

SAFETY DATA SHEET

In accordance with 1907/2006 Annex II (2015/830) and 1272/2008

(All references to EU regulations and directives are abbreviated into only the numeric term)

Issued 2016-05-02

Replaces issued SDS 2016-01-26

Version number 1.1



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

1.1. Product identifier

Trade name MAUS Xtin Klein

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

Producer

Company Falkenheim Invest AB

Smedstorpsgratan 16

532 37 Skara

Sweden

Telephone 08-12 00 51 30

E-mail info@mausxtin.com

1.4. Emergency telephone number

Acute cases: Call 112, request poison information. Less acute cases: Call 111 (England, Wales and Scotland).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Oxidising solids (Verified Category 2), H272

Skin Irritant (Category 2), H315

May cause an allergic skin reaction (Category 1), H317

Irritates eyes (Category 2), H319

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

Precautionary statements

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P221

Take any precaution to avoid mixing with 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

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	Ox Sol 3; H272	50 - 60 %
MELAMINE		
CAS No: 108-78-1 EC No: 203-615-4		10 - 20 %
STRONTIUM NITRATE		
CAS No: 10042-76-9 EC No: 233-131-9	Ox Sol 1, Skin Irrit 2, Eye Irrit 2, STOT SE 3 <i>resp</i> ; H271, H315, H319, H335	10 - 20 %
FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH PHENOL		
CAS No: 9003-35-4 EC No: 500-005-2	Skin Sens 1; H317	10 - 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

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 eyes with plenty of water. If symptoms persist, seek medical advice.

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

Inhalation of heated product may cause airway 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

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

Not indicated.

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 a respirator mask.

Cool closed containers that were exposed to fire with water.

Wear full protective clothing.

Any extinguishing should be executed from a good distance due to the risk of violent reaction or explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation and exposure to skin and eyes.

Ensure good ventilation.

Keep unauthorized and unprotected people at a safe distance.

Use recommended safety equipment, see section 8.

Upon larger spills, wear suitable protective gloves and eye protection, as well as fire resistant clothing.

6.2. Environmental precautions

Avoid that larger spills reach drains, fields or waterways.

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 facility with fresh air.

6.4. Reference to other sections

See also section 7 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not eat, drink or smoke in premises where this product is stored.

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.

Must be handled with care to avoid puncture or damage to the product.

Wash your hands after using the product.

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.

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

Follow the instructions. No special measures need to be taken in the event of normal handling or use.

8.2.1. Appropriate engineering controls

Handle in premises with good ventilation.

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 risk of skin contact.

Respiratory protection

Use proper protective breathing equipment in case of insufficient ventilation.

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) Appearance	Form: Solid of unspecified shape. Colour: yellowish.
b) Odour	Not indicated
c) Odour threshold	Not applicable
d) pH	In working solution the pH value is: 7.5
e) Melting point/freezing point	Not indicated
f) Initial boiling point and boiling range	Not indicated
g) Flash point	Not indicated
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not indicated
k) Vapour pressure	Not indicated
l) Vapour density	Not indicated
m) Relative density	1.66
n) Solubility	Not indicated
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	>500 °C
q) Decomposition temperature	Not indicated
r) Viscosity	Not indicated
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

Easily ignites.

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 water.

Avoid contact with organic solvents.

10.6. Hazardous decomposition products

Nitrous gases (NO_x).

Carbon monoxide (CO).

Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Not indicated.

Acute toxicity

The product is not classified as harmful to health.

POTASSIUM NITRATE

LD50 rat 24h: 3750 mg/kg Orally

MELAMINE

LD50 rabbit 24h: > 1000 mg/kg Dermally

LD50 rat 24h: 3161 mg/kg Orally

STRONTIUM NITRATE

LD50 rat 24h: 2750 mg/kg Orally

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/irritation

Eye contact may cause burning pain or irritation.

Respiratory or skin sensitisation

The product contain allergenic substances.
Can cause skin sensitivity (eczema).

Germ cell mutagenicity

No mutagenic effects have been reported for the substance in this mixture.

Carcinogenicity

No carcinogenic effects have been reported for the substances in this product.

Reproductive toxicity

No toxic effects to reproduction have been reported for the substances in this mixture.

STOT-single exposure

Inhalation of mist may cause irritation of the nose and throat. Coughing and breathing difficulties may also occur.

STOT-repeated exposure

No known hazards for repeated exposure.

Aspiration hazard

The product is not classified as being toxic for aspiration.

SECTION 12: Ecological information

12.1. Toxicity

No ecological damage is known or expected in the event of normal use.
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. Other adverse effects

No known effects or hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste handling of the product

Discarded products must be disposed of as hazardous waste in accordance with regulations.
Avoid discharge into sewers.
Observe local regulations or contact the supplier for further information.

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

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

Not applicable

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

Earlier versions

2016-01-26 Changes in section(s) 14.

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 solid substances (Category 3)
Ox Sol 1	Oxidising solids (Verified Category 1)
Skin Irrit 2	Skin Irritant (Category 2)
Eye Irrit 2	Irritates eyes (Category 2)
STOT SE 3resp	Specific target organ toxicity - single exposure; May cause respiratory irritation (Category 3 resp)
Skin Sens 1	May cause an allergic skin reaction (Category 1)

Comprehensive definition of the hazards mentioned in Section 2

Ox Sol 3

Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 3:7 mixture (by mass) of potassium bromate and cellulose and the criteria for Categories 1 and 2 are not met.

Ox Sol 1

Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time less than the mean burning time of a 3:2 mixture, by mass, of potassium bromate and cellulose.

Skin Irrit 2

One or more criteria 1-3 for irritation of skin is applicable.

Eye Irrit 2

If, when applied to the eye of an animal, a substance produces at least in 2 of 3 tested animals, a positive response of:

- corneal opacity ≥ 1 and/or
- iritis ≥ 1 , and/or
- conjunctival redness ≥ 2 and/or
- conjunctival oedema (chemosis) ≥ 2

calculated as the mean scores following grading at 24, 48 and 72 hours after installation of the test material, and which fully reverses within an observation period of 21 days.

STOT SE 3resp

Transient target organ effects: Respiratory tract irritation. These are target organ effects for which a substance does not meet the criteria to be classified in Categories 1 or 2. These are effects which adversely alter human function for a short duration after exposure and from which humans may recover in a reasonable period without leaving significant alteration of structure or function.

Skin Sens 1

Substances shall be classified as skin sensitisers (Category 1) in accordance with the criteria given below: (i) if there is evidence in humans that the substance can induce sensitisation by contact with the skin in a significant number of people, or (ii) where there are positive results from an appropriate animal test. The concentration limit 0.1% for elicitation is used for the application of the special labeling requirements of 1272/2008 Annex II:2.8 to protect sensitised individuals.

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

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 2016-05-02.

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 Annex II (2015/830) COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

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

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 Oxidising solid substances (Category 3)

H271 Oxidising solids (Verified Category 1)

H315 Skin Irritant (Category 2)

H319 Irritates eyes (Category 2)

H335 Specific target organ toxicity - single exposure; May cause respiratory irritation (Category 3 resp)

H317 May cause an allergic skin reaction (Category 1)

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

Editorial information



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Teknikringen 10, SE-583 30 Linköping, Sweden, www.kemrisk.se