

# SAFETY DATA SHEET

## Stainflux

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

#### 1.1. Product identifier

**Trade name**

Stainflux

**Product no.**

2160000100

**Unique formula identifier (UFI)**

PUNN-2N45-MU1A-H8WG

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

**Relevant identified uses of the substance or mixture**

To be applied on the root side of welds to prevent oxidation  
Restricted to professional users.

**Uses advised against**

None known.

#### 1.3. Details of the supplier of the safety data sheet

**Company and address**

**ESAB AB**  
Box 8004  
40277 Göteborg  
Sweden  
+46 31 509000  
www.esab.com

**Contact person**

Product Stewardship Team

**E-mail**

Sustainability@esab.com

**Revision**

31/01/2025

**SDS Version**

3.0

#### 1.4. Emergency telephone number

HUS Poison Information Center, 24h 0800 147 111  
Poison Information Center / HUS, Tukholmankatu 17, 00029 HUS (Helsinki)  
See first aid measures section 4.

### SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

## 2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

Eye Dam. 1; H318, Causes serious eye damage.

STOT SE 3; H335, May cause respiratory irritation.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

## 2.2. Label elements

### Hazard pictogram(s)



### Signal word

Danger

### Hazard statement(s)

Causes skin irritation. (H315)

Causes serious eye damage. (H318)

May cause respiratory irritation. (H335)

May cause damage to organs through prolonged or repeated exposure. (H373)

### Precautionary statement(s)

#### General

-

#### Prevention

Do not breathe dust. (P260)

Wash hands and exposed skin thoroughly after handling. (P264)

Wear eye protection/protective gloves. (P280)

[In case of inadequate ventilation] wear respiratory protection. (P284)

#### Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

Immediately call a POISON CENTER/doctor. (P310)

#### Storage

-

#### Disposal

-

### Hazardous substances

Calcium hydroxide

Quartz\*

### Additional labelling

UFI: PUNN-2N45-MU1A-H8WG

## 2.3. Other hazards

### Additional warnings

The product contains quartz; working processes in which respirable quartz dust can be developed are covered by the EU cancer Regulation.

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Quartz	CAS No.: 14808-60-7 EC No.: 238-878-4 REACH: Index No.:	35-45%		
Calcium hydroxide	CAS No.: 1305-62-0 EC No.: 215-137-3 REACH: 01-2119475151-45-XXXX Index No.:	25-35%	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1]
TITANIUM OXIDE**	CAS No.: 13463-67-7 EC No.: 236-675-5 REACH: 01-2119489379-17 Index No.:	10-20%		
Quartz*	CAS No.: 14808-60-7 EC No.: 238-878-4 REACH: Index No.:	0-3.6%	STOT RE 1, H372	
Manganese Oxide	CAS No.: 1317-35-7 EC No.: 215-266-5 REACH: Index No.:	0-2%		

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

### Other information

[1] European occupational exposure limit.

## 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 persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.  
If skin irritation occurs: Get medical advice/attention.

#### Eye contact

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

#### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### Burns

Not applicable.

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

EYE CONTACT: Dust and splash in the eyes of the solution may cause strong irritation with burning sensation, redness and possibly burns.

SKIN CONTACT: Irritating to skin. Prolonged skin contact could give blisters and wounds especially at wet skin.

INHALATION: Irritating to mucous membranes, nose and throat, and may cause cough. Prolonged exposure to respirable crystalline silica-containing dust may cause silicosis.

INGESTION: Irritation and burning in the mouth and throat. May also cause burns with burning pain in the stomach.

### 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 or the label from this product.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Some metal oxides

### 5.3. Advice for firefighters

Breathing apparatus with filter of type P3.

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.  
Ensure adequate ventilation, especially in confined areas.  
Contaminated areas may be slippery.

## 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.  
Keep unauthorized persons away from the spill

## 6.3. Methods and material for containment and cleaning up

Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust.  
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

## 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.  
See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid direct contact with the product.  
Avoid contact during pregnancy and while nursing.  
Smoking, drinking and consumption of food is not allowed in the work area.  
See section 8 "Exposure controls/personal protection" for information on personal protection.

### 7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.  
Powder trickling out onto the floor or onto other containers must be prevented.

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Storage conditions

No specific requirements

#### Incompatible materials

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

### 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

Quartz  
Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 0,05 (alveolijae/respirabel fraktion)

Calcium hydroxide  
Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 1  
Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 4

Quartz\*  
Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 0,05 (alveolijae/respirabel fraktion)

## Manganese Oxide

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 0,02 (Mn, alveolijae/respirabel fraktion) / 0,2 (Mn, hengittävä pöly/inhalerbaar damm)

Regulation of the Ministry of Social Affairs and Health on concentrations of chemical substances found to be harmful (654/2020).

## DNEL

### Calcium hydroxide

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	1 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	1 mg/m <sup>3</sup>
Short term – Local effects - General population	Inhalation	4 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	4 mg/m <sup>3</sup>

### Manganese Oxide

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	2.1 µg/kg bw/day
Long term – Systemic effects - Workers	Dermal	4.14 µg/kg bw/day
Long term – Local effects - General population	Inhalation	41 µg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	200 µg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	41 µg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	200 µg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	200 µg/m <sup>3</sup>

### TITANIUM OXIDE\*\*

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	28 µg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	170 µg/m <sup>3</sup>

## PNEC

### Calcium hydroxide

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		490 µg/L
Intermittent release (freshwater)		490 µg/L
Marine water		320 µg/L
Sewage treatment plant		3 mg/L
Soil		1.08 g/kg

## 8.2. Exposure controls

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

### General recommendations

- If possible, avoid working processes where respiratory quartz dust may be developed.
- Smoking, drinking and consumption of food is not allowed in the work area.

### Exposure scenarios

There are no exposure scenarios implemented for this product.

### Exposure limits

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

### Appropriate technical measures

In connection with work processes in which respirable quartz dust can be developed e.g. when cutting and drilling in concrete, extracted air must not be recycled according to EU Cancer Regulation.

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above).

Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and showers are clearly marked.

Ensure that eyewash stations and safety showers are located within easy reach.

Airborne gas and dust concentrations must be kept at a minimum. Provide efficient mechanical ventilation. If not possible use suitable respiratory equipment.

### Hygiene measures

Take off contaminated clothing and wash it before reuse.

### 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

No specific requirements

### Respiratory Equipment

Wear respiratory protective equipment in the event of dust formation.

Breathing apparatus with dust filter type P3.

### Skin protection

Wear protective clothing.

### Hand protection

Use protective gloves (EN 374).

Gloves must be inspected prior to use.

Use a suitable glove removal technique (without touching the outer surface of the glove) to avoid skin contact with this product.

Replace punctured or contaminated protective gloves.

Recommended glove material: Nitrile

### Eye protection

Use eye and skin protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Physical state

Powder

#### Colour

Gray

#### Odour / Odour threshold

Odourless

#### pH

<10(10g/l)

#### Density (g/cm<sup>3</sup>)

No relevant or available data due to the nature of the product.

#### **Kinematic viscosity**

Does not apply to solids.

#### **Particle characteristics**

No relevant or available data due to the nature of the product.

### **Phase changes**

#### **Melting point/Freezing point (°C)**

No relevant or available data due to the nature of the product.

#### **Softening point/range (°C)**

Does not apply to solids.

#### **Boiling point (°C)**

Does not apply to solids.

#### **Vapour pressure**

No relevant or available data due to the nature of the product.

#### **Relative vapour density**

Does not apply to solids.

#### **Decomposition temperature (°C)**

No relevant or available data due to the nature of the product.

### **Data on fire and explosion hazards**

#### **Flash point (°C)**

Does not apply to solids.

#### **Flammability (°C)**

Non-flammable

#### **Auto-ignition temperature (°C)**

Not self-igniting

#### **Lower and upper explosion limit (% v/v)**

Not explosive

### **Solubility**

#### **Solubility in water**

Slightly soluble

#### **n-octanol/water coefficient (LogKow)**

No relevant or available data due to the nature of the product.

#### **Solubility in fat (g/L)**

No relevant or available data due to the nature of the product.

## **9.2. Other information**

#### **Other physical and chemical parameters**

No data available.

#### **Oxidizing properties**

Not oxidizing

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

Formation of dust (Always mix the product in the original can to prevent formation of dust).

### 10.5. Incompatible materials

None Known

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

## SECTION 11: Toxicological information

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

#### Acute toxicity

Calcium hydroxide: LD50, oral, rat: >2000 mg/kg LD50, dermal, rat: >2500 mg/kg

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/irritation

Causes serious eye damage.

#### Respiratory sensitisation

Based on available data, the classification criteria are not met.

#### Skin sensitisation

Based on available data, the classification criteria are not met.

#### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

#### Carcinogenicity

Quartz: Increased risk of lung cancer can only be demonstrated during high occupational exposure to inhalable crystalline silicon. The increased risk of lung cancer is limited to subjects with silicosis.

#### Reproductive toxicity

Based on available data, the classification criteria are not met.

#### STOT-single exposure

May cause respiratory irritation.

#### STOT-repeated exposure

This product contains quartz (fine fraction) as an impurity and is therefore classified as STOT RE2 in accordance with the criteria defined in Regulation (EC) 1272/2008. Prolonged and / or massive exposure to fine dust from respirable crystalline quartz can cause silicosis, a nodular pulmonary fibrosis caused by fine respirable particles of crystalline quartz in the lungs. There is a collection of evidence that increased cancer risk is limited to people who already are

suffers from silicosis. Occupational safety against silicosis must be guaranteed by respecting the existing statutory limit values for exposure in the workplace and by implementing additional risk management measures if necessary.

### Aspiration hazard

Based on available data, the classification criteria are not met.

## 11.2. Information on other hazards

### Long term effects

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

### Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

### Other information

Quartz has been classified by IARC as a group 1 carcinogen.

TITANIUM OXIDE\*\* has been classified by IARC as a group 2B carcinogen.

Quartz\* has been classified by IARC as a group 1 carcinogen.

Eye Contact: Dust and splash of solution gives strong irritation, redness and pain. Risk for corrosive damage;

Skin contact: Gives irritation. Prolonged skin contact could give blisters and wounds especially at wet skin;

Inhalation: Inhalation irritates the mucous membranes and may cause burning in the nose and throat as well as coughing. The product may be dangerous by inhalation. Prolonged and repeated inhalation of respirable dust of crystalline quartz can cause pulmonary fibrosis (silicosis);

Ingestion: Ingestion gives corrosive damage with burning pain in mouth and throat, possibly severe general effect and damage to the stomach.

## SECTION 12: Ecological information

### 12.1. Toxicity

Calcium hydroxide:

LC50, fish, freshwater, 96 h: 50.6 mg / l, LC50, fish, seawater, 96 h: 457 mg / l,

EC50, invertebrates, freshwater 48 h: 49.1 mg / l, LC50, invertebrates, seawater, 96 h: 158 mg / l,

NOEC, invertebrates, seawater, 14 d: 32 mg / l, EC50, algae, freshwater 72 h: 184.57 mg / l,

NOEC, algae, fresh water, 72 h: 48 mg / l,

EC10 / LC10, NOEC, soil, macro-organisms: 2,000 mg / kg soil dry weight,

EC10 / LC10, NOEC, soil, microorganisms: 12,000 mg / kg soil dry weight,

NOEC, land plants, 21 d: 1,080 mg / kg

### 12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

### 12.3. Bioaccumulative potential

Based on available data, the classification criteria are not met.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

### 12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation

to the environment.

## 12.7. Other adverse effects

None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.  
HP 4 - Irritant (skin irritation and eye damage)  
HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity  
Dispose of contents/container to an approved waste disposal plant.  
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

#### EWC code

Not applicable.

### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* Packing group

\*\* Environmental hazards

### Additional information

Not dangerous goods according to ADR, IATA and IMDG.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Maritime transport in bulk according to IMO instruments

No data available.

## SECTION 15: Regulatory information

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

#### Restrictions for application

Restricted to professional users.  
People under the age of 18 shall not be exposed to this product.  
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

#### **Demands for specific education**

No specific requirements.

#### **SEVESO - Categories / dangerous substances**

Not applicable.

#### **Additional information**

Not applicable.

#### **Sources**

25.4.2012 / 188 Ordinance of the Ministry of Social Affairs and Health on a list of examples of work that is dangerous for young workers.

Decree of the Government on the protection of pregnant, recently given birth and breastfeeding workers from factors that cause danger at work (143/2024)

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

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 (CLP).

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).

### **15.2. Chemical safety assessment**

No

## **SECTION 16: Other information**

### **Full text of H-phrases as mentioned in section 3**

H315, Causes skin irritation.

H318, Causes serious eye damage.

H335, May cause respiratory irritation.

H372, Causes damage to organs through prolonged or repeated exposure.

### **Abbreviations and acronyms**

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
OECD = Organisation for Economic Co-operation and Development  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
RRN = REACH Registration Number  
SCL = A specific concentration limit  
SVHC = Substances of Very High Concern  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
TWA = Time weighted average  
UN = United Nations  
UVBC = Unknown or variable composition, complex reaction products or of biological materials  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

### **Additional information**

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

### **The safety data sheet is validated by**

Product Stewardship Team

### **Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

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.

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.

Country-language: FI-en