Base Ca

Safety Data Sheet

according to Regulation (EU) 2020/878
Issue date: 4/8/2025 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : Base Ca

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

Relevant identified uses

Use of the substance/mixture : Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Agriculture, forestry, fishery
Fertilizer

Uses advised against

Restrictions on use : No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
The Aquatrols Company
The Panorama Park Street
Ashford Kent, UK
T: +44 (0) 1233 633267
E-mail: SDS@aquatrols.com

Manufacturer
Lamberti S.p.A. – Viguzzolo Plant
Via 1° maggio, 168 15058 Viguzzolo (Al) Italy
T: +39 0131 888 611
E-mail: lamberti@lamberti.com

1.4. Emergency telephone number

Emergency number : Chemtrec: (800) 424-9300 (United States and Canada), Chemtrec International: +1-703-527-388

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4 H302
Serious eye damage/eye irritation, Category 1 H318
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Causes serious eye damage.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05 GHS07

Signal word (CLP)	:	Danger
Contains	:	Nitric acid, ammonium calcium salt; Ethylene glycol
Hazard statements (CLP)	:	H302 - Harmful if swallowed. H318 - Causes serious eye damage.
Precautionary statements (CLP)	:	P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P301+P312 - IF SWALLOWED: Call a POISON CENTER, doctor if you feel unwell. 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. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	Conc.	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Nitric acid, ammonium calcium salt	CAS-No.: 15245-12-2 EC-No.: 239-289-5 REACH-no: 01-2119493947-16	≥ 30 – ≤ 40	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Magnesium Nitrate Hexahydrate	CAS-No.: 13446-18-9 EC-No.: 233-826-7 REACH-no: 01-2119491164-38	≥ 10 – ≤ 20	Eye Irrit. 2, H319
Ethylene glycol	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	≥ 0.5 – ≤ 1	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Sodium metabisulphite	CAS-No.: 7681-57-4 EC-No.: 231-673-0 EC Index-No.: 016-063-00-2 REACH-no: 01-2119531326-45	≤ 0.5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	:	If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contact ophthalmologist immediately.
First-aid measures after ingestion : Do not induce vomiting. Rinse mouth out with water. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation : At high concentrations, the vapours can be irritating to the respiratory system.
Symptoms/effects after skin contact : Repeated or prolonged skin contact may cause irritation.
Symptoms/effects after eye contact : Causes serious eye damage. Can cause blindness. Pain. Blurred vision. Redness, itching, tears.
Symptoms/effects after ingestion : Harmful if swallowed. Ingestion may cause nausea and vomiting.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Carbon dioxide. Water spray. Foam. Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Presents no particular fire or explosion hazard. Burning produces stinking and toxic fumes. In case of fire and/or explosion do not breathe fumes.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Firefighting instructions : Evacuate the danger area. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Fight fire from safe distance and protected location. Use extinguishing media appropriate for surrounding fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all contact with skin, eyes, or clothing.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing vapours. Do not touch or walk on the spilled product. No action shall be taken without appropriate training or involving any personal risk.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.
Emergency procedures : Evacuate unnecessary personnel. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak without risks if possible. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Caution : this product can cause the floor to be slippery.

Methods for cleaning up : Move containers from spill area. Recover small spills with a suitable absorbent, like diatomaceous earth. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Ventilate spillage area. Clean contaminated surfaces with an excess of water. Prevent entry to sewers and public waters.

Other information : Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station. Provide local exhaust or general room ventilation. Do not breathe vapours. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Strong acids, Strong bases, Store in a dry place. Keep away from food, drink and animal feedingstuffs. Keep container tightly closed. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in accordance with local, regional, national or international regulation.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Ethylene glycol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylene glycol
IOEL TWA	52 mg/m³
	20 ppm
IOEL STEL	104 mg/m³
	40 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

Ethylene glycol (107-21-1)	
Ireland - Occupational Exposure Limits	
Local name	Ethane-1,2-diol [Ethylene glycol]
OEL TWA	10 mg/m³ particulate 52 mg/m³ vapour
	20 ppm vapour
OEL STEL	104 mg/m³ vapour
	40 ppm vapour
Remark	IOELV (Indicative Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible)
Regulatory reference	Chemical Agents Code of Practice 2024

Sodium metabisulphite (7681-57-4)	
Ireland - Occupational Exposure Limits	
Local name	Disodium disulphite [Sodium metabisulphite]
OEL TWA	5 mg/m³
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024

Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Refer to all applicable national, international and local regulations or provisions. Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents. Workplace atmospheres. Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy. Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

DNEL and PNEC

Ethylene glycol (107-21-1)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	7 mg/kg bw/day
Long-term - systemic effects, dermal	106 mg/kg bw/day
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	7 mg/kg bw/day
Long-term - systemic effects, dermal	63 mg/kg bw/day

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Provide local exhaust or general room ventilation. Ensure exposure is below occupational exposure limits (where available). Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protection equipment

Personal protective equipment:
Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

Eye and face protection

Eye protection:
Chemical goggles or safety glasses. ISO 16321-1

Skin protection

Skin and body protection:
Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided

Hand protection:
Chemical resistant gloves (according to European standard ISO 374-1 or equivalent). Recommended materials. Polyvinylchloride (PVC). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Respiratory protection

Respiratory protection:
No respiratory protection needed under normal use conditions. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment. EN 149

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	brown. orange.
Odour	:	Characteristic.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	2.1 – 3.65
Viscosity, kinematic	:	Not available
Solubility	:	Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	1.34 – 1.38 (20°C)
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerisation: Will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Base Ca	
ATE CLP (oral)	1219.512 mg/kg bodyweight

Ethylene glycol (107-21-1)	
LD50 oral rat	500 mg/kg
LD50 dermal rabbit	10600 mg/kg
LC50 Inhalation - Rat	2.5 mg/l/4h

Magnesium Nitrate Hexahydrate (13446-18-9)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 5000 mg/kg

Nitric acid, ammonium calcium salt (15245-12-2)	
LD50 oral rat	500 mg/kg
LD50 dermal rat	3500 mg/kg

Sodium metabisulphite (7681-57-4)	
LD50 oral rat	1540 mg/kg
LD50 dermal rat	2000 mg/kg
LC50 Inhalation - Rat	5.5 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 2.1 – 3.65

Serious eye damage/irritation : Causes serious eye damage.
pH: 2.1 – 3.65

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)
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)

Ethylene glycol (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

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

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Other information

Other information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute)	:	Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic)	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

12.2. Persistence and degradability

Base Ca	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

Base Ca	
Bioaccumulative potential	No data available concerning bioaccumulation.

12.4. Mobility in soil

Base Ca	
Ecology - soil	No additional information available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

Other adverse effects : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Do not dispose of waste into sewer.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecological waste information : Avoid release to the environment.
European List of Waste (LoW, EC 2000/532) : Disposal must be carried out using appropriate EWC code

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

Inland waterway transport
Not regulated

Rail transport
Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)
ANNEX II REPORTABLE EXPLOSIVES PRECURSORS
List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Calcium ammonium nitrate	15245-12-2	ex 3102 60 00	ex 3824 99 96
Magnesium nitrate hexahydrate	13446-18-9	ex 2834 29 80	ex 3824 99 96

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate

Abbreviations and acronyms:	
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Data sources : ECHA (European Chemicals Agency). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 and all its amendments and modifications. Supplier's safety documents.

Training advice : Training staff on good practice.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Acute Tox. 4 (Oral)	H302	Calculation method
Eye Dam. 1	H318	Calculation method

Safety Data Sheet (SDS), EU

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.