

## SAFETY DATA SHEET

# mira z-fix excellent

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

- 1.1. Product identifier  
Trade name  
**mira z-fix excellent**  
Product no.  
2213991  
Unique formula identifier (UFI)  
5Y09-X02P-J00N-XQKE
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Relevant identified uses of the substance or mixture  
**Cement-based construction products**  
Uses advised against  
None known.
- 1.3. Details of the supplier of the safety data sheet  
Company and address  
**mira byggeprodukter a/s**  
Egegårdsvej 2  
4621 Gadstrup  
+45 46 19 19 46  
www.mira.eu.com  
Contact person  
-  
E-mail  
info@mira.eu.com  
Revision  
30/03/2023  
SDS Version  
6.0  
Date of previous version  
15/11/2022 (5.0)
- 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  
Skin Irrit. 2; H315, Causes skin irritation.  
Eye Dam. 1; H318, Causes serious eye damage.  
STOT SE 3; H335, May cause respiratory irritation.  
Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
- 2.2. Label elements  
Hazard pictogram(s)



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Signal word

**Danger**

Hazard statement(s)

- Causes skin irritation. (H315)
- Causes serious eye damage. (H318)
- May cause respiratory irritation. (H335)

Precautionary statements

General

Keep out of reach of children. (P102)

Prevention

- Wear protective gloves/protective clothing/eye protection/face protection. (P280)
- Avoid breathing dust. (P261)

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)
- IF SWALLOWED: Immediately call a POISON CENTER/doctor. (P301+P310)

Storage

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▼ Disposal

Dispose of contents/container in accordance with local regulation. (P501)

Hazardous substances

Cement, portland, chemicals (white)

Additional labelling

UFI: 5Y09-X02P-J00N-XQKE

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 considered to meet the criteria classifying them as PBT and/or vPvB.
- 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) 2018/605.

## 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
Cement, portland, chemicals (white)	CAS No.: 65997-15-1 EC No.: 266-043-4 UK-REACH: Index No.:	40-60%	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	

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

Other information

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## 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

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

#### Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. 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

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

#### 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.

#### 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 direct contact with spilled substances.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

#### 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

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

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.  
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 temperature

Store in a closed original container in a dry and well-ventilated place.

#### 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

Cement, portland, chemicals (white)  
Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 10(inhalable)/4(respirable)

#### Sand

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.  
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

### ▼ DNEL

#### Calcium diformate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects	Dermal	4780 mg/kg
Long term – Systemic effects	Inhalation	337 mg/m <sup>3</sup>

### PNEC

No data available.

### 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.

#### Hygiene measures

Take off contaminated clothing and wash it before reuse.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
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For dusty work use a dust mask with particle filter P2.			
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Skin protection

Recommended	Type/Category	Standards
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No special when used as intended.	-	-
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Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
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Protective gloves made of eg PVC, neoprene and vinyl			
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Eye protection

Type	Standards
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Safety glasses	
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## SECTION 9: Physical and chemical properties

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

Physical state

**Powder**

Colour

**White**

▼ Odour / Odour threshold

Testing not relevant or not possible due to the nature of the product.

pH

11 – 13 (20°C)

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

1450000

▼ Kinematic viscosity

Does not apply to solids.

▼ Particle characteristics

Testing not relevant or not possible due to the nature of the product.

Phase changes

▼ Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

▼ Softening point/range (waxes and pastes) (°C)

Does not apply to solids.

Boiling point (°C)

Does not apply to solids.

Vapour pressure

Testing not relevant or not possible due to the nature of the product.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Relative vapour density

Does not apply to solids.

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Does not apply to solids.

Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Does not apply to solids.

Solubility

Solubility in water

Testing not relevant or not possible due to the nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

▼ Other physical and chemical parameters

No data available.

▼ Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

## SECTION 10: Stability and reactivity

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

None known.

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 hazard classes as defined in Regulation (EC) No 1272/2008

▼ Acute toxicity

Product/substance	Calcium diformate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	2650 mg/kg

Product/substance	White mineral oil (petroleum)
Species:	Rat
Route of exposure:	Oral

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Test:	LD50
Result:	5000.00 mg/kg

Product/substance	White mineral oil (petroleum)
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	2000.00 mg/kg

Product/substance	White mineral oil (petroleum)
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	5000.00 mg/m <sup>3</sup>

**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**

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

**Reproductive toxicity**

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

**STOT-single exposure**

May cause respiratory irritation.

**STOT-repeated exposure**

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

**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

Not applicable.

▼ Other information

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

## SECTION 12: Ecological information

**12.1. ▼ Toxicity**

Product/substance	Calcium diformate
Species:	Fish
Duration:	48 hours
Test:	LC50
Result:	>1000 mg/L

Product/substance	Calcium diformate
Species:	Daphnia
Duration:	48 hours

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Test:	EC50
Result:	>1000 mg/L

Product/substance	Calcium diformate
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	>1000 mg/L

Product/substance	White mineral oil (petroleum)
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	1000.00 mg/L

Product/substance	White mineral oil (petroleum)
Species:	Algae
Duration:	72 hours
Test:	
Result:	100.00 mg/L

Product/substance	White mineral oil (petroleum)
Species:	Daphnia
Duration:	48 hours
Test:	
Result:	100.00 mg/L

#### 12.2. ▼ Persistence and degradability

Product/substance	White mineral oil (petroleum)
Biodegradable:	Yes
Test method:	
Result:	60%

#### 12.3. Bioaccumulative potential

No data available.

#### 12.4. Mobility in soil

Calcium diformate  
LogKoc = 1.49, High mobility potential.

#### 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. ▼ Endocrine disrupting properties

Not applicable.

#### 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.  
 Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

#### EWC code

17 09 03*	Other construction and demolition wastes (including mixed wastes) containing dangerous substances
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

#### Specific labelling

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

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 information:
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

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

The Management of Health and Safety at Work Regulations 1999.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

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.

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

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

BCF = Bioconcentration Factor  
CAS = Chemical Abstracts Service  
CE = Conformité Européenne  
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  
EWC = European Waste Catalogue  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
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 substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

- ▼ The safety data sheet is validated by  
Reyhaneh R. Kanafi

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue 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: GB-en