

Page Nr. 1/8

Safety data sheet

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

1.1. Product identifier

Code Name BETON TOP IW-BETONTOP Pre-blended, cement-based admixture

1.2. Relevant identified uses of the substance or mixture and uses advised against Product for concrete surfaces low thickness

1.3. Details of the supplier of the safety data sheet Company name Address Place and country

IDEAL WORK SRL Via Kennedy, 52 31030 Vallà di Riese Pio X (TV) Italy tel. 0423/4535 fax 0423/748429 <u>sicurezza@idealwork.it</u>

e-mail address for a competent person, responsible for the safety data sheet

1.4. Emergency telephone number For information in an emergency

Poison center:

National Poisons Information Service (Birmingham Unit) City Hospital Dudley Rd Birmingham Telephone: +44 121 507 4123 Fax: +44 121 507 55 88 Emergency telephone: 844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous in accordance with the provisions of Regulation (EC) No. 1272/2008 (CLP) (and subsequent amendments and adaptations). The product accordingly requires a safety data sheet in accordance with the provisions of Regulation (EC) No. 1907/2006 and subsequent amendments.

Additional information on health and/or environmental risks are set out in sections 11 and 12 of this safety data sheet.

2.1.1. Regulation (EC) No. 1272/2008 (CLP) and subsequent amendments and adaptations

Classification and hazard statements:	
Eye Dam. 1	H318
Skin Sens. 1	H317

2.1.2. Directives 67/548/EEC and 1999/45/EC and subsequent amendments and adaptations

Hazard symbols: Xi R phrases: 41-43

The complete text of the risk phrases (R) and of the hazard statements (H) is set out in section 16 of the safety data sheet.

2.2. Label elements

Hazard labelling in accordance with Regulation (EC) No. 1272/2008 (CLP) and subsequent amendments and adaptations.





IW-BETONTOP

Version No. 1

Revision date 16/10/2014

Issue date 16/10/2014

H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
P264	Wash hands thoroughly after handling.
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.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P310	Immediately call a POISON CENTER or doctor/physician.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
	otore in a weit vertalated place. Reep container agray oloced.
Contains:	Cement, portland, chemicals
	Calcium oxide
2.3 Other hazards	

2.3. Other hazards

Information not available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Contains:

Identification Calcium oxide	Conc. %.	Classification (67/548/EEC)	Classification (1272/2008 CLP)
CAS NUMBER 1305-78-8 EC NUMBER 215-138-9	1.5 - 3	Xi R37/38, Xi R41	Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335
Reg .N. 01-2119475325-36-XXXX			
Cement, portland, chemicals CAS NUMBER 65997-15-1	1 - 3	Xi R37/38, Xi R41	Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335
EC NUMBER 266-043-4 INDEX NUMBER -			

NOTE: upper value of range is excluded.

The complete text of the risk phrases (R) and of the hazard statements (H) is set out in section 16 of the safety data sheet. T+ = very toxic(T+), T = toxic(T), Xn = harmful(Xn), C = corrosive(C), Xi = irritant(Xi), O = oxidising(O), E = explosive(E), F+ = extremely flammable(F+), F = highly flammable(F), N = dangerous for the environment(N)

SECTION 4: First aid measures

4.1. Description of first aid measures

EYE CONTACT: remove contact lenses. Wash immediately with plenty of water for at least 30 minutes, keeping the lids wide open. Get immediate medical advice/attention.

SKIN CONTACT: remove immediately all contaminated clothing. Wash the affected parts of the body and get immediate medical advice.

SWALLOWING: make the victim drink as much water as possible. Get immediate medical advice/attention. Do not induce vomiting unless expressly authorised by the physician.

INHALATION: call a physician immediately. Remove victim to fresh air, far from the site of the accident. If the victim has stopped breathing, administer artificial respiration. The emergency responders should adopt suitable precautions.

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

For the symptoms and effects due to the substances contained, see section 11.

4.3. Indication of any immediate medical attention and special treatment needed Information not available.



Version No. 1

Revision date 16/10/2014 Issue date 16/10/2014

IW-BETONTOP

Page Nr. 3/8

SECTION 5: Firefighting measures

5.1. Extinguishing media

The product is not classified as flammable, combustible, or oxidising, in the event of fire choose the most suitable extinguishing means for the surrounding environment.

5.2. Special hazards arising from the substance or mixture

EXPOSURE HAZARDS IN EVENT OF FIRE

The product is not combustible. Nevertheless, in the event of fire, do not breath in the combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Cool the containers with jets of water to prevent the product decomposing and developing substances that are potential health hazards. Always wear personal protective equipment, including fire protection. Collect the extinguishing water, which must not be discharged into the drains. Dispose of the contaminated water used for extinguishing the fire and the fire residue in compliance with current standards.

EQUIPMENT

Normal firefighting gear like a self-contained open-circuit compressed air breathing apparatus (EN 137), firefighting suit (EN469), protective gloves for firefighters (EN 659) and boots for fire services (HO A29 or A30).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Leave the accident site immediately if you do not have suitable respiratory and eye protective devices (see section 8).

For emergency responders

Stop the leak if it is safe to do so. Surround the accident zone. Wear suitable protective devices (including the personal protective equipment specified in section 8 of the safety data sheet) to prevent contamination of the skin, eyes and personal garments. Do not breathe mist and vapours.

6.2. Environmental precautions

Prevent the product entering drains, surface water or groundwater.

6.3. Methods and material for containment and cleaning up

Use non-sparking mechanical equipment to collect the leaked product and place it in containers for recovery or disposal. Eliminate the residue with jets of water if there are no contraindications.

Ventilate the area adequately that has been affected by the leak. Check that the material of the containers in section 7 is compatible. The contaminated material must be disposed of in compliance with the provisions of section 13.

6.4. Reference to other sections

Information on personal protective equipment and disposal is set out in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle the product after consulting all the other sections of this safety data sheet. Do not release the product in the environment. Do no eat, drink or smoke when using this product. Remove contaminated clothes and personal protective equipment before entering areas in which food is consumed.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original container. Keep container tightly closed, in a well ventilated place, away from direct sunlight. Keep the containers away from any incompatible materials, checking section 10.

7.3. Specific end uses

Information not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Reference standards:

ItalyItalian legislative decree no. 81 of 9 April 2008OEL EUDirective 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.TLV-ACGIHACGIH 2013

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IW-BETONTOP

Page Nr. 4/8

Cement, portland, chemicals

Threshold Limit Value						
Туре	State	TWA/8h		STEL/15 min		
			Notes mg/m3	ppm	mg/m3	ppm
TLV-ACGIH		1				A4 (e, j)
Calcium oxide						
Threshold Limit Value						
Туре	State	TWA/8h		STEL/15 min		
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		2				Irrt, eye, cute and rspr

Legend:

A4 = non classified as carcinogen to humans

(e) = for particles not containing asbestos and with crystalline silica < 1%

(j) = breathable fraction measured as indicated by ACGIH

Irrt= irritant Eye= eyes Cute= skin Rspr= respiratory

(C) = CEILING ; INALAB = inhalable fraction; RESPIR = breathable fraction; TORAC = thoracic fraction.

The risk assessment should also consider the occupational exposure limit values set by ACGIH for inert dusts that are not otherwise classified (PNOC breathable fraction: 3 mg/m^3 ; PNOC inhalable fraction: 10 mg/m^3). If these limits are exceeded, a P-type filter should be used, the class (1, 2 or 3) must be chosen on the basis of the outcome of the risk assessment.

8.2. Exposure controls

As taking appropriate technical measures always has priority over personal protective equipment, ensure good ventilation in the workplace by means of an effective local extraction system.

When choosing personal protective equipment, ask your suppliers of chemical substances for advice.

The personal protective equipment must display CE marking certifying conformity to current standards.

Provide emergency shower with face and eye bath.

HAND PROTECTION

If prolonged contact with the product is envisaged, protect the hands with work gloves that resist penetration (reference standard EN 374), like latex, nitrile rubber, neoprene and PVC gloves. When choosing the material of the work gloves, the use must be considered to which the product and further products based on it will be put. Also remember that latex gloves can give rise to sensitisation phenomena.

SKIN PROTECTION

Wear work clothes with long sleeves and category II safety footwear for professional use (ref. Directive 89/686/EEC and EN ISO 20344 standard). Wash yourself with soap and water after removing the protective clothing.

EYE/FACE PROTECTION

A hood with visor or a protective visor with hermetically sealed goggles should be worn (reference standard EN 166).

RESPIRATORY PROTECTION

A filtering half mask type P should be worn. The class (1, 2 or 3) and actual need must be defined on the basis of the outcomes of the risk assessment (reference standard EN 149).

Emissions from productive processes, including those from ventilation equipment, should be checked to ensure that they comply with environmental protection standards.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Powder
Colour	Grey
Odour	no odour
Odour threshold	Not available
pH	Not available
Melting point/freezing point	Not available
Initial boiling point	Not applicable
Boiling range	Not available
Flash point	>60 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower flammability limit	Not applicable (there are no chemical groups present in the molecule associated



Version No. 1

Revision date 16/10/2014 Issue date 16/10/2014

IW-BETONTOP

Page Nr. 5/8

Upper flammability limit

Lower explosive limit Upper explosive limit Vapour pressure Vapour density Relative density Solubility Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Explosive properties

Oxidising properties

with explosive properties. Refer to Annex I of Regulation (EC) No. 1272/2008 section 2.8.4.2 a) Not applicable (there are no chemical groups present in the molecule associated with explosive properties. Refer to Annex I of Regulation (EC) No. 1272/2008 section 2.8.4.2 a) Not available Not applicable (there are no chemical groups present in the molecule associated with oxidising properties. Refer to Annex I of Regulation (EC) No. 1272/2008 section 2.1.4.3) Not applicable (there are no chemical groups present in the molecule associated with explosive properties. Refer to Annex I of Regulation (EC) No. 1272/2008 section 2.8.4.2 a)

9.2. Other information

Information not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use .

10.2 . Chemical stability .

The product is stable in normal conditions of use and storage .

10.3 . Possibility of hazardous reactions .

In normal conditions of use and storage no dangerous reactions are predictable .

10.4 . Conditions to avoid .

None in particular . However the usual precautions against chemicals .

10.5. Incompatible materials .

Do not allow the product to come into contact with acids .

10.6 . Hazardous decomposition products .

The presence of calcium carbonate can lead to the formation of oxides of calcium, oxides of carbon .

SECTION 11: Toxicological information

11.1 . Information on toxicological effects .

In the absence of experimental toxicological data on the product itself, the potential risks of the product to health were evaluated based on the properties of substances, according to the criteria laid down by the relevant regulations for the classification. Consider, therefore, the concentration of each substance dangerous possibly mentioned in sect. 3, to evaluate the toxicological effects deriving from the exposure to the product.

a) Acute toxicity

Swallowing can cause health complaints such as abdominal pains with a burning sensation, nausea and vomiting.

CALCIUM OXIDE

LD50 (oral) - >2000 mg/kg rat

b) Skin corrosion/irritation

The product is not classified as corrosive/irritant for the skin according to the calculation methods provided by the CLP Regulation.

c) Serious eye damage/irritation

The product causes serious eye damage and can cause corneal opacity, harm to the iris, irreversible colouring of the eye. Direct contact with cement can cause corneal injury through mechanical stress, irritation or immediate or delayed inflammation. Direct contact with large quantities of dry cement or with flying wet cement can cause effects that vary from moderate eye irritation (e.g. conjunctivitis or blepharitis) to chemical burns and blindness.

d) Respiratory or skin sensitisation

If the product comes into contact with the skin, it causes sensitisation (contact dermatitis). The dermatitis originates from an inflammation of the skin that starts in the skin zones that come into repeated contact with the sensitising agent. The skin complaints can comprise erythema, oedemas, papulae, vescicles, pustules, scaling, cracking and exhudation phenomena that vary according to the phases of the disease and the zones affected. In the acute phase erythema, oedema and exhudation predominate. In the chronic phases scaling, dryness, cracking and thickening of the skin predominate.



Page Nr. 6/8

IW-BETONTOP

e) Germ cell mutagenicity

On the basis of the calculation methods provided by the CLP Regulation the product is not classified as mutagenic for germ cells.

f) Carcinogenicity

On the basis of the calculation methods provided by the CLP Regulation the product is not classified as carcinogen for humans if inhaled.

g) Reproductive toxicity

On the basis of the calculation methods provided by the CLP Regulation, the product is not classified as toxic for reproduction.

- h) Specific target organ toxicity (STOT) single exposure On the basis of the calculation methods provided by the CLP Regulation the product is not classified for STOT - single exposure.
- i) Specific target organ toxicity (STOT) repeated exposure On the basis of the calculation methods provided by the CLP Regulation the product is not classified for STOT - repeated exposure.

j) Aspiration hazard

The product is not classified as hazardous in the event of aspiration on the basis of the calculation methods provided by the CLP Regulation.

SECTION 12: Toxicological information

Follow good working practice to avoid releasing the product into the environment. Alert the competent authorities if the product has reached water courses or drains or if it has contaminated the soil or vegetation.

12.1. Toxicity Information not available.

12.2. Persistence and degradability

Information not available.

12.3. Bioaccumulative potential Information not available.

12.4. Mobility in soil

Information not available.

12.5. Results of PBT and vPvB assessment

According to available data, the product does not contain more than 0.1% of PBT or vPvB substances.

12.6. Other adverse effects

Adding large quantities of cement to the water can nevertheless increase the pH and thus be toxic for aquatic life in certain circumstances.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

If possible, reuse. Product residues must be treated as special hazardous waste. The hazardousness of waste partially containing this product must be evaluated on the basis of current legislation.

An authorised waste-management company must be used to dispose of the waste in compliance with national and local legislation. Under no circumstances allow the product to enter the soil, drains or water courses.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in compliance with national waste-management regulations.

SECTION 14: Transport information

The product is not considered to be hazardous by current regulations governing the transport of hazardous products by road (A.D.R.), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1. UN number:

- 14.2. UN proper shipping name:
- 14.3. Transport hazard classes:
- 14.4. Packing group:
- 14.5. Environmental hazards:
- 14.6. Special precautions for user:

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.



IW-BETONTOP

Revision date 16/10/2014

Issue date 16/10/2014

SECTION 15: Regulatory information

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

Seveso category

None.

Restrictions relating to the product or to the substances contained therein according to Annex XVII Regulation (EC) No. 1907/2006 None.

Substances on candidate list (Article 59 REACH) None.

Substances subject to authorisation (Annex XIV REACH) None.

Substances subject to export notification Regulation (EC) No. 649/2012 None.

Substances subject to the Rotterdam Convention None.

Substances subject to the Stockholm Convention None.

Healthcare controls

Workers exposed to this chemical agent that is hazardous to human health must be subject to health monitoring in compliance with the provisions of article 41 of Italian legislative decree no. 81 of 9 April 2008 unless the risk to the health of the worker is deemed to be insignificant pursuant to the provisions of article 224, sub-section 2 of Italian legislative decree 152/2006 and subsequent amendments.

15.2. Chemical safety assessment

No chemical safety assessment of the substances contained in the mixture has been carried out.

SECTION 16: Other information

Text of the hazard statements (H) mentioned in sections 2-3 of the safety data sheet:

Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity — single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.

Text of the risk phrases (R) mentioned in sections 2-3 of the safety data sheet:

R37/38	IRRITATING TO RESPIRATORY SYSTEM AND SKIN.
R41	RISK OF SERIOUS DAMAGE TO EYES.
R43	MAY CAUSE SENSITISATION BY SKIN CONTACT.

LEGEND:

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

- CAS NUMBER: Chemical Abstract Service number

- CE50: Concentration affecting 50% of the population tested

- CE NUMBER: Identification number in ESIS (European Standardised Information Sheet relating to existing substances)



Page Nr. 8/8

- CLP: Regulation (EC) No. 1272/2008

- DNEL: Derived No-Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Inhibitory concentration of 50% of the tested population
- IMDG: International Maritime Dangerous Goods code
- IMO: International Maritime Organization
- INDEX NUMBER: identification number in Annex VI of the CLP
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%
- OEL: Occupational Exposure Limits
- PBT: Persistent, bioaccumulative and toxic according to the REACH
- PEC: Predicted Environmental Concentration
- PEL: Permissible Exposure Limit
- PNEC: Predicted No Effect Concentration
- REACH: Regulation (EC) No. 1907/2006
- RID: Regulations concerning the International carriage of Dangerous goods by rail
- TLV: Threshold Limit Value
- TLV CEILING: concentration that must not be exceeded at any moment of working exposure
- TWA STEL: Short-term exposure limit
- TWA: time-weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: very Persistent and very Bioaccumulative according to the REACH
- WGK: Water Hazard Class (Germany)

GENERAL BIBLIOGRAPHY:

- 1. Directive 1999/45/CE and subsequent amendments
- 2. Directive 67/548/EEC and subsequent amendments and adaptations
- 3. Regulation (EC) No. 1907/2006 of the European Parliament (REACH)
- 4. Regulation (EC) No. 1272/2008 of the European Parliament (CLP)
- 5. Regulation (EC) No. 790/2009 of the European Parliament (I Atp. CLP)
- 6. Regulation (EC) No. 453/2010 of the European Parliament
- 7. Regulation (EC) No. 286/2011 of the European Parliament (II Atp. CLP)
- 8. Regulation (EC) No. 618/2012 of the European Parliament (III Atp. CLP)
- 9. The Merck Index. Ed. 10
- Handling Chemical Safety
 Niosh Registry of Toxic Effects of Chemical Substances
- 12. INRS Fiche Toxicologique
- 13. Patty Industrial Hygiene and Toxicology
- 14. N.I. Sax Dangerous properties of Industrial Materials-7 Ed., 1989
- 15. ECHA Agency website

Note for user:

The information contained in this data sheet is based on the knowledge in our possession at the date of the last version. The user must ascertain the suitability and completeness of the information in relation to the specific use of the product.

This document must not be interpreted as a guarantee of any specific property of the product.

As the use of the product is not under our direct control, it is the user's responsibility to comply with current health and safety laws and regulations. No liability is accepted for improper use.

Train operators appropriately in the use of chemical products.

First version of the document.