

SAFETY DATA SHEET

ARC PRO-FLEX

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

1.1. Product identifier

Trade name

ARC PRO-FLEX

Product no.

TAWC002

Unique formula identifier (UFI)

EXR2-H0A8-P00F-YWCH

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

Relevant identified uses of the substance or mixture

Building & Construction Work

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Arc Building Products

IDA Business & Technology Park, Ballynattin

Y14 A370 Arklow, Co. Wicklow

Ireland

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Fax +353 (0)402 24168

www.arcbuildingproducts.ie

E-mail

sales@arcbuildingproducts.ie

Revision

05/10/2023

SDS Version

1.0

1.4. Emergency telephone number

The National Poisons Information Centre (NPIC)

Public: +353 (0) 1 809 2166 (7 days a week, 8am- 10pm)

Healthcare professionals: +353 (0) 1 809 2566 (24 h service)

See also section 4 "First aid measures"

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.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Causes skin irritation. (H315)

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

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

Precautionary statement(s)

General

If medical advice is needed, have product container or label at hand. (P101)
 Keep out of reach of children. (P102)

Prevention

Wash hands and exposed skin thoroughly after handling. (P264)
 Wear protective gloves/protective clothing/eye protection/face protection. (P280)

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

Store locked up. (P405)

Disposal

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

Hazardous substances

Cement, portland, chemicals
 Calcium diformate

Additional labelling

The content of water-soluble chromate is less than 2 ppm in dry storage up to 12 months from production date. If stored under moist conditions, chromate reduction may be impaired.
 UFI: EXR2-H0A8-P00F-YWCH

2.3. Other hazards

Additional warnings

Upon mixing the product with water it will become corrosive.
 When wet concrete or mortar is trapped against the skin by falling inside a worker's boots or gloves or by soaking through protective clothing—the result may be first, second, or third degree burns.
 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	CAS No.: 65997-15-1 EC No.: 266-043-4 REACH: Index No.:	15-25%	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[19]
Calcium diformate	CAS No.: 544-17-2 EC No.: 208-863-7 REACH: 01-2119486476-24-XXXX Index No.:	1-3%	Eye Dam. 1, H318	

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

Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: First aid measures

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

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

Skin in contact with wet cement should be washed immediately with large amounts of cool clean water. 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

Workers using cement may develop an allergy to chromium, with symptoms ranging from a mild rash to severe skin ulcers. In addition to skin reactions, hexavalent chromium can cause occupational asthma. Symptoms include wheezing and difficulty breathing. Workers may develop both skin and respiratory allergies to hexavalent chromium. 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.

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

Carbon oxides (CO / CO₂)

Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the National Poisons Information Centre (NPIC) on +353 (0) 1 809 256 (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.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

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

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

Keep only in original packaging.

Storage temperature

5-30

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
Long term exposure limit (8 hours) (mg/m³): 1 (Respirable Fraction)

Kaolin
Long term exposure limit (8 hours) (mg/m³): 2

2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019).

DNEL

Calcium diformate

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Dermal	8.3 mg/cm ²
Long term – Local effects - Workers	Dermal	16.7 mg/cm ²
Long term – Systemic effects - General population	Dermal	2390 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	4780 mg/kg bw/day
Short term – Local effects - General population	Dermal	8.3 mg/cm ²
Short term – Local effects - Workers	Dermal	16.7 mg/cm ²
Short term – Systemic effects - General population	Dermal	2390 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	4780 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	83.2 mg/m ³
Long term – Systemic effects - Workers	Inhalation	337 mg/m ³
Short term – Systemic effects - General population	Inhalation	83.2 mg/m ³
Short term – Systemic effects - Workers	Inhalation	337 mg/m ³
Long term – Systemic effects - General population	Oral	23.9 mg/kg bw/day

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

PNEC

Calcium diformate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		2 mg/L
Freshwater sediment		13.4 mg/kg
Intermittent release (freshwater)		10 mg/L
Marine water		200 µg/L
Marine water sediment		1.34 mg/kg
Sewage treatment plant		2.21 mg/L
Soil		1.5 mg/kg

8.2. Exposure controls

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

General recommendations

Provide adequate hygiene facilities on site for workers to wash hands and face at the end of a job and before eating, drinking, smoking, or using the toilet. Facilities for cleaning boots and changing clothes should also be available.

Clothing contaminated by wet cement should be quickly removed. Skin in contact with wet cement should be washed immediately with large amounts of cool clean water.

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

Mix dry cement in well-ventilated areas.

Work in ways that minimize the amount of cement dust released.

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

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.

Don't wash your hands with water from buckets used for cleaning tools.

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.




Respiratory Equipment

Type	Class	Colour	Standards
S/SL	P2	White	EN149



Skin protection

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

Recommended	Type/Category	Standards	
-			
			
Hand protection			
Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	-	-	EN374-2
			
Eye protection			
Type	Standards		
EN 166	EN 166		
			

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Powder

Colour

White

Odour / Odour threshold

None

pH

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

Density (g/cm³)

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

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.

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.

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

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

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

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

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

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

to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

No data available.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

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. 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 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

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

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

Protection of Young Persons (Employment) Act, 1996

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.

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

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

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

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

Technical

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: IE-en