

Uniclass L621
 / Cl/SfB / / Yq2 / /
 December 2015

SAFETY INFORMATION

LIMELITE NATURAL HYDRAULIC LIME

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 PRODUCT IDENTIFIER

Product Name	EN 459-1 Natural Hydraulic Lime		
Substance	REACH Registration No:	EINECS	CAS
Natural Hydraulic Lime	01-2199475523-36-0001 (NHL 3.5)/0011(NHL 5)	285-561-1	85117-09-5
Trade Name(s):	Limelite NHL 3.5 Limelite NHL 5		

1.2. RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST

Natural hydraulic limes are used in industrial installations in the preparation of hydraulic binders for building and construction work, such as mortars, renders or plasters of for other construction products.

Natural hydraulic limes are used industrially, by professionals as well as by consumers in building and construction work, indoor and outdoor. The identified uses of natural hydraulic limes cover the dry products and the products in a wet suspension (paste). See section 16.2 for more information regarding use descriptors and categories.

Any uses not mentioned above, are advised against.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Tarmac Cement and Lime Ltd
 Portland House
 Bickenhill Lane, Birmingham B37 7BQ

Technical helpdesk: 0845 812 6323
 Email: info-cement@tarmac.com

1.4. EMERGENCY TELEPHONE NUMBER

Emergency telephone number available during office hours (08:30 - 16:00): Tel +44 (0)845 812 6232 (English language only)

Emergency telephone number available outside office hours: None

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE MIXTURE

2.1.1 ACCORDING TO REGULATION (EC) NO 1272/2008 (CLP)

Hazard class	Hazard	Hazard statements
Skin irritation	2	H315: Causes skin irritation
Serious eye damage/eye irritation	1	H318: Causes serious eye damage
Specific target organ toxicity single exposure respiratory tract irritation	3	H335: May cause respiratory irritation

2.1.2 ACCORDING TO DIRECTIVE 1999/45/EC

Xi Irritant
 R37/38 Irritating to respiratory system and skin
 R41 Risk of serious damage to eyes

2.2. LABEL ELEMENTS

According to Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms



Signal word

Danger

Hazard statements

H318 Causes serious eye damage
 H315 Causes skin irritation
 H335 May cause respiratory irritation

Precautionary statements

- P102 Keep out of reach of children
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P305+P351+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 doctor/physician
- P302+P352: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention
- P261+P304+P340: Avoid breathing dust/fume/gas/mist/vapours/spray. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor/physician if you feel unwell.
- P501 Dispose of contents/container to: Harden by application of water and dispose of as concrete waste

2.3. OTHER HAZARDS

Natural hydraulic lime does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH (Regulation (EC) No 1907/2006).

No other hazards identified

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

Substance	Concentration range (% by weight in NHL)	Registration No:	EINECS	CAS	Classification 67/548/EEC		Classification Regulation (EC) 1272/2008	
					Symb [C&L]	R	Hazard Class Category	Hazard Statement
Calcium Hydroxide	>15	01-2199475523-36-0001/0011	285-561-1	85117-09-5	Xi	R37 R38 R41	H315 H318 H335	Causes skin irritation Causes serious eye damage May cause respiratory irritation

3.2. MIXTURES

Contains less than 1% crystalline silica

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

General notes

No personal protective equipment is needed for first aid responders. First aid workers should avoid contact with wet natural hydraulic lime (NHL) or mixtures containing wet natural hydraulic lime (NHL).

Following contact with eyes

Do not rub eyes in order to avoid possible cornea damage as a result of mechanical stress.

Incline head to injured eye, open the eyelid(s) widely and flush eye(s) immediately by thoroughly rinsing with plenty of clean water for at least 20 minutes to remove all particles. Remove contact lenses, if present and easy to do. Continue rinsing. Avoid flushing particles into uninjured eye. If possible, use isotonic water (0.9% NaCl). Contact a specialist of occupational medicine or an eye specialist, preferably an ophthalmologist.

Following skin contact

For dry NHL, remove and rinse abundantly with water.

For wet NHL, wash skin with plenty of water.

Remove contaminated clothing, footwear, watches, etc. and clean thoroughly before re-using them.

Seek medical treatment in all cases of skin irritation (redness, rash, blistering) or burns.

Following inhalation

Move the person to fresh air and keep at rest in a position comfortable for breathing. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops or if discomfort, coughing or other symptoms persist.

Following ingestion

Do not induce vomiting. If the person is conscious,

wash out mouth with water and give plenty of water to drink.

Get immediate medical attention

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eyes: Eye contact with NHL (dry or wet) may cause serious and potentially irreversible injuries.

Skin: NHL may have an irritating effect on moist skin (due to sweat or humidity) after prolonged contact.

Prolonged skin contact with wet NHL or wet NHL mortar may cause serious burns because they develop without pain being felt.

Inhalation: May cause respiratory irritation. Repeated inhalation of dust of NHL over a long period of time increases the risk of developing lung diseases.

Medical conditions aggravated by exposure: Inhaling NHL dust may aggravate existing respiratory system disease(s) and/or medical conditions such as emphysema or asthma and/or existing skin and/or eye conditions.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

When contacting a doctor/physician, take this SDS or the product label with you.

IF IN EYES: Contact a specialist of occupational medicine or an eye specialist, preferably an ophthalmologist.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Natural hydraulic limes are not flammable. As appropriate for surrounding fire. Direct water jet may spread the fire.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Natural Hydraulic limes are non-combustible and non-explosive and will not facilitate or sustain the combustion of other materials.

5.3. ADVICE FOR FIRE-FIGHTERS

Natural hydraulic lime poses no fire-related hazards. General measures for a fire are applicable: Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1 FOR NON-EMERGENCY PERSONNEL

Wear protective equipment as described under Section 8 and follow the advice for safe handling and use given under Section 7.

6.1.2 FOR EMERGENCY RESPONDERS

Emergency procedures are not required. However, respiratory protection is needed in situations with high dust levels.

6.2. ENVIRONMENTAL PRECAUTIONS

Do not wash NHL down sewage and drainage systems or into bodies of water (e.g. streams).

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Collect the spillage in a dry state if possible.

Dry NHL

Use cleanup methods such as vacuum clean-up or vacuum extraction (Industrial portable units, equipped with high efficiency air filters (EPA and HEPA filters, EN 1822-1:2009) or equivalent technique) which do not cause airborne dispersion. Never use compressed air. Alternatively, wipe-up the dust by mopping, wet brushing or by using water sprays or hoses (fine mist to avoid that the dust becomes airborne) and remove slurry. If not possible, remove by slurring with water (see wet NHL).

When wet cleaning or vacuum cleaning is not possible and only dry cleaning with brushes can be done, ensure that the workers wear the appropriate personal protective equipment and prevent dust from spreading. Avoid inhalation of NHL and contact with skin. Place spilled materials into a container. Solidify before disposal as described under Section 13.

Wet NHL

Clean up wet NHL and place in a container. Allow material to dry and solidify before disposal as described under Section 13.

6.4. REFERENCE TO OTHER SECTIONS

See sections 8 and 13 for more details.

SECTION 7: HANDLING AND STORAGE

Do not handle or store near food and beverages or smoking materials.

7.1. PRECAUTIONS FOR SAFE HANDLING

The "Good practice guides" which contain advice on safe handling practices can be found from: <http://www.nepsi.eu/agreement-good-practice-guide/agreement.aspx>. These good practices have been adopted under the Social Dialogue "Agreement on Workers' Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it by Employee and Employer European sectoral associations, among which is EULA.

7.1.1 Protective measures

Follow the recommendations as given under Section 8. To clean up dry NHL, see Subsection 6.3.

Measures to prevent fire

Not applicable.

Measures to prevent aerosol and dust generation

Do not sweep. Use dry cleanup methods such as vacuum clean-up or vacuum extraction, which do not cause airborne dispersion.

Measure to protect the environment

Avoid release to the environment. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

7.1.2 INFORMATION ON GENERAL OCCUPATIONAL HYGIENE

Do not handle or store near food and beverages or smoking materials.
 In dusty environment, wear dust mask and protective goggles.
 Use protective gloves to avoid skin contact.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Bulk NHL should be stored in silos that are waterproof, dry (i.e. with internal condensation minimised), clean and protected from contamination.
 Engulfment hazard: To prevent engulfment or suffocation, do not enter a confined space, such as a silo, bin, bulk truck, or other storage container or vessel that stores or contains cement without taking the proper security measures. NHL can build-up or adhere to the walls of a confined space.
 The NHL can release, collapse or fall unexpectedly.
 Packed products should be stored in unopened bags clear of the ground in cool, dry conditions and protected from excessive draught in order to avoid degradation of quality.
 Bags should be stacked in a stable manner.
 Do not use aluminium containers for the storage or transport of wet NHL containing mixtures due to incompatibility of the materials.

7.3. SPECIFIC END USE(S)

No additional information for the specific end uses (see section 1.2).

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

8.1.1 EXPOSURE LIMIT VALUES

WEL (Workplace Exposure Limit) 8 hr Time Weighted Average (TWA): Total inhalable dust 5 mg/m³
 OEL (Occupational Exposure Limit) 8 hr Time Weighted Average (TWA): Respirable dust 1 mg/m³ of calcium oxide
 STEL (Short Term Exposure Limit) 15 min:
 Respirable dust 4 mg/m³ of calcium oxide

This value is read-across to natural hydraulic lime in view of the anticipated local effect (pH is comparable to that of CaO and Ca(OH)₂)

8.2. EXPOSURE CONTROLS

8.2.1 APPROPRIATE ENGINEERING CONTROLS

Measures to reduce generation of dust and to avoid dust propagating in the environment such as de-dusting, exhaust ventilation and dry clean-up methods which do not cause airborne dispersion.

8.2.2 INDIVIDUAL PROTECTION MEASURES SUCH AS PERSONAL PROTECTION EQUIPMENT

General

During work avoid kneeling in fresh mortar wherever possible. If kneeling is absolutely necessary then appropriate waterproof personal protective equipment must be worn.
 Do not eat, drink or smoke when working with NHL to avoid contact with skin or mouth.
 Before starting to work with NHL, apply a barrier cream and reapply it at regular intervals.
 Immediately after working with NHL or NHL-containing materials, workers should wash or shower or use skin moisturisers.
 Remove contaminated clothing, footwear, watches, etc. and clean thoroughly before re-using them.

Eye/face protection



Wear approved glasses or safety goggles according to EN 166 when handling dry or wet NHL to prevent contact with eyes.

Skin protection



Use watertight, wear-and-alkali-resistant protective gloves (eg nitrile soaked cotton gloves with CE marking) internally lined with cotton; boots; closed long-sleeved protective clothing as well as skin care products (eg barrier creams) to protect the skin from prolonged contact with wet NHL. Particular care should be taken to ensure that wet cement does not enter the boots. For the gloves, respect the maximum wearing time to avoid skin problems.
 In some circumstances, waterproof trousers or kneepads may also be necessary.

Respiratory protection



When a person is potentially exposed to dust levels above exposure limits, use appropriate respiratory protection. The type of respiratory protection should be adapted to the dust level and conform to the relevant EN standard, (e.g. EN 149, EN 140, EN 14387, EN 1827) or national standard.

An overview of the APFs of different RPE (according to EN 529:2005) can be found in the glossary of MEASE. Any RPE as defined above shall only be worn if the following principles are implemented in parallel: The duration of work (compare with "duration of exposure" above) should reflect the additional physiological stress for the worker due to the breathing resistance and mass of the RPE itself, due to the increased thermal stress by enclosing the head. In addition, it shall be considered that the worker's capability of using tools and of communicating are reduced during the wearing of RPE. For reasons as given above, the worker should therefore be (i) healthy (especially in view of medical problems that may affect the use of RPE), (ii) have suitable facial characteristics reducing leakages between face and mask (in view of scars and facial hair). The recommended devices above which rely on a tight face

seal will not provide the required protection unless they fit the contours of the face properly and securely. The employer and self-employed persons have legal responsibilities for the maintenance and issue of respiratory protective devices and the management of their correct use in the workplace. Therefore, they should define and document a suitable policy for a respiratory protective device programme including training of the workers.

Thermal hazards
Not applicable.

8.2.3 ENVIRONMENTAL EXPOSURE CONTROLS

Environmental exposure control for the emission of NHL particles into air has to be in accordance with the available technology and regulations for the emission of general dust particles.

Air: Environmental exposure control for the emission of NHL particles into air has to be in accordance with the available technology and regulations for the emission of general dust particles.

Water: Do not wash NHL into sewage systems or into bodies of water, to avoid high pH. Above pH 9 negative ecotoxicological impacts are possible.

Soil and terrestrial environment: No special emission control measures are necessary for the exposure to the terrestrial environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- (a) Appearance: Finely ground solid inorganic material (grey or white powder).
- (b) Odour: Odourless
- (c) Odour threshold: No odour threshold, odourless
- (d) pH: 12.3 (Saturated solution at 20 °C)
- (e) Melting point: > 450 °C
- (f) Initial boiling point and boiling range: Not applicable as under normal atmospheric conditions, melting point > 450 °C
- (g) Flash point: Not applicable as is not a liquid
- (h) Evaporation rate: Not applicable as is not a liquid
- (i) Flammability (solid, gas): Non-combustible solid which does not cause or contribute to fire through friction
- (j) Upper/lower flammability or explosive limits: Not applicable as is not a flammable gas
- (k) Vapour pressure: Not applicable as melting point > 450 °C
- (l) Vapour density: Not applicable as melting point > 450 °C
- (m) Relative density: 2.70
- (n) Solubility in water: Moderately soluble
- (o) Partition coefficient: n-octanol/water: Not applicable as product is an inorganic substance
- (p) Auto-ignition temperature: Not applicable

(no pyrophoricity – no organo- metallic, organo-metalloid or organo-phosphine bindings or of their derivatives, and no other pyrophoric constituent in the composition)

- (q) Decomposition temperature: Not applicable as no organic peroxide present
- (r) Viscosity: Not applicable as not a liquid
- (s) Explosive properties: Not applicable. Not explosive or pyrotechnic. Not in itself capable by chemical reaction of producing gas at such temperature and pressure and at such a speed as to cause damage to the surroundings. Not capable of a self-sustaining exothermic chemical reaction.
- (t) Oxidising properties: Not applicable as does not cause or contribute to the combustion of other materials

9.2. OTHER INFORMATION

Not applicable.

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

When mixed with water, NHL will harden into a stable mass that is not reactive in normal environments.

10.2. CHEMICAL STABILITY

Dry NHLs are stable as long as they are properly stored (see Section 7) and compatible with most other building materials. They should be kept dry.

Contact with incompatible materials should be avoided. Wet NHL is alkaline and incompatible with acids, aluminium or other non-noble metals..

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

Natural hydraulic lime reacts exothermically with acids. When heated to above 580 °C, calcium dihydroxide decomposes to produce Calcium Oxide (CaO) and Water (H₂O). Calcium oxide in turn reacts with water and generates heat. This may pose a risk to flammable material

10.4. CONDITIONS TO AVOID

Humid conditions during storage may cause lump formation and loss of product quality.

10.5. INCOMPATIBLE MATERIALS

Natural hydraulic lime reacts exothermically to produce salts. Reacts with aluminium and brass in the presence of moisture, leading to the production of hydrogen

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

NHL will not decompose into any hazardous products. Calcium dihydroxide reacts with carbon dioxide to form calcium carbonate which is a common material in nature.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Natural hydraulic lime is not acutely toxic. An acute dermal or inhalation toxicity study with natural hydraulic lime is not considered to be scientifically justified. Classification for acute toxicity is not warranted

Hazard class	Cat	Effect	Reference
Acute toxicity - dermal	-	No data available	
Acute toxicity- inhalation	-	No data available	
Acute toxicity - oral	-	LD50>2000 mg/kg by wt. (OECD 425, test substance Ca(OH) ₂ , rat); the results are also applicable to lime (chemical) hydraulic by read-across	OECD 425
Skin corrosion/ irritation	2	Calcium hydroxide is irritating to the skin. By read-across these results are applicable to Natural Hydraulic Lime. Based on experimental results on a similar substance utilised by read-across, NHL requires classification as irritating to the skin. Skin Irrit.2 (H315-Causes skin irritation)	
Serious eye damage/irritation	1	Calcium hydroxide entails a risk of serious damage to eyes Eye irritation studies, in vivo, Rabbit). By read-across these results are applicable to NHL. Based on experimental results on a similar substance utilised by read-across, NHL requires classification as severely irritating to the eye. Eye Damage 1 (H318 - Causes serious eye damage)	
Skin sensitisation	-	No data available. NHL is not considered to be a skin sensitizer, based on the nature of the effect (pH shift) and the essential requirement of calcium for human nutrition. Classification for sensitisation is not warranted	
Respiratory sensitisation	-	No data available	
Germ cell mutagenicity	-	Bacterial reverse mutation assay (Ames test, OECD 471): Negative Mammalian chromosome aberration test: Negative These results are applicable to NHL by read-across. NHL does not contain any main constituents or major impurities that are known to be genotoxic. The pH level of NHL does not give rise to mutagenic risk Human epidemiological data support lack of any mutagenic potential of NHL. Classification for genotoxicity is not warranted.	OECD 471
Carcinogenicity	-	Calcium (administered as Ca-Lactate) is not carcinogenic (experimental result, rat). The pH effect does not give rise to a carcinogenic risk. Human epidemiological data support lack of any carcinogenic potential of NHL Classification for carcinogenicity is not warranted.	
Reproductive toxicity	-	Calcium (administered as Ca-Carbonate) is not toxic to reproduction (experimental result, mouse). The pH effect does not give rise to a reproductive risk. Human epidemiological data support lack of any reproductive toxicity of calcium hydroxide. Both in animal studies and human clinical studies on various calcium salts, no reproductive or developmental effects were detected. Thus, NHL is not toxic for reproduction and/or development. Classification for carcinogenicity according to regulation (EC) 1272/2008 is not warranted	
STOT-single exposure	3	From human data on calcium oxide and calcium hydroxide it is concluded by read-across (worst case approach) that NHL is irritating to the respiratory tract. As summarised in the SCOEL recommendation, based on human data, NHL is classified as irritating to the respiratory system by read across from CaO and Ca(OH) ₂ . STOT SE 3 (H335- May cause respiratory irritation).	
STOT-repeated exposure		Toxicity of calcium via the oral route is addressed by upper intake levels (UL) for adults determined by the Scientific Committee on Food (SCF), being: UL = 2500 mg/d, corresponding to 36 mg/kg bw/d (70 kg person) for calcium. Toxicity of natural hydraulic lime via the dermal route is not considered as relevant in view of the anticipated insignificant absorption through skin and due to local irritation as the primary health effect (pH shift). Toxicity of natural hydraulic lime via inhalation (local effect, irritation of mucous membranes) is addressed by an 8-h TWA determined for CaO and Ca(OH) ₂ by the Scientific Committee on Occupational Exposure Limits (SCOEL) of 1 mg/m ³ respirable dust (read across from CaO and Ca(OH) ₂ ; see Section 8.1). Therefore, classification of natural hydraulic lime for toxicity upon prolonged exposure is not required.	
Aspiration hazard	-	Natural Hydraulic Lime is not known to present an aspiration hazard	

12.1.1 ACUTE/PROLONGED TOXICITY TO FISH

LC50 (96h) for freshwater fish: 50.6 mg/l (calcium hydroxide) LC50 (96h) for marine water fish: 457 mg/l (calcium hydroxide)

12.1.2 ACUTE/PROLONGED TOXICITY TO AQUATIC INVERTEBRATES

EC50 (48h) for freshwater invertebrates: 49.1 mg/l (calcium hydroxide) LC50 (96h) for marine water invertebrates: 158 mg/l (calcium hydroxide)

12.1.3 ACUTE/PROLONGED TOXICITY TO AQUATIC PLANTS

EC50 (72h) for freshwater algae: 184.57 mg/l (calcium hydroxide) NOEC (72h) for freshwater algae: 48 mg/l (calcium hydroxide)

12.1.4 TOXICITY TO MICRO-ORGANISMS E.G. BACTERIA

At high concentration, through the rise of temperature and pH, calcium oxide is used for disinfection of sewage sludges

12.1.5 CHRONIC TOXICITY TO AQUATIC ORGANISMS

NOEC (14d) for marine water invertebrates: 32 mg/l (calcium hydroxide)

12.1.6 TOXICITY TO SOIL DWELLING ORGANISMS

EC10/LC10 or NOEC for soil macro organisms: 2000 mg/kg soil dw (calcium hydroxide) EC10/LC10 or NOEC for soil micro organisms: 12000 mg/kg soil dw (calcium hydroxide)

12.1.7 TOXICITY TO TERRESTRIAL PLANTS

NOEC (21d) for terrestrial plants: 1080 mg/kg (calcium hydroxide)

12.1.8 GENERAL EFFECT

Acute pH-effect. Although this product is useful to correct water acidity, an excess of more than 1 g/l may be harmful to aquatic life. pH-value of >12 will rapidly decrease as result of dilution and carbonation

12.2. PERSISTENCE AND DEGRADABILITY

Not relevant for inorganic substances.

12.3. BIOACCUMULATIVE POTENTIAL

Not relevant for inorganic substance.

12.4. MOBILITY IN SOIL

Natural hydraulic lime reacts with water and/or carbon dioxide to form respectively; calcium hydroxide and/or calcium carbonate which is sparingly soluble and presents a low mobility in most soils

12.5. RESULTS OF PBT AND VPOB ASSESSMENT

Not relevant for inorganic substances.

12.6. OTHER ADVERSE EFFECTS

No other adverse effects are identified

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Disposal of natural hydraulic lime should be in accordance with local and national legislation. Processing, use or contamination of this product may change the waste management options. Dispose of container and unused contents in accordance with applicable member state and local requirements. The used packing is only meant for packing this product; it should not be reused for other purposes. After usage, empty the packing completely.

SECTION 14: TRANSPORT INFORMATION

Natural hydraulic lime is not covered by the international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID), therefore no classification is required. No special precautions are needed apart from those mentioned under Section 8.

14.1. UN NUMBER

Not relevant

14.2. UN PROPER SHIPPING NAME

Not relevant

14.3. TRANSPORT HAZARD CLASS(ES)

Not relevant

14.4. PACKING GROUP

Not relevant

14.5. ENVIRONMENTAL HAZARDS

Not relevant

14.6. SPECIAL PRECAUTIONS FOR USER

Not relevant

14.7. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 AND THE IBC CODE

Not relevant

SECTION 15: REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE

15.2. CHEMICAL SAFETY ASSESSMENT

A chemical safety assessment has been carried out for this substance

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGES

This safety data sheet (v.1.0) contains the information required to meet the provisions of Regulation (EU) No 453/2010

16.2 ABBREVIATIONS AND ACRONYMS

ACGIH	American Conference of Industrial Hygienists
ADR/RID	European Agreements on the transport of Dangerous goods by Road/Railway
APF	Assigned protection factor
CAS	Chemical Abstracts Service
CLP	Classification, labelling and packaging (Regulation (EC) No 1272/2008)
COPD	Chronic Obstructive Pulmonary Disease
DNEL	Derived no-effect level
EC50	Half maximal effective concentration
ECHA	European Chemicals Agency
EINECS	European Inventory of Existing Commercial chemical Substances
EPA	Type of high efficiency air filter
ES	Exposure scenario
EULA	European Lime Association
EWC	European Waste Catalogue
FF P	Filtering face piece against particles (disposable)
FM P	Filtering mask against particles with filter cartridge
GefStoffV	Gefahrstoffverordnung
HEPA	Type of high efficiency air filter
H&S	Health and Safety
IATA	International Air Transport Association
IMDG	International agreement on the Maritime transport of Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
MEASE	Metals estimation and assessment of substance exposure, EBRC Consulting GmbH for Eurometaux, http://www.ebrc.de/ebrc/ebrc-mease.php
MS	Member State
NOEC	No observable effect concentration
OEL	Occupational exposure limit
OELV	Occupational exposure limit value
PBT	Persistent, bio-accumulative and toxic
PNEC	Predicted no-effect concentration
PROC	Process category
RE	Repeated exposure
REACH	Registration, Evaluation and Authorisation of Chemicals
RPE	Respiratory protective equipment
SCOEL	Scientific Committee on Occupational Exposure Limit Values
SDS	Safety Data Sheet
STEL	Short term exposure limit
SE	Single exposure
STP	Sewage treatment plant

STOT	Specific Target Organ Toxicity
TLV-TWA	Threshold Limit Value-Time-Weighted Average
TRGS	Technische Regeln für Gefahrstoffe
VLE-MP	Exposure limit value-weighted average in mg by cubic meter of air
vPvB	Very persistent, very bio-accumulative
WEL	Workplace exposure limit
w/w	Weight by weight
WWTP	Waste water treatment plant

16.3 KEY LITERATURE REFERENCES AND SOURCES OF DATA

- [1] Anon 2006 Tolerable upper intake levels or vitamins and minerals. Scientific Committee on Food: European Food Safety Authority, ISBN: 92-9188-014-0 [SCF document].
- [2] Anon 2008 Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL) for calcium oxide (CaO) and calcium dihydroxide (Ca(OH)₂) European Commission, DG Employment, Social Affairs and Equal Opportunities, SCOEL/SUM/137 February 2008.

16.4 RELEVANT R-PHRASES AND/OR H-STATEMENTS

R37/38	Irritating to respiratory system and skin
R41	Risk of serious damage to eyes
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation

H315: Causes skin irritation
 H318: Causes serious eye damage
 H335: May cause respiratory irritation

16.5 TRAINING ADVICE

In addition to health, safety and environmental training programs for their workers, companies must ensure that workers read, understand and apply the requirements of this SDS.

16.6 FURTHER INFORMATION

See Annex A for the ES of the following substances

Natural Hydraulic Lime

The data and test methods used for the purpose of classification of Natural Hydraulic Lime, are given or referred to in section 11.1.

16.7 DISCLAIMER

The information on this data sheet reflects the currently

available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or any other process, is the responsibility of the user. It is implicit that the user is responsible for determining appropriate safety measures and for applying the legislation covering his/her own activities.