

#### SAFETY DATA SHEET

# ARC FLEXI-GROUT

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

#### 1.1. Product identifier

Trade name

ARC FLEXI-GROUT

Product no.

MRGG002

Unique formula identifier (UFI)

7SQ7-1VMP-Y20C-XRTP

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

Relevant identified uses of the substance or mixture

Tiling

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)

Light ---- (0) 1 609 2100 (7 days a week, 6am-10pm)

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

See also section 4 "First aid measures"

# SECTION 2: Hazards identification

# 2.1. Classification of the substance or mixture

Skin Corr. 1; H314, Causes severe skin burns and eye damage.

Skin Sens. 1; H317, May cause an allergic skin reaction.

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 severe skin burns and eye damage. (H314)



May cause an allergic skin reaction. (H317)

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

Do not breathe dust. (P260)

Wear eye protection/protective gloves/protective clothing. (P280)

# Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (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)

# Disposal

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

#### Hazardous substances

Cement, portland, chemicals

Calcium aluminate sulphate

octhilinone (ISO); 2-octyl-2H-isothiazol-3-one; [OIT]; octhilinone (ISO); 2-octyl-2H-isothiazol-3-one

#### Additional labelling

EUH203, Contains chromium (VI). May produce an allergic reaction.

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: 7SQ7-1VMP-Y20C-XRTP

#### 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.

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.:	25-40%	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[19]
Calcium aluminate sulphate	CAS No.: 12005-25-3 EC No.: 818-462-4 REACH: Index No.:	<1%	EUH066 Skin Sens. 1, H317	
Calcium oxide	CAS No.: 1305-78-8 EC No.: 215-138-9 REACH: 01-2119475325-36-XXXX Index No.:	<0.25%	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1]
octhilinone (ISO); 2-octyl-2H-isothiazol-3-one; [OIT];octhilinone (ISO);2-octyl-2H-isothiazol-3-one	CAS No.: 26530-20-1 EC No.: 247-761-7 REACH: 01-2120768921-45-XXXX Index No.: 613-112-00-5	<0.01%	EUH071 Acute Tox. 3, H301 (ATE: 125.00 mg/kg) Acute Tox. 3, H311 (ATE: 311.00 mg/kg) Skin Corr. 1, H314 Skin Sens. 1A, H317 (SCL: 0.0015 %)	





Eye Dam. 1, H318

Acute Tox. 2, H330 (ATE: 0.27 mg/L)

Aquatic Acute 1, H400 (M=100)

Aquatic Chronic 1, H410 (M=100)

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.

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

#### 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

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.

#### Eve 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

In the case of ingestion, contact a doctor immediately. 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 to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

# 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. Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

# 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

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.

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.

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°C

# 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)

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq$  10 µm] Long term exposure limit (8 hours) (mg/m³): 10(total inhalable dust) / 4(respirable dust)

# Calcium sulfate

Long term exposure limit (8 hours) (mg/m³): 10

# Calcium oxide

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

Short term exposure limit (15 minutes) (mg/m³): 4 (Respirable Fraction )

Annotations:

IOELV = Indicative Occupational Exposure Limit Values are health based limits set under the Chemical Agents Directive (98/24/EC).



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**

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	1 mg/m³
Long term – Local effects - Workers	Inhalation	1 mg/m³
Short term – Local effects - General population	Inhalation	4 mg/m³
Short term – Local effects - Workers	Inhalation	4 mg/m³
Calcium sulfate		
Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Inhalation	5.29 mg/m³
Long term – Systemic effects - Workers	Inhalation	21.17 mg/m³
Short term – Systemic effects - General population	Inhalation	3811 mg/m³
Short term – Systemic effects - Workers	Inhalation	5082 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	1.52 mg/kg bw/da
Short term – Systemic effects - General population	Oral	11.4 mg/kg bw/da
titanium dioxide; [in powder form containing 1 % or more <b>Duration:</b>	e of particles with aerodynamic diar Route of exposure:	•
	-	DNEL:
Long term – Local effects - General population	Inhalation	28 μg/m³
Long term – Local effects - Workers	Inhalation	170 μg/m³
Calcium oxide  Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		370 μg/L
Intermittent release (freshwater)		370 μg/L
Intermittent release (marine water)		240 μg/L
Marine water		240 μg/L
Sewage treatment plant		2.27 mg/L
Soil		817.4 mg/kg
Calcium sulfate		
Route of exposure:	Duration of Exposure:	PNEC:
Sewage treatment plant		100 mg/L
Glass, oxide, chemicals		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		6.5 μg/L
Freshwater sediment		174 mg/kg
Marine water		3.4 μg/L
Marine water sediment		164 mg/kg
Predators		10.9 mg/kg
		100 μg/L
Sewage treatment plant		
Sewage treatment plant Soil		147 mg/kg
	nono (ISO):2 octul 24 icothiczel 2 c	

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Freshwater	2.2 μg/L
Freshwater sediment	47.5 μg/kg
Intermittent release (freshwater)	1.22 μg/L
Intermittent release (marine water)	122 ng/L
Marine water	220 ng/L
Marine water sediment	4.75 μg/kg
Soil	8.2 μg/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.

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.

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.

### 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

Wash contaminated clothing before reuse.

Use only CE marked protective equipment.

# Respiratory Equipment

Туре	Class	Colour	Standards	
S/SL	P2	White	EN149	

# Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	R

# Hand protection

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Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	-	-	EN374-2	
Eye protection				
Туре	Standards			
Safety glasses	EN166			

# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Physical state

Powder

Colour

Various colours

Odour / Odour threshold

None

рΗ

-

pH in solution

10-12 (%)

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.

Solubility

Solubility in water

Slightly soluble

n-octanol/water coefficient



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

Solubility in fat (q/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 severe skin burns and eye damage.

# Serious eye damage/irritation

Causes serious eye damage.

### Respiratory sensitisation

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

### Skin sensitisation

May cause an allergic skin reaction.

### 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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

# Endocrine disrupting properties

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

# Other information

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] has been



classified by IARC as a group 2B carcinogen.

# 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 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 8 - Corrosive

Dispose of contents/container to an approved waste disposal plant.

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

### EWC code

10 13 11

Wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10

# 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	-	-	-	-	-	-

<sup>\*</sup> Packing group

# Additional information

This product is within scope of the regulations of transport of dangerous goods.

# 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

People under the age of 18 shall not be exposed to this product.

Demands for specific education

<sup>\*\*</sup> Environmental hazards



No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Tactile warning.

If this product is sold in retail, it must be delivered with child-resistant fastening.

#### Sources

Protection of Young Persons (Employment) Act, 1996

Maternity Protection Act 1994 (34/1994) with later amendments.

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

EUH066, Repeated exposure may cause skin dryness or cracking.

EUH071, Corrosive to the respiratory tract.

H301, Toxic if swallowed.

H311, Toxic in contact with skin.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H330, Fatal if inhaled.

H335, May cause respiratory irritation.

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

# 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

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 classification of the substance/mixture in regard of skin corrosion and serious eye damage is based on the pH-criterion 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