

MATERIAL safety data sheet  
in compliance with Reg. (EC) Nr.1907/2006, 1272/2008, 453/2010

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER	Compound of magnesium oxide, calcium oxide and secondary products. Exempted according to Annex V.7.  Trade name: <b>Namex XA</b>  Chemical name/synonyms: magnesium oxide
1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST	Expansive additive for cement based materials. Advised against all other uses
1.3 DETAIL OF THE SUPPLIER OF THE SAFETY DATA SHEET	<b>Newchem AG</b> Felsenstrasse 12 CH-8808 Pfäeffikon Switzerland Tel. +41 55 420 15 30 Fax: +41 55 420 15 30 <a href="http://www.newchem.info">www.newchem.info</a> <a href="mailto:office@newchem.org">office@newchem.org</a>

## 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE

according to Regulation(EC)No. 1272/2008[CLP/GHS]:  
Skin Irritation 2, H315  
Eye damage 1, H318  
STOT SE 3 ,H335

HAZARD PICTOGRAMS :



GHS 05



GHS 07

SIGNAL WORD :

Danger

HAZARD STATEMENTS :

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335 : May cause respiratory irritation.

PRECAUTIONARY STATEMENT :

P261: Avoid breathing dust/spray

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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

LABELLING ACCORDING TO DIRECTIVE 67/548/EEC

INDICATION OF DANGER:



Xi irritant

RISK PHRASES:

R37: Irritating to respiratory system.  
R38: Irritating to skin.  
R41: Risk of serious damage to eyes.

SAFETY PHRASES:

S2: Keep out of the reach of children.  
S25: Avoid contact with eyes  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S37: Wear suitable gloves  
S39: Wear eye/face protection

HEALTH EFFECTS :

Potential health effects may vary depending on the duration and degree of exposure. To reduce or eliminate health hazards associated with this product, use exposure controls or personal protection methods as described Section 8.

ENVIRONMENTAL EFFECTS :

Not classified as harmful, but may cause environmental effects due to alkalinity.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

SINGLE PRODUCT / COMPOUND ☐

**Compound of magnesium and calcium Oxide**

Chemical name	CAS Nr.:	EINECS Nr.:	DSD Classification	CLP Classification
Magnesium Oxide (75-90%)	1309-48-4	215-171-9	-	-
Calcium Oxide (0-5%)	1305-78-9	215-138-9	Xi - irritant. R37; R38; R41	Skin Irr. Cat. 2: H315 Eye Dam. 1: H318 STOT SE3: H335

### 4. FIRST-AID MEASURES

EYE CONTACT

If this product comes in contact with eyes, wash out immediately with fresh water for at least 15 minutes and consult a doctor.  
Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN CONTACT

If skin contact occurs immediately remove all contaminated clothing, including footwear, flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation

INHALATION

If dust is inhaled, remove from exposure to fresh air immediately. If breathing is difficult, give oxygen and consult a doctor. Encourage patient to blow nose to ensure clear breathing passages. Ask patient to rinse mouth with water. Seek medical attention.

INGESTION

Rinse mouth with fresh water and consult a doctor.

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

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### Main modes of action:

Acute: Irritation of the eyes and respiratory tract

Chronic: lung function impairment

### Metabolism and excretion:

Magnesium (essential trace element, physiological content about 272-420 mg / kg body weight) is stored in the body, especially in the bones (around 60%) and muscle (about 29%). Only about 1% of Mg is extracellularly, of which 1/3 is bound to plasma proteins; the remaining 2/3 (ionized present and diffusible) seem to be the biologically active part. Excretion is almost exclusively through the kidney into the urine. Mg is in the body in many fundamental metabolic processes involved (interaction especially with calcium and phosphate ions). Deviations from the physiological equilibrium in both directions (hyper- or hypomagnesemia) may lead to disease symptoms.

After inhalation use parenteral glucocorticoids, further antibiotic and prescribe mucolytic.

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## 5. FIRE-FIGHTING MEASURES

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FIRE AND EXPLOSIVE PROPERTIES	The product is not flammable, and will not form explosive dust clouds.
EXTINGUISHING MEDIA	Non combustible. Use dry powder, foam or CO <sub>2</sub> to extinguish surrounding fire.
SPECIFIC HAZARDS	None
PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS	Fire fighters should wear an approved self-contained breathing apparatus and full protective clothing.
HAZARDOUS COMBUSTION PRODUCTS	None
FIRE FIGHTING	Use firefighting procedures suitable for surrounding area.

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## 6. ACCIDENTAL RELEASE MEASURES

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PERSONAL PRECAUTIONS	Avoid dust formation. Use dust mask
ECOLOGICAL PRECAUTIONS	Material may harm aquatic life.
SPILL AND LEAK PROCEDURES	Dry material. Collect the product into suitable containers avoiding dust formation.

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## 7. HANDLING AND STORAGE

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STORAGE	Avoid dust formation. Use dust mask. Keep in a dry place.
HANDLING	Keep containers closed in a well ventilated area. Minimize dust generation and accumulation. Use proper personal protective equipment.

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## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

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### PARAMETERS TO WATCH

Magnesiumoxide

TRGS 900

General dust limit inhalable fraction  
10 mg/m<sup>3</sup>

Maximum limit 2 (II)

## **OCCUPATIONAL EXPOSURE CONTROLS**

ENGINEERING REQUIREMENTS	Use adequate ventilation and local exhaust to keep airborne concentration low. Maintain eye rinse fountains and quick-drench facilities in work area
EYE PROTECTION REQUIREMENTS	Safety spectacles with side shields or goggles with full face shield
HAND PROTECTION REQUIREMENTS	Protective gloves
CLOTHING REQUIREMENTS	Where more extensive contact may occur, wear suitable protective clothing (e.g. apron, sleeves, boots).
RESPIRATORY REQUIREMENTS	In case of brief exposure or low pollution use filter respirator. In case of intensive or longer exposure, use self-contained breathing protection.

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

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PHYSICAL FORM	Powder
COLOUR	Beige
ODOUR	Odourless
pH	12 in saturated water solution
BOILING POINT	3582°C
MELTING - / FREEZING POINT	2800°C
SOLUTILITY IN WATER	6 mg/l
VISCOSITY	Not applicable
DENSITY	3,5 – 3,7 g/cm <sup>3</sup>
EVAPORATION RATE	Not applicable
VAPOUR PRESSURE	Not applicable
LOWER EXPLOSION LIMIT (%)	Not applicable
UPPER EXPLOSION LIMIT (%)	Not applicable
AUTOFLAMMABILITY	Not flammable
FLASH POINT	Not combustible
DUST EXPLOSION CLASS	Not applicable

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## **10. STABILITY AND REACTIVITY**

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STABILITY	Absorbs humidity and carbon dioxide from the air
INCOMPATIBLE MATERIAL AND CONDITIONS TO AVOID:	Strong acids. Contact with aluminium and humidity will form hydrogen gas. Reaction exothermally with non-metal-halogenates as phosphor pentachloride.
HAZARDOUS DECOMPOSITION PRODUCTS	none

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## **11. TOXICOLOGICAL INFORMATION**

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The preparation has not been tested for toxicological effects, but it is classified as a skin and eye irritant on the basis of the known hazards of the components.

ACUTE TOXICITY	No components are classified as harmful
CORROSIVITY/IRRITATION	Magnesium oxide dust or fumes are expected to be a mild eye irritant and irritates the respiratory system
SENSITISATION	No ingredient has been identified as having sensitising

properties.

REPEATED-DOSE  
TOXICITY/MUTAGENICITY/  
CARCINOGENICITY/REPRODUCTIVE  
AND DEVELOPMENTAL TOXICITY

No information available.

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## 12. ECOLOGICAL INFORMATION

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Ecotoxicological data have not been determined specifically for this product, but it is not expected to be classified as toxic to aquatic organisms on the basis of the known hazards of the components.

MOBILITY	The product is partially soluble in water and expected to have a low vapour pressure.
PERSISTENCE AND DEGRADABILITY	Not applicable to inorganic product.
BIOACCUMULATION	Not applicable to inorganic product.
AQUATIC TOXICITY	Not expected to be toxic to aquatic organisms, but may cause harmful changes in pH (high alkalinity) in water.

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## 13. DISPOSAL CONSIDERATION

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WASTE DISPOSAL METHODS	This product may be suitable for disposal by landfill. Some reduction of hazard can be effected by careful neutralisation with dilute acid. Disposal must be in accordance with current national and local regulations. Chemical residues generally count as special waste, and their disposal may be regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities or approved waste disposal companies who will advise you on how to dispose of special waste. General EU requirements are given in the Waste Framework Directive (75/442/EEC) and the Hazardous Waste Directive (91/689/EEC).
EMPTY CONTAINER WARNINGS	Packaging may contain residues of the product and should be treated accordingly.
EU WASTE NO	060316

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## 14. TRANSPORT INFORMATION (See also section 9)

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IATA CLASSIFICATION	product is not classed as a dangerous good
IMDG CLASSIFICATION	product is not classed as a dangerous good
ADR/RID	product is not classed as a dangerous good

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## 15. REGULATORY INFORMATION

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15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATION/LEGISLATIONJ SPECIFIC FOR THE SUBSTANCE:	
EUROPEAN/INTERNATIONAL REGULATIONS	The substance is not subject to authorisation or restriction under REACH.
EUROPEAN LABELING IN ACCORDANCE WITH EC DIRECTIVES	

HAZARD SYMBOL :



**Danger**

EU LEGISLATION:

Compound as dangerous according EU 1272/2008  
REACH Regulation (1907/2006)  
EU legislation: 1999/45/EC, 2001/58/EC, 2006/58/EC,  
2006/8/EC

## 15.2 CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this substance by the supplier

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## 16. OTHER INFORMATION

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REPLACES VERSION DATED

ORIGINAL DOCUMENT DATED

07.12.2015

FOR REGULATORY INFORMATION;  
CONTACT

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