

DENSOCRETE 111, 555, 555 color, dry component

Creation date	17. May 2016	Revision no.	
Date of revision		Version	1

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

- 1.1. Product identifier
substance / mixture
Number
Other names of the mixture
DENSOCRETE 111, 555, 555 color, dry component
mixture
2-1, 2-33, 2-34
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use of the mixture
Not recommended use of the mixture
Protection and repair of concrete structures
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet
Manufacturer
Name or trade name
Place of business or residency
Telephone
Fax
E-mail
Web address
Emergency telephone number
Competent person responsible for the safety data sheet
Name
E-mail
BETOSAN s.r.o.
Na Dolinách 28, Praha 4, 147 00
Czech Republic
241 431 212
241 431 212
praha@betosan.cz
www.betosan.cz
241 431 212, 8,00-16,00
BETOSAN s.r.o.
praha@betosan.cz
- 1.4. Emergency telephone number
Toxicological Information Centre, Na Bojišti 1, Praha, Tel.: non-stop 224 919 293 or 224 915 402, Information on health risks only - acute poisoning of humans and animals

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
A mixture is classified as dangerous.

Skin Irrit. 2, H315
Skin Sens. 1A, H317
Eye Dam 1, H318
STOT SE 3, H335

The classification of the mixture according to Directive 1999/45/EC
A mixture is classified as dangerous.

Irritant: Xi; R 38, R 41
sensitising: R 43

Full text of all classifications, H-phrases and R-phrases is given in the section 16.

The most serious adverse physicochemical effects

Unknown

The most serious adverse effects on human health and the environment

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

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2.2. Label elements

Warning symbol



Signal word

Danger

Hazardous substances

Cement, portland, chemicals

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Instructions for safe handling

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P261	Avoid breathing dust
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to local regulations.

Additional information

Do not use in paint spraying equipment.

2.3. Other hazards

Cement contained in the product may contain a reducing agent. The effectiveness of the reducing agent is reduced over time.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances specified below and additives.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Name of the substance	Content in % weight	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 65997-15-1 ES: 266-043-4	Cement, portland, chemicals	15-30	Xi; R 38, R 41 R 43	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Dam 1, H318 STOT SE 3, H335	1, 2

Notes

- 1 Substances for which there are exposure limits Community for working environment.
- 2 The use of the substance is restricted by Annex XVII of REACH Regulation.

The full text of all standard phrases and guidelines is specified in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

not available

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Inhalation

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

Skin contact

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists. Note: If the mixture sticks to the skin and cannot be removed with water and cleaning products or edible oil, do not use force and leave for specialized treatment.

Eye contact

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible. Note: If the product sticks to the skin of the eyelids and cannot be removed using water, do not use force and leave for specialized treatment.

Ingestion

DO NOT INDUCE VOMITING - even the inducing of vomiting by itself may cause complications (inhalation of the substance in respiratory pathways and lungs, for example, in detergents and other substances that produce foam or causing mechanical damage to the mucous membrane of the pharynx). If possible, give a small amount of activated carbon (1-2 crushed tablets). For persons with no symptoms, call the Toxicological Information Centre to decide about the need of medical treatment; provide information about the substances or composition of the product from the original packaging or the Safety Data Sheet of the substance or mixture. Provide medical treatment if the person has any health problems.

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

Possible irritation of respiratory pathways, cough, headache.

Skin contact

Painful reddening, irritation.

Eye contact

Serious eye damage

Ingestion

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

All types of extinguishing media are suitable. Prior to using the product liaise with local fire authority for confirmation of best and most current form of extinguishing media for the product.

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

No hazardous combustion products

5.3. Advice for firefighters

No need for specialist protective equipment for firefighters

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

The mixture is nonflammable. Provide sufficient ventilation. Use gloves in case of prolonged contact. Follow the instructions in Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

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- 6.3. Methods and material for containment and cleaning up
 At all times avoid inhalation of product and contact with skin and eyes. Contain the spillage. Keep the material dry if possible. Wear full personal protective equipment when cleaning up, whatever method is chosen. When the product is in a dry state, avoid airborne dust generation when cleaning up. Avoid dry sweeping. Examples of clean up methods when in dry state are:
 (A) Using a vacuum cleaner (Industrial portable units, equipped with high efficiency particulate filters (HEPA filter) or equivalent technique)
 (B) Wipe up the dust by mopping, wet brushing or water sprays or hoses (fine mist to avoid the dust becoming airborne) and remove slurry. Ensure drains are covered.
 If the product has become wet, clean up and place in watertight container. Allow material to dry and solidify before disposal.
 Check current regulations before disposing of spillage, whether in dry state or not.
- 6.4. Reference to other sections
 7, 8 and 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 Avoid all types of dust generation. (Particularly the creation of respirable dust)
 At all times avoid inhalation of product and contact with skin and eyes.
 Carrying the product may cause back injuries, strains, sprains or the like. Use correct handling techniques to avoid injury. Use handling equipment and controls if necessary to avoid injury. If in doubt, contact your local health and safety body for further guidance on manual handling.
 Always wear sufficient and full protective equipment and suitable clothing when handling the product. Ensure have adequate ventilation / ventilation equipment available when handling the product.
 Do not eat, drink or smoke in work areas; wash hands after use; remove contaminated clothing and protective equipment before entering eating areas.
- 7.2. Conditions for safe storage, including any incompatibilities
 Store in a well-ventilated place. Store this product in a draught free environment, clear of the ground, avoiding humid conditions.

Material of package

C (81), Paper and tape/plastic (Combined materials and packaging)



C

- 7.3. Specific end use(s)
 not available

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
 The mixture contains substances for which the following concentration limits in the workplace are determined.

European Union

Name of the substance (component)	CAS number	Limit values				Note
		8 hours		Short-term		
		mg/m ³	ppm	mg/m ³	ppm	
cement	65997-15-1	10				

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Other information of limit values

DNEL: not listed, was not carried out a risk assessment

PNEC: not listed, was not carried out a risk assessment

8.2. Exposure controls

Follow usual measures for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of respiratory pathways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye and face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Wear gloves resistant to damage and alkaline media. Use suitable protective and regenerating hand cream.

Respiratory protection

Filter mask, possibly self-contained breathing apparatus in poorly ventilated environments.

Thermal hazard

not available

Restriction of the environment exposure

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	powder
physical state	solid at 20°C
colour	grey
Odour	odorless
Odour threshold	data not available
pH	12,1 (undiluted)
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	data not available
Evaporation rate	data not available
Flammability (solid, gas)	non-flammable
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	data not available
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	not classified as explosive
Oxidising properties	not classified as an oxidant

9.2. Other information

Density	1,8 g/cm ³ at 25 °C
auto-ignition temperature	data not available

SECTION 10: Stability and reactivity**10.1. Reactivity**

The mixture is nonflammable

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- 10.2. Chemical stability
Under normal conditions, the mixture is stable.
- 10.3. Possibility of hazardous reactions
Under normal conditions, the mixture is stable.
- 10.4. Conditions to avoid
The product is incompatible with strong acids.
- 10.5. Incompatible materials
Strong acids.
- 10.6. Hazardous decomposition products
Under normal use do not arise.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
No toxicological data is available for the mixture.

Acute toxicity

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Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining the value of	Source
oral	LD 50		> 2000 mg/kg		rat (Rattus norvegicus)			
dermal	LD 50		> 2000 mg/kg		rat (Rattus norvegicus)			

Corrosion/skin irritation

When skin is exposed to the product in its dry or wet state, thickening, cracking or fissuring of the skin may occur. Prolonged contact in combination with abrasion can cause severe burns. Portland cement is an irritant to skin. Serious eye damage / eye irritation

Direct contact with product may cause corneal damage by mechanical stress, immediate or delayed irritation or inflammation. Direct contact either in dry or wet form may cause effects ranging from moderate eye irritation (eg conjunctivitis or blepharitis) to chemical burns or blindness.

Respiratory / skin sensitization

This product contains portland cement which is classified as a skin sensitizer. Contact dermatitis/Sensitising effects – prolonged and repeated skin contact with calcium dihydroxide may cause dermatitis. Some individuals may exhibit eczema upon exposure to wet cementitious products, caused either by the high pH which induces irritant contact dermatitis, or by an immunological reaction to soluble Cr (VI) which elicits allergic contact dermatitis. The response may appear in a variety of forms ranging from a mild rash to severe dermatitis and is a combination of those two mechanisms. An exact diagnosis is often difficult to assess.

Germ cells mutagenicity

With the exception of Chromium (VI) (<2 ppm) none of the individual substances in this mixture are classified as mutagenic.

Carcinogenicity

This product contains silica sand and this form of silica is not classified as carcinogenic due to its large particle size. However, prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica. With the exception of Chromium (VI) (<2 ppm) none of the individual substances in this mixture are classified as carcinogenic.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Toxicity for specific target organ - single exposure

May cause respiratory irritation.

Toxicity for specific target organ - repeated exposure

Prolonged or repeated inhalation exposure may cause damage to the lungs, including chronic obstructive pulmonary disease (COPD). Certain ingredients within these products do give potential for generation of respirable dust during handling and use. The dust may contain respirable crystalline silica. Prolonged or frequent or excessive exposure to respirable crystalline silica dust, cement dust may cause respiratory disease, lung disease, lung and respiratory tract damage, ulceration and perforation of the nasal septum, pneumonitis and other serious bad health effects.

Aspiration hazard

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Based on available data, the classification criteria are not met.

SECTION 12: Ecological information**12.1. Toxicity****Acute toxicity**

The product contains no substances with an effect against active action of microorganisms.

12.2. Persistence and degradability

It is not biodegradable.

12.3. Bioaccumulative potential

Insignificant.

12.4. Mobility in soil

not known

12.5. Results of PBT and vPvB assessment

The mixture is not classified as PBT or vPvB.

12.6. Other adverse effects

not available

SECTION 13: Disposal considerations

Hazard of environmental contamination; remove waste in accordance with local and/or national regulations.

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to an authorised person for waste removal (specialized company) authorised for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Law No.185 / 2001 Sb., On waste and Act No. 188/2004 Coll. Supplementing Act No.185 / 2001 Sb. Law .477 / 2001 Coll., On packaging and on amendment of certain acts (Packaging Act), as amended. Decree .376 / 2001 Coll., On assessment of dangerous properties of waste, as amended. Decree .381 / 2001 Coll., (Waste Catalogue) as amended. Decree .383 / 2001 Sb. On details of waste management, as amended. (Decree no. 41/2005 Coll. (Effective as of 02.01.2005), no. 294/2005 Coll. (Effective from 8.5.2005), no. 353/2005 Coll. (Effective date of its publication on Sept. 15, 2005), no. 351/2008 Coll. (effective as of 01.11.2008), no. 478/2008 Coll. (effective from 1 January 2009), no. 61/2010 Coll. (effective from 1.4.2010), no. 170/2010 Coll. (15.6.2010))

Code of type of waste	101311
Type of waste	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
Subgroup of waste	wastes from manufacture of cement, lime and plaster and articles and products made from them
Waste group	WASTES FROM THERMAL PROCESSES
Another code of type of waste	170101
Type of waste	concrete
Subgroup of waste	concrete, bricks, tiles and ceramics
Waste group	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
Another code of type of waste	101314
Type of waste	waste concrete and concrete sludge
Subgroup of waste	wastes from manufacture of cement, lime and plaster and articles and products made from them
Waste group	WASTES FROM THERMAL PROCESSES
Code of type of waste packaging	150105
Type of waste	composite packaging
Subgroup of waste	packaging (including separately collected municipal packaging waste)
Waste group	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED

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SECTION 14: Transport information

- 14.1. UN number
not available
- 14.2. UN proper shipping name
not available
- 14.3. Transport hazard class(es)
not available
- 14.4. Packing group
not available
- 14.5. Environmental hazards
not available
- 14.6. Special precautions for user
Reference in Sections 4 to 8.
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not available
- Additional information
The product is not within the meaning of Section 22 paragraph. 1 of Act no. 111/1994 Coll. hazardous item and is not subject to ADR, RID, IMDG and ICAO / IATA. And with no classification.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. Directives 67/548/EEC, as amended, and 1999/45/EC, as amended.
- 15.2. Chemical safety assessment
not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Guidelines for safe handling used in the safety data sheet

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P261	Avoid breathing dust
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to local regulations.

List of R-phrases used in the safety data sheet

R 38	Irritating to skin.
R 41	Risk of serious damage to eyes.
R 43	May cause sensitisation by skin contact.

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Other important information about safety of human health

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Unique Numeric Identifier used in chemistry for chemical substances
CLP	Classification, Labelling and Packaging
DNEL	Derived no-effect level
EC50	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
Ems	Emergency plan
ErC50	Environmental Release category
ES	Identification code for each substance listed in EINECS
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC50	Concentration causing 50 % blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Transport
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
Log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
MFAG	First Aid Manual
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
NPK	The maximum permissible concentration
PBT	Persistent ,Bioaccumulative and Toxic
PEL	Permissible Exposure Limit
PNEC	Predicted no-effect concentration
REACH	Registration, Evaluation and Restriction of chemicals (EP and Council Regulation (EC) No.1907/2006)
RID	Agreement on the transport of dangerous goods by rail
UN	Four-digit code reflecting the characteristics of substances or mixtures in transport
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Eye Dam	Serious eye damage
Skin Irrit.	Skin irritation
Skin Sens	Skin sensitization
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the mixture.

Recommended restrictions of use
not available

Information about the sources of data used to compile the data sheet

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REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended, REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended, COMMISSION REGULATION (EU) No 453/2010, COUNCIL DIRECTIVE 67/548/EEC as amended and 1999/45/EC, COMMISSION REGULATION (EU) No 286/2011 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.

Statement

The Safety Data Sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.

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

- 1.1. Product identifier**
substance / mixture
Number
Other names of the mixture
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Intended use of the mixture
Not recommended use of the mixture
- 1.3. Details of the supplier of the safety data sheet**
Manufacturer
Name or trade name
Place of business or residency
Telephone
Fax
E-mail
Web address
Emergency telephone number
- Competent person responsible for the safety data sheet**
Name
E-mail
- 1.4. Emergency telephone number**
Toxicological Information Centre, Na Bojišti 1, Praha, Tel.: non-stop 224 919 293 or 224 915 402, Information on health risks only - acute poisoning of humans and animals
- DENSOCRETE 111, 555, 555 color, liquid component mixture
2-1, 2-33, 2-34
Anticorrosive protection /adhesive bridge, Two-component fine slurry for concrete surface sealing and finalization
The product should not be used in ways other than those referred in Section 1.
BETOSAN s.r.o.
Na Dolinách 28, Praha 4, 147 00
Czech Republic
241 431 212
241 431 212
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241 431 212, 8,00-16,00
BETOSAN s.r.o.
praha@betosan.cz

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008
- The classification of the mixture according to Directive 1999/45/EC**
The mixture is not classified as dangerous according to Directive 67/548/EEC
- The most serious adverse physicochemical effects**
Unknown
- The most serious adverse effects on human health and the environment**
Unknown
- 2.2. Label elements**
none
- 2.3. Other hazards**
not available

SECTION 3: Composition/information on ingredients

- 3.2. Mixtures**
Chemical characterization
Mixture of substances specified below and nonhazardous additives.
Mixture contents these hazardous substances and substances with the highest permissible concentration in the working environment
none

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SECTION 4: First aid measures**4.1. Description of first aid measures**

If any health problems are manifested or if in doubt, inform a doctor and show him information from this Safety Data Sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that respiratory pathways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

Inhalation

not available

Skin contact

not available

Eye contact

not available

Ingestion

not available

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

Possible irritation of respiratory pathways, cough, headache.

Skin contact

Not expected.

Eye contact

Not expected.

Ingestion

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist

Unsuitable extinguishing media

water - full jet

5.2. Special hazards arising from the substance or mixture

Heavy, black smoke is produced in a fire, with potential development of carbon monoxide and dioxide and other toxic gases. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the mixture near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

The mixture is nonflammable. Provide sufficient ventilation. Use gloves in case of prolonged contact. Follow the instructions in Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

Spilled mixture should be covered with suitable (nonflammable) absorbing material (sand, kieselguhr, earth and other suitable absorption materials); to be contained in well closed containers and removed as per Section 13. Collected material should be disposed of in accordance with locally valid regulations. Upon an escape of large quantities of the mixture, inform the Fire Department and the Environmental Department of the Municipal Authority with extended scope of competencies. After removal of the mixture, wash the contaminated site with plenty of water or another suitable cleaning material. Do not use solvents.

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6.4. Reference to other sections
7, 8 and 13.**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the highest permissible concentration in the occupational environment. The mixture should be used only in areas where it is not in contact with open fire and other ignition sources. No smoking. Protect against direct sunlight. Electrostatic charge may form during use; use only earthed piping (tubing) when repumping. Use of antistatic clothes and footwear is recommended. Use non-sparking tools. Do not inhale gases and vapours. Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Observe valid legal regulations laying down safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight.

Storage class	12 - Other non-combustible liquids
Content	4 l
Type of packaging	bucket
Material of package	LDPE (4), Low density polyethylene (Plastics)



LDPE

The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

7.3. Specific end use(s)
not available**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

none

8.2. Exposure controls

Follow usual measures for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of respiratory pathways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye and face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant against the product. Observe recommendations of the particular manufacturer of the gloves in the choice of their appropriate thickness, material and permeability. Use barrier creams to protect of the skin, they should however not be applied once exposure has occurred. Observe other recommendations of the manufacturer. Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant against elevated temperatures. Contaminated skin should be washed thoroughly.

Respiratory protection

Mask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of toxic substances are exceeded or in a poorly ventilated environment.

Thermal hazard

not available

Restriction of the environment exposure

Observe usual measures for protection of the environment, see Section 6.2.

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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	liquid
physical state	liquid in 20°C
colour	white
Odour	no
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	100 °C
Flash point	data not available
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	miscible
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	nemá

9.2. Other information

Density	1,3 g/cm ³
auto-ignition temperature	data not available

SECTION 10: Stability and reactivity**10.1. Reactivity**

The mixture is nonflammable

10.2. Chemical stability

Under normal conditions, the mixture is stable.

10.3. Possibility of hazardous reactions

The mixture is stable under normal conditions.

10.4. Conditions to avoid

The mixture is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents. Thereby a dangerous exothermic reaction will be prevented.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous products are formed at high temperature and in fire, such as carbon monoxide and carbon dioxide, heavy smoke and nitrogen oxides.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

No toxicological data is available for the mixture.

Acute toxicity

Based on available data, the classification criteria are not accomplished.

Corrosion/skin irritation

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Based on available data, the classification criteria are not accomplished.

Serious eye damage / eye irritation

Based on available data, the classification criteria are not accomplished.

Respiratory / skin sensitization

Based on available data, the classification criteria are not accomplished.

Germ cells mutagenicity

Based on available data, the classification criteria are not accomplished.

Carcinogenicity

Based on available data, the classification criteria are not accomplished.

Reproductive toxicity

Based on available data, the classification criteria are not accomplished.

Toxicity for specific target organ - single exposure

Based on available data, the classification criteria are not accomplished.

Toxicity for specific target organ - repeated exposure

Based on available data, the classification criteria are not accomplished.

Aspiration hazard

Based on available data, the classification criteria are not accomplished.

SECTION 12: Ecological information**12.1. Toxicity****Acute toxicity**

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Parameter	Method	Value	Time of exposure	Species	Environment	Determining the value of	Source
LC 50		100 mg/kg	96 hour	fishes (Oncorhynchus mykiss)			
EC 50		20 mg/kg	48 hour	daphnia (Daphnia magna)			

The product contains no substances with an effect against active action of microorganisms.

12.2. Persistence and degradability

The mixture is biodegradable.

12.3. Bioaccumulative potential

Insignificant.

12.4. Mobility in soil

The product is soluble and mobile in water and soil. Contamination of water courses may occur in case of rain.

12.5. Results of PBT and vPvB assessment

The mixture is not classified as PBT or vPvB.

12.6. Other adverse effects

not available

SECTION 13: Disposal considerations

Hazard of environmental contamination; remove waste in accordance with local and/or national regulations.

13.1. Waste treatment methods

Proceed in accordance with valid regulations laying down the disposal of waste. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to an authorised person for waste removal (specialized company) authorised for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

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Legislation of waste

Council Directive 75/442/EEC on waste, at last amended. Council Directive 91/689/EEC on hazardous waste, as last amended. Decision 94/3/EC establishing a list of wastes, as last amended.

Code of type of waste

080112

Type of waste

waste paint and varnish other than those mentioned in 08 01 11

Subgroup of waste

wastes from MFSU and removal of paint and varnish

Waste group

WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

Code of type of waste packaging

150102

Type of waste

plastic packaging

Subgroup of waste

packaging (including separately collected municipal packaging waste)

Waste group

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED

SECTION 14: Transport information**14.1. UN number**

not available

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in Sections 4 to 8.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not available

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. Directives 67/548/EEC, as amended, and 1999/45/EC, as amended.

15.2. Chemical safety assessment

not available

16. SECTION 16: Other information**Other important information about safety of human health**

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per Section 1. The user is responsible for adherence to all related health protection regulations.

Key to the abbreviations and the acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Unique Numeric Identifier used in chemistry for chemical substances
CLP	Classification, Labelling and Packaging
CSN	Czech Technical Standard

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DNEL	Derived no-effect level
EC50	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
Ems	Emergency plan
ErC50	Environmental Release category
ES	Identification code for each substance listed in EINECS
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC50	Concentration causing 50 % blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Transport
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
Log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
MFAG	First Aid Manual
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
NPK	The maximum permissible concentration
PBT	Persistent ,Bioaccumulative and Toxic
PEL	Permissible Exposure Limit
PNEC	Predicted no-effect concentration
REACH	Registration, Evaluation and Restriction of chemicals (EP and Council Regulation (EC) No.1907/2006)
RID	Agreement on the transport of dangerous goods by rail
UN	Four-digit code reflecting the characteristics of substances or mixtures in transport
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the mixture.

Recommended restrictions of use

not available

Information about the sources of data used to compile the data sheet

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended, REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended, COMMISSION REGULATION (EU) No 453/2010, COUNCIL DIRECTIVE 67/548/EEC as amended and 1999/45/EC, COMMISSION REGULATION (EU) No 286/2011 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.

The changes (which information has been added, deleted or modified)

Reworked classification according to Regulation 1272/2008 (CLP).

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The Safety Data Sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.