

Safety Data Sheet dated 1/10/2012	, version 1
<ul> <li>1.1. Product Identifier Mixture identification: Trade name: FORLAST</li> <li>1.2. Relevant identified uses of 1.3. Details of the supplier of Supplier: FORKOLL - Strada Prov Competent person res sicurezza@forkoll.it</li> <li>1.4. Emergency telephone nur FORKOLL - Tel. +(39) 0</li> </ul>	of the substance/mixture and uses advised against the safety data sheet 7. 42 - Km 1 - Collepasso (LE) ponsible for the safety data sheet:
Directive criteria, 67/5 Properties / Symbols: Xi Irritant R Phrases: R37/38 Irritatir R41 Risk of ser R43 May cause	48/CE, 1999/45/EC and following amendments thereof: 48/CE, 99/45/EC and following amendments thereof: ng to respiratory system and skin. ious damage to eyes. sensitization by skin contact. cal, human health and environmental effects:
R41 Risk of ser R43 May cause S Phrases: S22 Do not bre S24/25 Avoid of S26 In case of of advice. S36/37/39 Wea Contents: Portland cemer 2.3. Other hazards vPvB Substance Other Hazards: No other hazard	contact with skin and eyes. contact with eyes, rinse immediately with plenty of water and seek medical ar suitable protective clothing, gloves and eye/face protection. nt, Cr(VI)< 2 ppm es: None - PBT Substances: None



<ul> <li>3. COMPOSITION/INFORMATION ON INGREDIENTS <ul> <li>3.1. Substances; N.A.</li> <li>3.2. Mixtures; Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and corresponding classification:</li> <li>50% - 60% free crystalline silica (Ø &gt; 10 μ)</li> <li>CAS: 14808-60-7 EC: 238-878-4</li> <li>25% - 30% Portland cement, Cr(VI)&lt; 2 ppm</li> <li>CAS: 65997-15-1 EC: 266-043-4</li> <li>Xi; R41-43-37/38</li> <li>3.8/3 STOT SE 3 H335</li> <li>3.2/2 Skin Irrit. 2 H315</li> <li>3.3/1 Eye Dam. 1 H318</li> <li>3.4.2/1 Skin Sens. 1 H317</li> </ul> </li> <li>0.25% - 0.49% free crystalline silica (Ø &lt;10 μ)(*)</li> <li>CAS: 14808-60-7 EC: 238-878-4</li> <li>Xin; R48/20</li> <li>3.9/2 STOT RE 2 H373</li> </ul>
<ul> <li>4. FIRST AID MEASURES <ul> <li>4.1. Description of first aid measures</li> <li>In case of skin contact: <ul> <li>Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).</li> <li>Remove contaminated clothing immediately and dispose off safely.</li> </ul> </li> <li>In case of eyes contact: <ul> <li>After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.</li> <li>Protect uninjured eye.</li> </ul> </li> <li>In case of Ingestion: <ul> <li>Wash the mouth thoroughly and drink plenty of water. In case of disease consult a physician immediately and present this safety-data sheet.</li> <li>In case of inhalation: <ul> <li>In case of inhalation, consult a doctor immediately and show him packing or label.</li> </ul> </li> <li>4.2. Most important symptoms and effects, both acute and delayed</li> <li>If inhaled, the product causes irritation in the airways. and if brought into contact with the skin, it causes appreciable inflammation, with erythema, scabs, and oedema.</li> <li>If brought into contact with the skin, the product may cause sensitisation of the skin.</li> </ul> </li> <li>4.3. Indication of any immediate skin, the product may cause sensitisation of the skin.</li> <li>4.3. Indication of any immediate skin, the product may cause sensitisation of the skin.</li> <li>A.3. Indication for unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).</li> <li>Treatment: (see paragraph 4.1)</li> </ul> </li> </ul>
<ul> <li>5. FIRE-FIGHTING MEASURES <ul> <li>5.1. Extinguishing media</li> <li>Suitable extinguishing media:</li> <li>None in particular.</li> <li>Extinguishing media which must not be used for safety reasons:</li> <li>None in particular.</li> </ul> </li> <li>5.2. Special hazards arising from the substance or mixture <ul> <li>The product does not present a fire hazard</li> </ul> </li> <li>5.3. Advice for fire-fighters <ul> <li>Use suitable breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.</li> <li>Move undamaged containers from immediate hazard area if it can be done safely.</li> </ul> </li> </ul>



<ul> <li>6. ACCIDENTAL RELEASE MEASURES <ul> <li>6.1. Personal precautions, protective equipment and emergency procedures <ul> <li>Wear personal protection equipment.</li> <li>Wear breathing apparatus if exposed to vapours/dusts/aerosols.</li> <li>Provide adequate ventilation.</li> <li>Use appropriate respiratory protection.</li> <li>See protective measures under point 7 and 8.</li> </ul> </li> <li>6.2. Environmental precautions <ul> <li>Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.</li> </ul> </li> <li>6.3. Methods and material for containment and cleaning up <ul> <li>Rapidly recover the product, wearing protective clothing.</li> <li>Scoop into containers and seal for disposal.</li> <li>After the product has been recovered, rinse the area and materials involved with water.</li> </ul> </li> <li>6.4. Reference to other sections <ul> <li>See also section 8 and 13</li> </ul> </li> </ul></li></ul>
<ul> <li>7. HANDLING AND STORAGE <ul> <li>7.1. Precautions for safe handling</li> <li>Avoid contact with skin and eyes and exposure to high dust concentration.</li> <li>Avoid powder development and deposit</li> <li>Use localized ventilation system.</li> <li>Contamined clothing should be changed before entering eating areas.</li> <li>Do not eat or drink while working.</li> <li>See also section 8 for recomened protective equipment.</li> </ul> </li> <li>7.2. Conditions for safe storage, including any incompatibilities <ul> <li>Always keep the containers tightly closed.</li> <li>Incompatible materials:</li> <li>Keep away from water or from damp surroundings.</li> <li>Instructions as regards storage premises:</li> <li>Adequately ventilated premises.</li> </ul> </li> <li>7.3. Specific end use(s) <ul> <li>None in particular</li> </ul> </li> </ul>
<ul> <li>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</li> <li>8.1. Control parameters <ul> <li>free crystalline silica (Ø &gt; 10 µ) - Index: NA, CAS: 14808-60-7, EC No: 238-878-4</li> <li>TLV TWA:: 0,025 mg/m<sup>3</sup> (respirable fraction)</li> <li>Portland cement, Cr(VI) &lt; 2 ppm - Index: NA, CAS: 65997-15-1, EC No: 266-043-4</li> <li>TLV TWA:: (polvere)10 mg/m<sup>3</sup></li> <li>free crystalline silica (Ø &lt;10 µ)(*) - Index: NA, CAS: 14808-60-7, EC No: 238-878-4</li> <li>TLV TWA:: 0,025 mg/m<sup>3</sup> (respirable fraction)</li> </ul> </li> <li>8.2. Exposure controls <ul> <li>Eye protection: Safety goggles.</li> <li>Protection for skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.</li> <li>Protection for hands: Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves</li> <li>Respiratory protection: Not needed for normal use.</li> <li>A dust mask (P2) should be worn if above exposure limits</li> <li>Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.</li> <li>Thermal Hazards: None</li> <li>Environmental exposure controls: None</li> </ul> </li> </ul>



9. PHYSICAL AND CHEMICAL PROPERTIES
9.1. Information on basic physical and chemical properties
Appearance: powder
Colour: grey
Odour: typical
Odour threshold: N.A.
pH: N.A.
pH(water dispersion,10%): 12-12.5
Melting point / freezing point: == $^{\circ}$ C
Initial boiling point and boiling range: == °C
Solid/gas flammability: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Flash point: == °C
Evaporation rate: N.A.
Vapour pressure: == kPa (23°C)
Relative density: 1.4 g/cm³ (23°C)
Vapour density (air=1): N.A.
Solubility in water: partly soluble
Lipid solubility: soluble
Viscosity: N.A.
Auto-ignition temperature: == $^{\circ}C$
Explosion limits(by volume): ==
Decomposition temperature: N.A.
Partition coefficient (n-octanol/water): N.A.
Explosive properties: ==
Oxidizing properties: N.A.
9.2. Other information
Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.
Substance Groups relevant properties N.A.
Substance Groups relevant properties N.A.
10. STABILITY AND REACTIVITY
10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
10.4. Conditions to avoid
Stable under normal conditions.
10.5. Incompatible materials
None in particular.
10.6. Hazardous decomposition products
None.
11. TOXICOLOGICAL INFORMATION
11.1. Information on toxicological effects
Route(s) of entry:
Ingestion: Yes
Inhalation: Yes
Contact: No
Toxicological information related to the product:
There is no toxicological data available on the mixture. Consider the individual concentration of each
component to assess toxicological effects resulting from exposure to the mixture.
component to assess toxicological effects resulting from exposure to the mixture.
The product does not contain toxicologically relevant substances.
The product does not contain toxicologically relevant substances.



CI	<b>ting Properties:</b> kin:
51	The product can cause irritation by contact.
Ey	re:
	The product can cause damage to eyes by contact
	ig Properties:
	equent and prolonged skin contacts with cement paste may cause dermatitis. enic Effects:
	ne IARC (International Agency for Research on Cancer) believes that the crystalline silica
	haled at the workplace can cause lung cancer in man.
	owever, it also points out that the cancer effect depends on the silica characteristics and on the
	ological-physical condition of the environment.
	nere is a large amount of information in support of the fact that increased risk of cancer is nited to persons suffering from silicosis.
	the current situation of studies, protection of workers from silicosis can be ensured by specting the exposure limit values.
Mutageni	c Effects: o effects are known.
	nic Effects:
N	o effects are known.
	I Information:
	isceptibility to skin irritation and sensitization varies from person to person. a sensitized individual the allergic dermatitis may not appear until after several days or weeks of
	equent and prolonged contact.
	nerefore, even though the skin irritation potential is slight, skin contact should be avoided. Once
	ensitization has occurred, exposure of the skin to very small quantities of the material may cause
er	ythema and edema.
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ECOLOGICA 12.1. Tox Na Ad 12.2. Per: Bi 12.3. Bioa Na 12.4. Mol Na 12.5. Res VF 12.6. Oth Na DISPOSAL CO 13.1. Was Re 9' DI	L INFORMATION sticity ot available data on the mixture dopt good industrial practices, so that the product is not released into the environment. sistence and degradability odegradability: no data available on the preparation. accumulative potential A. bility in soil A. ults of PBT and vPvB assessment VvB Substances: None - PBT Substances: None ier adverse effects ot available data on the mixture <b>ONSIDERATIONS</b> ste treatment methods ecover if possible. In so doing, comply with the local and national regulations currently in force. 1/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments. isposal of hardened product (EC waste code) : 170101 isposal of not hardened product (EC waste code) : 170101
ECOLOGICA 12.1. Tox Na Ad 12.2. Per: Bi 12.3. Bioa Na 12.4. Mol Na 12.5. Res VF 12.6. Oth Na DISPOSAL CO 13.1. Was Ref 9 <sup>-1</sup> Di Di Di Di Di	L INFORMATION kicity ot available data on the mixture dopt good industrial practices, so that the product is not released into the environment. sistence and degradability odegradability: no data available on the preparation. accumulative potential A. bility in soil A. ults of PBT and vPvB assessment PvB Substances: None - PBT Substances: None ier adverse effects ot available data on the mixture ONSIDERATIONS set treatment methods accover if possible. In so doing, comply with the local and national regulations currently in force. 1/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments. isposal of hardened product (EC waste code) : 170101



4. TRANSPORT INFORMATION 14.1. UN number
Not classified as dangerous in the meaning of transport regulations.
UN Number: ==
14.2. UN proper shipping name
N.A.
14.3. Transport hazard class(es)
Rail/Road(RID/ADR): no dangerous good
ADR-Upper number: NA
Air (ICAO/IATA): no dangerous good
Sea (IMO/IMDG): no dangerous good
N.A.
14.4. Packing Group
N.A.
14.5 Environmental hazards
Marine pollutant: No N.A.
14.6. Special Precautions for User
Rail (RID): ==
N.A.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No
5. REGULATORY INFORMATION 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
REACH Regulation (1907/2006)
REACH Regulation (1907/2006) - All. XVII
The product contains Cr (VI) under the limitse established by annex. XVII pt.47. Respect the duration
according to the information described on the packaging
REACH Regulatio n° 1907/2006 (REACH) – Art. 59 (Su bstances in "Candidate List"): N.A.
CLP Regulation n° 1272/2008 (CLP) and s.m.i.
Directive n° 1999/45/CE (Dangerous Preparation) an d s.m.i. Directive n° 67/548/CEE (Substances) and s.m.i.
Directive if 07/346/CEE (Substances) and s.m.t.
Directive 2000/39/CE and s.m.i. (Professional threshold limit)
Directive 105/2003/CE (Seveso III): N.A.
ADR Agreement - IMDG Code - IATA Regulation
Wassergefährdungsklasse:
VOC (2004/42/EC) : N.A. g/l
15.2. Chemical Safety Assessment
No
6. OTHER INFORMATION
Text of phrases referred to under heading 3:
R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.
R43 May cause sensitization by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
H335 May cause respiratory irritation.
H315 Causes skin irritation.



H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,

Commission of the European Communities

SAX'S - Dangerous properties of industrial materials

Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service (division of the American Chemical Society). CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA). ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWA Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

OEL: European threshold limit value

VLE: Threshold Limiting Value.

WGK: German Water Hazard Class.