATA	The International Air Transport Association

Tunnel restriction code: E; Passage through category E tunnels is strictly forbidden
Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres (ADR 1.1.3.6)

16c. Key literature references and sources for data
Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I , as updated to 2021-02-12.
Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

1907/2006	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing

Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

2008/98/EC DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I , where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI .

16e. List of relevant hazard statements and/or precautionary statements
Full texts for hazard statements mentioned in section 3

H272 May intensify fire; oxidiser
H271 May cause fire or explosion; strong oxidiser
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H317 May cause an allergic skin reaction

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment
Warning for misuse

This product can cause harm if used improperly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with its intended use.

Other relevant information

Not indicated

Editorial information

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