

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

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

1.1. Product identifier

Product Name ARCPLAST
Pure substance/mixture Mixture
Other means of identification UFI: TCQN-186T-C10K-UYXK

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

Recommended use Building and construction work
Uses advised against None known

1.3. Details of the supplier of the safety data sheet

Company Name

Arc Building Products
IDA Business & Technology Park
Ballynattin, Arklow, Co. Wicklow,
Ireland. Y14A370

Tel: +353 (0)402 32370
Email: sales@arcbuildingproducts.ie

1.4. Emergency telephone number

Ireland **NPIC - National Poison Information Centre**
Members of the Public: +353 (01) 8092166 (8.00 am to 10.00 pm - 7 days a week)
Healthcare Professionals: +353 (01) 8092566 (24 hour service)
United Kingdom +44 (1785) 272650
Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)

2.2. Label elements



Signal word

Warning

Hazard statements

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary Statements - EU (§28, 1272/2008)

P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves and eye/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and 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
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P337 + P313 - If eye irritation persists: Get medical advice/attention
P362 + P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards

No information available.

PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No.	CAS No.	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	REACH registration number
Potassium silicate 1 - <2.5 %	215-199-1	1312-76-1	STOT SE 3 (H335) Skin Corr. 1B (H314) Met. Corr. 1 (H290)	-	-	-	01-2119456888-17-XXXX
Silicic acid, sodium salt 1 - <2.5 %	215-687-4	1344-09-8	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	-	-	-	01-2119448725-31-XXXX
Potassium hydroxide 0.1- <1 %	215-181-3	1310-58-3	Acute Tox. 4 (H302) Skin Corr. 1A (H314)	Eye Irrit. 2 :: 0.5%≤C<2% Skin Corr. 1A :: C≥5% Skin Corr. 1B :: 2%≤C<5% Skin Irrit. 2 :: 0.5%≤C<2%	-	-	01-2119487136-33-XXXX
Tetrasodium EDTA 0.1- <1 %	200-573-9	64-02-8	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	-	-	-	01-2119486762-27-XXXX

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

components

Chemical name	EC No	CAS No	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Potassium silicate	215-199-1	1312-76-1	-	-	-	-	-
Silicic acid, sodium salt	215-687-4	1344-09-8	-	-	-	-	-
Potassium hydroxide	215-181-3	1310-58-3	284	-	-	-	-
Tetrasodium EDTA	200-573-9	64-02-8	1658	-	-	-	-

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapours.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
Ingestion	Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a doctor.
Self-protection of the first aider	Use personal protective equipment as required.

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

Symptoms	May cause redness and tearing of the eyes. Burning sensation.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Unsuitable extinguishing media	No information available.
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5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the	Thermal decomposition can lead to release of irritating and toxic gases and vapours.
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SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

chemical

Hazardous combustion products Carbon dioxide (CO₂). Carbon monoxide. Hydrocarbons. Sulphur oxides. Silicon dioxide.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protection equipment. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapours/spray.

General hygiene considerations When using do not eat, drink or smoke. Take off all contaminated clothing and wash it before reuse. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Keep from freezing.

Recommended storage temperature Do not freeze.

7.3. Specific end use(s)

Specific use(s)

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

Building and construction work.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Other information Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Ireland	United Kingdom
Potassium hydroxide 1310-58-3	-	STEL: 2 mg/m ³	STEL: 2 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection	Tight sealing safety goggles. Eye protection must conform to standard EN 166. Face protection shield.
Hand protection	Wear protective gloves. Gloves must conform to standard EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The breakthrough time of the gloves depends on the material and the thickness as well as the temperature.
Skin and body protection	Suitable protective clothing.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Green
Odour	No information available.
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	None known
Flammability	Not applicable for liquids	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	11.6 - 13.6	
pH (as aqueous solution)	No data available	None known

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	No data available	None known
Bulk Density	No data available	
Liquid Density	1.03	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

VOC Content (%)

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended storage conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions. Thermal decomposition can lead to release of irritating and toxic gases and vapours.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium silicate	=5700 mg/kg (Rattus)	> 5000 mg/kg (Rat)	> 2.06 mg/L (Rat) 4 h
Silicic acid, sodium salt	=3400 mg/kg (Rattus) (OECD 401)	> 4640 mg/kg (Oryctolagus cuniculus)	-
Potassium hydroxide	=284 mg/kg (Rattus)	-	-
Tetrasodium EDTA	=10 g/kg (Rattus) = 1658 mg/kg (Rattus)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Irritating to skin.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or 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.

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

STOT - single exposure Based on available data, the classification criteria are not met.

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

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Potassium silicate 1312-76-1	-	LC50: =3185mg/L (96h, Brachydanio rerio) LC50: 301 - 478mg/L (96h, Lepomis macrochirus)	-	EC50: =216mg/L (96h, Daphnia magna)		
Silicic acid, sodium salt 1344-09-8	-	LC50 96 h 301 - 478 mg/L (Lepomis macrochirus)	-	EC50: =216mg/L (96h, Daphnia magna)		
Potassium hydroxide 1310-58-3	-	LC50: =80mg/L (96h, Gambusia affinis)	-	-		
Tetrasodium EDTA 64-02-8	EC50 72 h >60 mg/L (Pseudokirchnerella subcapitata)	LC50: =41mg/L (96h, Lepomis macrochirus) LC50: =59.8mg/L (96h, Pimephales promelas)	-	EC50: =610mg/L (24h, Daphnia magna)		

12.2. Persistence and degradability

Persistence and degradability Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Potassium hydroxide	0.83

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

12.4. Mobility in soil

Mobility in soil After release, adsorbs onto soil.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Potassium silicate	The substance is not PBT / vPvB PBT assessment does not apply
Silicic acid, sodium salt	The substance is not PBT / vPvB PBT assessment does not apply
Potassium hydroxide	The substance is not PBT / vPvB PBT assessment does not apply
Tetrasodium EDTA	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging Do not reuse empty containers.

Other information Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

Note: Keep from freezing.

Land transport (ADR/RID)

14.1 UN number or ID number Not regulated
14.2 Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special Provisions None

IMDG

14.1 UN number or ID number Not regulated
14.2 Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Marine pollutant NP
14.6 Special Provisions None
14.7 Maritime transport in bulk Not applicable

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

according to IMO instruments

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special Provisions	None

Section 15: REGULATORY INFORMATION

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken.

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorisation:

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Substance subject to authorisation per REACH Annex XIV

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Persistent Organic Pollutants

Not applicable

National regulations

15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

SAFETY DATA SHEET

ARC ARCPLAST

Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022

Revision Number 1.01

Full text of H-Statements referred to under section 3

H290 - May be corrosive to metals

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

SVHC: Substances of Very High Concern for Authorisation:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

STOT RE: Specific target organ toxicity - Repeated exposure

STOT SE: Specific target organ toxicity - Single exposure

EWC: European Waste Catalogue

LOW: List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)

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

IATA: International Air Transport Association

ICAO: ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG: International Maritime Dangerous Goods

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

Legend SECTION 8: Exposure controls/personal protection

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

AGW Occupational exposure limit value

BGW

Biological limit value

Ceiling Maximum limit value

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Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

NIOSH (National Institute for Occupational Safety and Health)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals

Programme Organisation for Economic Co-operation and Development Screening Information Data Set

SAFETY DATA SHEET

ARC ARCPLAST
Supersedes Date: 31-Aug-2018

Revision date 02-Jun-2022
Revision Number 1.01

Revision date	02-Jun-2022
Revision note	SDS sections updated 2 3 4 5 6 7 8 10 12
Training Advice	No information available
Further information	No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet