

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

1.1 Product identifier

Trade name : ARC FROSTPROOFER & RAPID HARDENER

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

1.3 Details of the supplier of the safety data sheet

Company : Arc Building Products
 IDA Business & Technology Park
 Ballynattin
 Arklow
 Co. Wicklow
 Ireland

Telephone : 00353 402 32370

E-mail address : sales@arcbuildingproducts.ie

1.4 Emergency telephone number

Emergency telephone number : 00353 402 32370 (office hours only)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Type of product : Mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302: Harmful if swallowed.

Serious eye damage, Category 1 H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
 H318 Causes serious eye damage.

Precautionary statements : **Prevention:**

P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear protective gloves/ eye protection/ face protection.

Response:

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

P310 Immediately call a POISON CENTER/doctor.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

- 480-110-7 nitric acid, calcium potassium salt, hydrate

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients**3.2 Mixtures****Hazardous components**

Chemical name CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
nitric acid, calcium potassium salt, hydrate 905593-70-6 480-110-7 01-0000020060-90-XXXX	Acute Tox.4; H302 Eye Dam.1; H318	>= 25 - < 50
nitric acid, ammonium calcium salt 15245-12-2 239-289-5 01-2119493947-16-XXXX	Acute Tox.4; H302 Eye Dam.1; H318	>= 1 - < 2,5

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

General advice : Move out of dangerous area.
 Consult a physician.
 Show this safety data sheet to the doctor in attendance.

- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Keep eye wide open while rinsing.
- If swallowed : Do not induce vomiting without medical advice.
Rinse mouth with water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Gastrointestinal discomfort
Excessive lachrymation
See Section 11 for more detailed information on health effects and symptoms.
- Risks : No known significant effects or hazards.

Harmful if swallowed.
Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

- Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Deny access to unprotected persons.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with local regulations.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

Contains no substances with occupational exposure limit values.

DNEL

nitric acid, ammonium calcium salt : End Use: Workers
 Exposure routes: Skin contact
 Value: 13,9 mg/m³

End Use: Workers
 Exposure routes: Inhalation
 Value: 24,5 mg/m³

End Use: Consumers
 Exposure routes: Ingestion
 Value: 8,33 mg/m³

End Use: Consumers
 Exposure routes: Inhalation
 Value: 6,3 mg/m³

PNEC

nitric acid, ammonium calcium salt : Fresh water
 Value: 0,45 mg/l

Marine water
 Value: 0,045 mg/l

8.2 Exposure controls**Personal protective equipment**

Eye protection : Safety glasses with side-shields
 Eye wash bottle with pure water

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.

Suitable for short time use or protection against splashes:
 Butyl rubber/nitrile rubber gloves (0,4 mm),

Contaminated gloves should be removed.
 Suitable for permanent exposure:
 Viton gloves (0.4 mm),
 breakthrough time >30 min.

Skin and body protection : Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.

Respiratory protection : No special measures required.

Environmental exposure controls

General advice : Try to prevent the material from entering drains or water courses.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid
 Colour : colourless
 Odour : odourless
 Odour Threshold : No data available
 Flash point : ca. 93 °C
 Autoignition temperature : Not applicable
 Decomposition temperature : No data available
 Lower explosion limit (Vol-%) : No data available
 Upper explosion limit (Vol-%) : No data available
 Flammability : No data available
 Explosive properties : No data available
 Oxidizing properties : No data available
 pH : 9 - 11
 at
 20 °C
 Melting point/range / Freez- : No data available

ing point	
Boiling point/boiling range	: No data available
Vapour pressure	: No data available
Density	: ca. 1,2 g/cm ³ at 20 °C
Water solubility	: No data available
Partition coefficient: n- octanol/water	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: > 7 mm ² /s at 40 °C
Relative vapour density	: No data available
Evaporation rate	: No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Components:**nitric acid, ammonium calcium salt:**

Acute oral toxicity : LD50 Oral (Rat): > 301 mg/kg

Acute dermal toxicity : LD50 Dermal (Rat): > 2.001 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information**12.1 Toxicity****Components:****nitric acid, ammonium calcium salt :**

Toxicity to fish : LC50: 447 mg/l, 48 h, Fish

Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea)

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

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Additional ecological information : There is no data available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The generation of waste should be avoided or minimized wherever possible.
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.
Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Contaminated packaging : 15 01 10* packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

No data available

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

Not applicable

SECTION 15: Regulatory information

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

Prohibition/Restriction

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : None of the components are listed (= > 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

REACH Information: All substances contained in our Products are
 - preregistered or registered by our upstream suppliers, and/or
 - preregistered or registered by us, and/or
 - excluded from the regulation, and/or
 - exempted from the registration.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
 Not applicable

VOC-CH (VOCV) : no VOC duties

VOC-EU (solvent) : Not applicable

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Health, safety and environmental regulation/legislation specific for the substance or mixture: : Environmental Protection Act 1990 & Subsidiary Regulations
 Health and Safety at Work Act 1974 & Subsidiary Regulations
 Control of Substances Hazardous to Health Regulations (COSHH)

May be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments.

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Full text of H-Statements

H302	Harmful if swallowed.
H318	Causes serious eye damage.

Full text of other abbreviations

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
CAS	Chemical Abstracts Service
DNEL	Derived no-effect level
EC50	Half maximal effective concentration
GHS	Globally Harmonized System
IATA	International Air Transport Association
IMDG	International Maritime Code for Dangerous Goods
LD50	Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL	Occupational Exposure Limit
PBT	Persistent, bioaccumulative and toxic
PNEC	Predicted no effect concentration
REACH	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), establishing a European Chemicals Agency
SVHC	Substances of Very High Concern
vPvB	Very persistent and very bioaccumulative

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.