SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
UNIFLUX STIFT

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
Flux

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
Unipak A/S
Marktoften 3C
8464 Galten
Denmark

E-mail
sales@unipak.dk

SDS date
02-11-2015

SDS Version
1.0

1.4. Emergency telephone number

+45 8626 1177 (normal opening time)
These services are only available to health professionals.
The UK National Poisons Emergency number is 0870 600 6266
Use your national or local emergency number
See section 4 “First aid measures”

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Corr. 1B; H314
Eye Dam. 1; H318
Acute Tox. 4; H302
STOT SE 3; H336
STOT SE 3; H335
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

Causes severe skin burns and eye damage. (H314)
Harmful if swallowed. (H302)
May cause drowsiness or dizziness. (H336)
May cause respiratory irritation. (H335)
Very toxic to aquatic life with long lasting effects. (H410)

Safety statement(s)

General	-
Prevention	Do not breathe mist/vapours/fume/spray. (P260).
Response	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	Store locked up. (P405).
	Store in a well-ventilated place. Keep container tightly closed. (P403+P233).
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

zinc chloride , ammonium chloride , Hydrochloric acid

2.3. Other hazards

Additional labelling

-

Additional warnings

-

VOC

0,00%

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME:	zinc chloride
IDENTIFICATION NOS.:	CAS-no: 7646-85-7 EC-no: 231-592-0 Index-no: 030-003-00-2
CONTENT:	50-100%
CLP CLASSIFICATION:	Acute Tox. 4, Skin. Corr. 1B, Aquatic Acute 1, Aquatic Chronic 1 H302, H314, H400, H410

NAME:	Hydrochloric acid
IDENTIFICATION NOS.:	CAS-no: 7647-01-0 EC-no: 231-595-7 Index-no: 017-002-00-2
CONTENT:	<10%
CLP CLASSIFICATION:	Met. Corr. 1, STOT SE 3, Skin Corr. 1B H290, H314, H335

NAME:	ammonium chloride
IDENTIFICATION NOS.:	CAS-no: 12125-02-9 EC-no: 235-186-4 Index-no: 017-014-00-8
CONTENT:	<5%
CLP CLASSIFICATION:	Acute Tox. 4, Eye Irrit. 2 H302, H319

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

Other informations

ATEmix(oral) = 381,024 - 571,536
Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 26,984 - 40,476
Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 80,7912 - 121,1868

N chronic (CAT 1) Sum = Sum(Ci/M(chronic)i*25) = 3,19968 - 4,79952
N acute (CAT 1) Sum = Sum(Ci/M(acute)i*25) = 3,19968 - 4,79952

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. Contact a doctor, if in doubt about the injured person's condition or if the symptoms continue. Never give an unconscious person water or similar.

Inhalation

Get the injured person into fresh air. Make sure there is always someone with the injured person. Prevent shock by keeping the injured person warm and calm. If the person stops breathing, give mouth-to-mouth resuscitation. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes with plenty of water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Contact a doctor at once.

Ingestion

In the case of ingestion, contact a doctor immediately and take this safety data sheet or the label from the material with you. 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 so that no vomit runs back into the mouth and throat. Prevent shock by keeping the injured person warm and calm. Give mouth-to-mouth resuscitation if breathing stops. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

Burns

Not applicable

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

Tissue damaging effects: This product contains substances which are corrosive. Corrosive substances cause irreversible damage to eyes and acid burns to skin.
Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled.

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

No special

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. Water jets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

No special

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of a leakage to the surroundings, contact the local environmental authorities. Consider putting up waste collecting trays/basins to prevent leakage to the surroundings.

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. Cleaning should be done as far as possible using normal cleaning agents. Solvents should be avoided.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Consider putting up waste collecting trays/basins to prevent leakage to the surroundings. 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.

Storage temperature

No data available.

7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

ammonium chloride (EH40, 2005)
Long-term exposure limit (8-hour TWA reference period): - ppm | 10 mg/m3
Short-term exposure limit (15-minute reference period): - ppm | 20 mg/m3

Hydrochloric acid (EH40, 2005)
Long-term exposure limit (8-hour TWA reference period): 1 ppm | 2 mg/m3
Short-term exposure limit (15-minute reference period): 5 ppm | 8 mg/m3

zinc chloride (EH40, 2005)
Long-term exposure limit (8-hour TWA reference period): - ppm | 1 mg/m3
Short-term exposure limit (15-minute reference period): - ppm | 2 mg/m3

DNEL / PNEC

8.2. Exposure controls

Compliance with the stated exposure limits values should be checked on a regular basis.

General recommendations

Observe general occupational hygiene.

Exposure scenarios

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

Exposure limits

Trade users are covered by the rules of the working environment legislation on maximum concentrations for exposure. See work hygiene threshold values below.

Appropriate technical measures

Airborne gas and dust concentrations must be kept as low as possible and below the current threshold values (see below). Use for example an exhaust system if the normal air flow in the work room is not sufficient. Make sure that eyewash and emergency showers are clearly marked.

Hygiene measures

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming 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

Recommended: B, P2

Skin protection

Special work clothing should be used. When working with this product for a long period of time, use a protective suit.

Hand protection

Recommended: butyl rubber. Breakthrough time: > 480 minutes (Class 6)

Eye protection

Use safety eyewear designed to protect against splash of liquids.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Colour	Odour	pH	Viscosity	Density (g/cm3)
Liquid	-	-	1	-	2,28

Phase changes

Melting point (°C)	Boiling point (°C)	Vapour pressure (mm Hg)
-	100	-

Data on fire and explosion hazards

Flashpoint (°C)	Ignition (°C)	Self ignition (°C)
-	-	-

Explosion limits (Vol %)	Oxidizing properties
-	-

Solubility

Solubility in water	n-octanol/water coefficient
Soluble	-

9.2. Other information

Solubility in fat	Additional information
-	N/A

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 on “Handling and storage”.

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

Do not expose to heat (e.g. sunlight), because it can lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reductants 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

Substance	Species	Test	Route of exposure	Result
zinc chloride	Rat	LD50	Oral	350 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity
No data available.

Reproductive toxicity
No data available.

STOT-single exposure
May cause respiratory irritation.May cause drowsiness or dizziness.

STOT-repeated exposure
No data available.

Aspiration hazard
No data available.

Long term effects
Tissue damaging effects: This product contains substances which are corrosive. Corrosive substances cause irreversible damage to eyes and acid burns to skin.
Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Test duration	Result
zinc chloride	Daphnia	EC50	48h	33 mg/L
zinc chloride	Fish	EC50	96h	> 100 mg/kg
zinc chloride	Fish	ErC50	72h	73 mg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result

No data available.

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BFC

No data available.

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
No data available

12.6. Other adverse effects
This product contains ecotoxic substances which can have damaging effects on water-organisms. This product contains substances which can cause undesirable long-term effects in the water environment, due to its poor biodegradability.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
The product is covered by the regulations on dangerous waste.

Waste
EWC code
06 03 13

Specific labelling
-

Contaminated packing
Packaging which contains leftovers from the product must be disposed of in the same way as the product.

SECTION 14: Transport information

This product is covered by the conventions on dangerous goods.

14.1 – 14.4
ADR/RID

14.1. UN number	3264
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID, ZINC CHLORIDE), MARINE POLLUTANT
14.3. Transport hazard class(es)	8

14.4. Packing group	III
Notes	-
Tunnel restriction code	E

IMDG

UN-no.	3264
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID, ZINC CHLORIDE), MARINE POLLUTANT
Class	8
PG*	III
EmS	F-A, S-B
MP**	YES
Hazardous constituent	-

IATA/ICAO

UN-no.	3264
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID, ZINC CHLORIDE), MARINE POLLUTANT
Class	8
PG*	

14.5. Environmental hazards

This product contains substances which can cause undesirable long-term effects in the water environment, due to its poor biodegradability.

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL73/78 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 must not be exposed to this product cf. Council Directive 94/33/EC.

Demands for specific education

-

Additional information

Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
EC Regulation 1272/2008 (CLP).
EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

-

Other symbols mentioned in section 2

-

Other

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)) is marked with a blue triangle.

The safety data sheet is validated by

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

-

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

-