

## Safety Data Sheet DITRA-X1

Safety Data Sheet dated 24/3/2016, version 3

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

1.1. Product identifier

Trade name: DITRA-X1

1.2. Relevant identified uses of the substance or mixture and uses advised against  
Cement based powder adhesive

1.3. Details of the supplier of the safety data sheet

Supplier:

SOPRO BAUCHEMIE GmbH - Biebricher Strasse 74 - D-65203 Wiesbaden

lab.phone: +49-(0)611/1707-330

phone: +49-(0)611/1707-0

fax: +49-(0)611/1707-335

Competent person responsible for the safety data sheet:

safetydatasheet@sopro.com

1.4. Emergency telephone number

SOPRO BAUCHEMIE GmbH - phone: +49-(0)611/1707-400 (office hours)

Giftnotruf Berlin +49-(0)30 30686 790

### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
- ⚠ Danger, Eye Dam. 1, Causes serious eye damage.
- ⚠ Warning, STOT SE 3, May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard Statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

## Safety Data Sheet

### DITRA-X1

#### Precautionary Statements:

P261 Avoid breathing dust.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER.

#### Special Provisions:

None

#### Contents:

Portland cement, Cr(VI) < 2 ppm

Blend of Ca and Mg silicate and aluminate  
calcium formate

P102 Keep out of reach of children.

P332+P313 If skin irritation occurs: Get medical advice/attention.

#### Special provisions according to Annex XVII of REACH and subsequent amendments:

None

#### 2.3. Other hazards

vPvB Substances: None - PBT Substances: None

#### Other Hazards:

No other hazards

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 25% - < 50% Portland cement, Cr(VI) < 2 ppm

CAS: 65997-15-1, EC: 266-043-4

⚠ 3.8/3 STOT SE 3 H335

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.3/1 Eye Dam. 1 H318

>= 10% - < 20% Blend of Ca and Mg silicate and aluminate

CAS: 65996-69-2

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.3/1 Eye Dam. 1 H318

>= 1% - < 2.5% calcium formate

REACH No.: 01-2119486476-24-xxxx, CAS: 544-17-2, EC: 208-863-7

⚠ 3.3/1 Eye Dam. 1 H318

>= 0.49% - < 1% White mineral oil (petroleum)

REACH No.: 01-2119487078-27-0013, CAS: 8042-47-5, EC: 232-455-8

⚠ 3.10/1 Asp. Tox. 1 H304

>= 0.49% - < 1% calcium hydroxide

REACH No.: 01-21194575151-45-XXXX, CAS: 1305-62-0, EC: 215-137-3

⚠ 3.8/3 STOT SE 3 H335

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.3/1 Eye Dam. 1 H318

## Safety Data Sheet

### DITRA-X1

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

CONSULT A PHYSICIAN IMMEDIATELY.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

Wash the mouth thoroughly and drink plenty of water. In case of disease consult a physician immediately and present this safety-data sheet.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

If inhaled, the product causes irritation in the airways. and if brought into contact with the skin, it causes appreciable inflammation, with erythema, scabs, and oedema.

If brought into contact with the eyes, the product causes serious eye injury, such as opacity of the cornea or lesions to the iris.

This preparation contains cement. Contact between cement and body fluids (e.g. sweat and eye fluids) may cause irritation or burns.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

Suitable extinguishing media:

None in particular.

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

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

The product does not present a fire hazard

##### 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

#### SECTION 6: Accidental release measures

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

## Safety Data Sheet

### DITRA-X1

Wear personal protection equipment.  
Remove all sources of ignition.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
Provide adequate ventilation.  
Use appropriate respiratory protection.  
See protective measures under point 7 and 8.  
The product has a characteristic smell that can cause discomfort. Use and store in areas with good ventilation

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

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

Rapidly recover the product, wearing protective clothing.

Scoop into containers and seal for disposal.

After the product has been recovered, rinse the area and materials involved with water.

Wash with plenty of water.

#### 6.4. Reference to other sections

See also section 8 and 13

## SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes and exposure to high dust concentration.

Avoid powder development and deposit

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

#### 7.3. Specific end use(s)

None in particular

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Portland cement, Cr(VI) < 2 ppm - CAS: 65997-15-1

ACGIH - LTE mg/m<sup>3</sup>(8h): 1 mg/m<sup>3</sup> - Notes: A4, (E,R) - Pulm func, resp symptoms, asthma

White mineral oil (petroleum) - CAS: 8042-47-5

TLV TWA: - 5 mg/m<sup>3</sup> (mist)

TLV STEL: - 10 mg/m<sup>3</sup> (mist)

calcium hydroxide - CAS: 1305-62-0

EU - LTE mg/m<sup>3</sup>(8h): 5 mg/m<sup>3</sup> - Notes: Indicative Occupational Exposure Limit Values, proposal [5] (for references see bibliography)

ACGIH - LTE mg/m<sup>3</sup>(8h): 5 mg/m<sup>3</sup> - Notes: Eye, URT and skin irr

DNEL Exposure Limit Values

## Safety Data Sheet

### DITRA-X1

calcium formate - CAS: 544-17-2

Consumer: 23.9 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 337 mg/m<sup>3</sup> - Consumer: 83.2 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 337 mg/m<sup>3</sup> - Consumer: 83.2 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 4780 mg/kg - Consumer: 2390 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Worker Professional: 4780 mg/kg - Consumer: 2390 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 16.7 mg/cm<sup>2</sup> - Consumer: 8.3 mg/cm<sup>2</sup> - Exposure: Human Dermal - Frequency: Short Term, local effects

Worker Professional: 16.7 mg/cm<sup>2</sup> - Consumer: 8.3 mg/cm<sup>2</sup> - Exposure: Human Dermal - Frequency: Long Term, local effects

#### PNEC Exposure Limit Values

calcium formate - CAS: 544-17-2

Target: Soil (agricultural) - Value: 1.5 mg/kg

Target: Marine water - Value: 0.2 mg/l

Target: Fresh Water - Value: 2 mg/l

#### 8.2. Exposure controls

##### Eye protection:

Safety goggles.

Use close fitting safety goggles, don't use eye lens.

##### Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

##### Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

##### Thermal Hazards:

None

##### Environmental exposure controls:

None

##### Appropriate engineering controls:

None

## SECTION 9: Physical and chemical properties

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

Appearance:	powder
Colour:	white o grey
Odour:	slight, typical of cement
Odour threshold:	N.A.
pH:	N.A.
pH(water dispersion,10%):	12
Melting point / freezing point:	== °C
Initial boiling point and boiling range:	== °C

## Safety Data Sheet

### DITRA-X1

Solid/gas flammability:	N.A.	
Upper/lower flammability or explosive limits:		N.A.
Vapour density:	N.A.	
Flash point:	== °C	
Evaporation rate:	N.A.	
Vapour pressure:	== kPa (23°C)	
Relative density:	1.5 g/cm <sup>3</sup> (23°C)	
Vapour density (air=1):	N.A.	
Solubility in water:	<5 g/l	
Solubility in oil:	insoluble	
Viscosity:	N.A.	
Auto-ignition temperature:	== °C	
Explosion limits(by volume):	==	
Decomposition temperature:	N.A.	
Partition coefficient (n-octanol/water):		N.A.
Explosive properties:	==	
Oxidizing properties:	N.A.	

#### 9.2. Other information

Miscibility:	N.A.	
Fat Solubility:	N.A.	
Conductivity:	N.A.	
Substance Groups relevant properties		N.A.

### SECTION 10: Stability and reactivity

- 10.1. Reactivity
  - Stable under normal conditions
- 10.2. Chemical stability
  - Stable under normal conditions
- 10.3. Possibility of hazardous reactions
- 10.4. Conditions to avoid
  - Stable under normal conditions.
- 10.5. Incompatible materials
  - None in particular.
- 10.6. Hazardous decomposition products
  - None.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Route(s) of entry:

Ingestion:	Yes
Inhalation:	Yes
Contact:	No

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Toxicological information of the mixture:  
N.A.

Toxicological information of the main substances found in the mixture:

calcium formate - CAS: 544-17-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2650 mg/kg

calcium hydroxide - CAS: 1305-62-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

## Safety Data Sheet

### DITRA-X1

Test: LD50 - Route: Skin - Species: Rabbit > 2500 mg/kg

Corrosive/Irritating Properties:

Skin:

The product can cause irritation by contact.

Eye:

The product can cause damage to eyes by contact

Sensitizing Properties:

No effects are known.

Carcinogenic Effects:

No effects are known.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

## SECTION 12: Ecological information

### 12.1. Toxicity

Adopt good industrial practices, so that the product is not released into the environment.

Not available data on the mixture

Biodegradability: no data available on the preparation.

calcium formate - CAS: 544-17-2

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 48

Endpoint: NOEC - Species: Daphnia > 100 mg/l - Duration h: 504 - Notes: 21 giorni

Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 96

calcium hydroxide - CAS: 1305-62-0

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 50.6 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 49.1 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 184.57 mg/l - Duration h: 72

### 12.2. Persistence and degradability

N.A.

### 12.3. Bioaccumulative potential

N.A.

### 12.4. Mobility in soil

N.A.

### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

### 12.6. Other adverse effects

None

Not available data on the mixture

## Safety Data Sheet

### DITRA-X1

#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

Disposal of hardened product (EC waste code) : 17 01 01

Disposal of not hardened product (EC waste code) : 17 01 01

The suggested European waste code is just based on the composition of the product.

According to the specific process or application field a different waste code may be necessary.

#### SECTION 14: Transport information

##### 14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

UN Number: ==

##### 14.2. UN proper shipping name

N.A.

##### 14.3. Transport hazard class(es)

Rail/Road(RID/ADR): no dangerous good

Air (ICAO/IATA): no dangerous good

Sea (IMO/IMDG): no dangerous good

N.A.

##### 14.4. Packing group

N.A.

##### 14.5. Environmental hazards

Marine pollutant: No

N.A.

##### 14.6. Special precautions for user

N.A.

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

No

#### SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

REACH Regulation (1907/2006) – All. XVII

The product contains Cr (VI) under the limitse established by annex. XVII pt.47. Respect the duration



## Safety Data Sheet

### DITRA-X1

according to the information described on the packaging

Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I - Protection against chemical agents"  
Directive 2000/39/CE and s.m.i. (Professional threshold limit)  
Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions. (Environmental regulations)  
Directive 105/2003/CE (Seveso III): N.A.  
ADR Agreement – IMDG Code – IATA Regulation  
VOC (2004/42/EC) : N.A. g/l

Provisions related to directive EU 2012/18 (Seveso III):  
N.A.  
15.2. Chemical safety assessment  
No

#### SECTION 16: Other information

Text of phrases referred to under heading 3:  
H335 May cause respiratory irritation.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H304 May be fatal if swallowed and enters airways.

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking  
SECTION 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
SECTION 4: First aid measures  
SECTION 5: Firefighting measures  
SECTION 6: Accidental release measures  
SECTION 7: Handling and storage  
SECTION 8: Exposure controls/personal protection  
SECTION 11: Toxicological information  
SECTION 12: Ecological information  
SECTION 13: Disposal considerations  
SECTION 14: Transport information  
SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances  
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of  
Dangerous Goods by Road.  
CAS: Chemical Abstracts Service (division of the American Chemical  
Society).

## Safety Data Sheet

### DITRA-X1

CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
OEL:	Substance with a Union workplace exposure limit.
VLE:	Threshold Limiting Value.
WGK:	German Water Hazard Class.
TSCA:	United States Toxic Substances Control Act Inventory
DSL:	DSL - Canadian Domestic Substances List