

NATCEM SETTING RETARDER (NSR)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Revision date: 6/30/2016 Supersedes: 12/6/2012 Version: 5.0

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

1.1. Product identifier

Product form : Substance
 Name : Citric acid
 EC no : 201-069-1
 CAS No : 77-92-9

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Setting retarder for CNP PM NF quick setting cement, maximum dosage: 1% of binder weight

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

NATURAL CEMENT DISTRIBUTION LTD
 10-11 FOUNTAIN PARADE, MAPPLEWELL, BARNSELY. S75 6FW
 T +44 1226 381133 - F +44 1226 381177
 enquiries@naturalcement.co.uk- www.naturalcement.co.uk

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital, Guy's & St Thomas' Hospital Trust	Dudley Road B18 7QH Birmingham	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 H319

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation. Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to display/Extra classification(s) to display

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

: Warning

Hazard statements (CLP) :

: H319 - Causes serious eye irritation

Precautionary statements (CLP) :

: P102 - Keep out of reach of children
 P260 - Do not breathe spray, mist, fume, gas, dust, vapours
 P264 - Wash hands, forearms and face thoroughly after handling
 P280 - Wear protective gloves, protective clothing, eye protection, face protection
 P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER, a doctor

2.3. Other hazards

Other hazards not contributing to the classification

: Dust from this product may cause irritation to the respiratory tract. May cause skin irritation.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Citric acid	(CAS No) 77-92-9 (EC no) 201-069-1	100	Eye Irrit. 2, H319

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : In the event of exposure to high concentrations : Move the affected person to the fresh air, If irritation persists, consult a doctor.
- First-aid measures after skin contact : Wash skin with mild soap and water. If case of redness or irritation, call a doctor.
- First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Always consult an eye specialist, even if there are no immediate symptoms.
- First-aid measures after ingestion : On ingestion in large quantities: Never attempt to induce vomiting. If swallowed, rinse mouth with water (only if the person is conscious). Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries after inhalation : Irritation to throat and respiratory system.
- Symptoms/injuries after skin contact : Skin irritation.
- Symptoms/injuries after eye contact : Eye irritation.
- Symptoms/injuries after ingestion : Irritation of mucous membranes. Vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. If possible show this sheet, if not available show packaging or label.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing agents can be used.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic vapours may be released. Carbon oxides (CO, CO₂).

5.3. Advice for firefighters

Firefighting instructions : Combat the gas with a water-spray. Do not dispose of fire-fighting water in the environment. Do not breathe fumes. Do not attempt to take action without suitable protective equipment. Complete protective clothing. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Avoid contact with skin and eyes. Do not breathe dust.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow product to spread into the environment. Do not discharge into drains or rivers. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Clean up NSR using methods that do not cause its dispersion into the air, for example: suction cleaners (portable industrial strength, equipped with an effective air particle filter (HEPA filter) or some other equivalent technique). Place the recovered product in a closed container. Arrange for its collection before disposing of it as indicated in section 13.
- Methods for cleaning up : Wash with plenty of water and detergent.
- Other information : Dispose of contaminated materials in accordance with current regulations.

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6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid the formation or spread of dust in the atmosphere. Avoid contact with skin and eyes. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. Comply with instructions for use (refer to technical sheet). Prevent the build-up of electrostatic charge.

Hygiene measures : Do not eat, drink or smoke while handling NSR in order to avoid all contact with the skin or mouth.
Wash your hands immediately after handling NSR or products containing it.
Remove clothing, shoes, watches and other contaminated objects and wash them separately and thoroughly before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in dry, cool, well-ventilated area.

Incompatible materials : Strong oxidizing agents. Strong bases.

Packaging materials : Polyethylene. Polypropylene.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Citric acid (77-92-9)		
France	VME (mg/m ³)	10 mg/m ³ Total dust 5 mg/m ³ respirable dust

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Nitrile-rubber protective gloves. The gloves are efficient only if the particles of NSR do not penetrate between gloves and skin. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374

Eye protection:

Approved goggles or watertight goggles complying with NF EN 166

Skin and body protection:

Handling large quantities of product: Protective clothing, Boots

Respiratory protection:

Dust mask FFP2

Environmental exposure controls:

Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline powder.

Colour : white.

Odour : None.

Odour threshold : Not applicable

pH : 1.8 (Aqueous solution - 5% - 25 °C)

Relative evaporation rate (butylacetate=1) : Not determined

Melting point : 153 °C

Freezing point : Not applicable

Boiling point : Not determined

Flash point : Not applicable

Auto-ignition temperature : 345 °C

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Decomposition temperature	: > 170 °C
Flammability (solid, gas)	: Not determined
Vapour pressure	: Not determined
Relative vapour density at 20 °C	: Not determined
Relative density	: Not determined
Density	: 850 - 950 g/cm ³ (Apparent specific gravity) - 1.665 g/cm ³ (Absolute specific gravity)
Solubility	: Water: 61.8 % (25°C) Ethanol: 38.3 % (25°C)
Log Pow	: -1.72 (20°C)
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not determined
Explosive properties	: No data available.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

None to our knowledge.

10.4. Conditions to avoid

Water, humidity. Avoid the build-up of electrostatic charge.

10.5. Incompatible materials

Strong bases. Strong oxidizing agents. Metals. reducing materials.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

Citric acid (77-92-9)	
LD50 oral rat	3000 mg/kg

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 1.8 (Aqueous solution - 5% - 25 °C)

Additional information : Repeated or prolonged contact may cause slight irritation to the skin

Serious eye damage/irritation : Causes serious eye irritation.
pH: 1.8 (Aqueous solution - 5% - 25 °C)

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Ames test (with and without metabolic activation) : negative
(Published data)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified (Not applicable)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : To our knowledge, the product does not present any particular risk, under normal conditions of use.

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Citric acid (77-92-9)	
LC50 fish	440 - 760 mg/l/48h (Leuciscus idus melanotus)
EC50 Daphnia	120 mg/l/72h (Daphnia magna)

12.2. Persistence and degradability

Citric acid (77-92-9)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	0.526 g O2/g substance
Chemical oxygen demand (COD)	0.728 g O2/g substance
Biodegradation	98 % 2 days (OECD 302B method)

12.3. Bioaccumulative potential

Citric acid (77-92-9)	
Log Pow	-1.72 (20°C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Citric acid (77-92-9)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of in accordance with relevant local regulations. Clean up with detergents.
Waste disposal recommendations	: Reuse or recycle following washing.
Additional information	: The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
Marine pollutant : NO				

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

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- Rail transport

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Citric acid is not on the REACH Candidate List

Citric acid is not on the REACH Annex XIV List

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

Indication of changes:

This sheet was updated (refer to the date at the top of this page).

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
EC50	Median effective concentration

Data sources : INRS (Institut National de Recherche et de Sécurité). Conseil Supérieur d'Hygiène Publique de France. IARC (International Agency for Research on Cancer).

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product