SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
Dark Hardener 923

Product no.
-

REACH registration number
Not applicable

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

Relevant identified uses of the substance or mixture
Hardener for wood adhesive.

Uses advised against
-
The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address
Dana Lim A/S
Københavnsvej 220
DK-4600 Køge
Denmark
phone: +45 56 64 00 70
fax: +45 56 64 00 90

Contact person
Product Safety Department

E-mail
info@danalim.dk

SDS date
2019-08-21

SDS Version
4.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Met. Corr. 1; H290
Skin Corr. 1B; H314
Skin Sens. 1; H317
Eye Dam. 1; H318
Acute Tox. 4; H332
Aquatic Chronic 2; H411
See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

May be corrosive to metals. (H290)
Causes severe skin burns and eye damage. (H314)
May cause an allergic skin reaction. (H317)
Harmful if inhaled. (H332)
Toxic to aquatic life with long lasting effects. (H411)

Precautionary statements

General	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
Prevention	Wear gloves/eye protection. (P280).
Response	Immediately call a POISON CENTER/doctor. (P310). IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. (P303+P361+P353). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
Storage	-
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

chromium trinitrate; salpetersyre

Additional labelling

Not applicable

Unique formula identifier (UFI)

JRE1-30V0-000Q-GDF0

2.3. Other hazards

Not applicable

Additional warnings

Tactile warning. If this product is sold in retail, it must be delivered with child-resistant fastening.

VOC (volatile organic compound)

Not applicable

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME:	chromium trinitrate
IDENTIFICATION NOS.:	CAS-no: 7789-02-8 EC-no: 236-921-1 REACH-no: 01-2119987047-27-xxxx
CONTENT:	60-80%
CLP CLASSIFICATION:	Met. Corr. 1, Skin Corr. 1B, Skin Sens. 1A, Eye Dam. 1, Acute Tox. 4, Aquatic Chronic 2 H290, H314, H317, H318, H332, H411

NAME:	salpetersyre
IDENTIFICATION NOS.:	CAS-no: 7697-37-2 EC-no: 231-714-2
CONTENT:	0.25 - <1%
CLP CLASSIFICATION:	Met. Corr. 1, Ox. Liq. 2, Acute Tox. 3, Skin Corr. 1A H272, H290, H314, H331, EUH071
NOTE:	L

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.
L = European occupational exposure limit.

Other information

ATEmix(inhale, vapour) = 12,384 - 18,576
Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 18,536 - 27,804

Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 55,608 - 83,412
N chronic (CAT 2) Sum = Sum(Ci/(M(chronic)i*25)*0.1*10^CATi) = 2,22433344 - 3,33650016

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing.

Ingestion

In the case of ingestion, contact a doctor immediately and bring the safety data sheet or label. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.
Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned: Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Nothing special

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from spilled material. Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on “Disposal considerations” in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

Frost free

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

salpetersyre
Long-term exposure limit (8-hour TWA reference period): - ppm | - mg/m³
Short-term exposure limit (15-minute reference period): 1 ppm | 2.6 mg/m³

DNEL / PNEC

No data available

8.2. Exposure controls

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep containment materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

If ventilation at the work place is insufficient, use a half- or full mask with an appropriate filter or an air-supplied breathing apparatus depending on the specific work situation and how long you will be using the product.

Skin protection

Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.

Hand protection

Butyl rubber

Breakthrough time: > 480 minutes (Class 6)

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Brown
Odour	No data available.
Odour threshold (ppm)	No data available.
pH	1
Viscosity (40°C)	No data available.
Density (g/cm³)	1,3
Phase changes	
Melting point (°C)	No data available.
Boiling point (°C)	100
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.
Data on fire and explosion hazards	
Flash point (°C)	No data available.
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.
Solubility	
Solubility in water	Soluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in the section “Handling and storage”.

10.3. Possibility of hazardous reactions

Nothing special

10.4. Conditions to avoid

Nothing special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
No data available.

Skin corrosion/irritation
Causes severe skin burns and eye damage.

Serious eye damage/irritation
Causes serious eye damage.

Respiratory or skin sensitisation
May cause an allergic skin reaction. Data on substance: chromium trinitrate
Test: OECD Guideline 406
Organism: Guinea pig
Result: Sensibilisation

Germ cell mutagenicity
No data available.

Carcinogenicity
No data available.

Reproductive toxicity
No data available.

STOT-single exposure
No data available.

STOT-repeated exposure
No data available.

Aspiration hazard
No data available.

Long term effects
Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance: chromium trinitrate
Species: Fish
Test: NOEC
Duration: 72 h
Result: 0,22 mg/l

Substance: chromium trinitrate
Species: Daphnia
Test: EC50
Duration: 48 h
Result: 16,8 mg/l (acute)

Substance: chromium trinitrate
Species: Daphnia
Test: NOEC
Duration: 21 d
Result: 0,066 mg/l (chronic)

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result

No data available.

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF

No data available.

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

Specific labelling

Not applicable

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

14.1. UN number	3264
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Chrom(III)nitrate)
14.3. Transport hazard class(es)	8
14.4. Packing group	III
Notes	-
Tunnel restriction code	-

IMDG

UN-no.	3264
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Chrom(III)nitrate)
Class	8
PG*	III
EmS	F-A, S-B
MP**	No
Hazardous constituent	-

IATA/ICAO

UN-no.	3264
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Chrom(III)nitrate)
Class	8
PG*	III

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

(*) Packing group
(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Demands for specific education

-

Additional information

Not applicable

Seveso

Seveso III Part 1: E2

Biocidal reg. no.

Not applicable

Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.
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 (CLP).
Regulation (EC) 1907/2006 (REACH).
The Control of Major Accident Hazards (COMAH) Regulations 2015.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H272 - May intensify fire; oxidiser.
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H331 - Toxic if inhaled.
H332 - Harmful if inhaled.
H411 - Toxic to aquatic life with long lasting effects.
EUH071 - Corrosive to the respiratory tract.

The full text of identified uses as mentioned in section 1

-

Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:
The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)
The classification of the mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the mixture in regard of skin corrosion and serious eye damage is based on the pH-criterion given by Regulation (EC) No. 1272/2008 (CLP)It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

Robert Pedersen

Date of last essential change
(First cipher in SDS version)

2019-03-26(3.0)

Date of last minor change
(Last cipher in SDS version)

2019-03-26