

# EC Material Safety Data Sheet

Manufacturer/Supplier: Vandex Isoliermittel-Gesellschaft mbH, D-21493 Schwarzenbek  
Product number: 191  
Trade name: VANDEX POLYCEM LIQUID / VANDEX POLYCEM LIQUID M  
Printing date: 15.05.2006 Reviewed on: 15.05.2006

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## 01. Identification of preparation and company

### Trade name

VANDEX POLYCEM LIQUID / VANDEX POLYCEM LIQUID M

### \* Use of preparation

Mixing liquid for VANDEX POLYCEM and VANDEX POLYCEM MORTAR

### Manufacturer/Supplier

Vandex Isoliermittel-Gesellschaft m.b.H.

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### \* General Information

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## 02. Composition/Information on ingredients

### \* Chemical characterization

Water-borne plasticizer-free copolymerisate dispersion based on styrene/acrylic acid ester.

### \* Hazardous ingredients

Components	CAS No.	EC no.	Classification	Percent %
Triisobutyl phosphat	126-71-6	204-798-3	Xi, R 43, R 52/53	<1%

## 03. Hazards identification

### \* Statements of hazard

The product does not require a hazard warning label in accordance with EC Directives. Frequent contact can lead to skin and eye irritation, especially if product is allowed to dry out. Observe the usual precautions when handling chemicals.

## 04. First aid measures

### \* General Information

Remove contaminated, soaked clothing immediately and dispose of safely.

### \* Inhalation

Move to fresh air. If symptoms persist, call a physician.

### \* Skin contact

Wash off with soap and water. If symptoms persist, call a physician.

### \* Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

### \* Ingestion

If swallowed, seek medical advice immediately and show this container or label. If conscious, drink plenty of water. Do not induce vomiting without medical advice.

### \* Notes to physician

Main symptoms: None known.

Treatment: Treat symptomatically.

## 05. Fire-fighting measures

### \* Suitable extinguishing media

foam. dry powder. carbon dioxide (CO<sub>2</sub>). water spray.

### \* Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

### \* Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases

Under conditions giving incomplete combustion, hazardous gases produced may consist of carbon monoxide carbon dioxide (CO<sub>2</sub>).

Combustion gases of organic materials must in principle be graded as inhalation poisons.

### \* Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### \* Environmental precautions

Dike and collect water used to fight fire.

### \* Other Information

This is a water-based product and presents no particular fire or explosion hazard.

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### 06. Accidental release measures

#### \* Personal precautions

Contaminated surfaces will be extremely slippery. Avoid contact with the skin and the eyes.

#### Environmental precautions

Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

#### Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal. Contaminated equipment (brushes, rags) must be cleaned immediately with water. Dispose of in accordance with local regulations.

### 07. Handling and storage

#### \* Handling

#### \* Advice on safe handling

Product may contain hazardous volatile ingredients which could accumulate in the unvented headspace of drums or containers.

Open/use containers in ventilated area. Do not breathe vapour.

#### \* Protection – fire and explosion

No special protective measures against fire required.

#### \* Storage

#### \* Material Storage

Protect from frost. To maintain product quality, do not store in heat or direct sunlight. Keep at temperatures between 5 and 25 °C (40 and 77 F)

#### \* Technical measures/Storage conditions

Keep tightly closed in a dry and cool place. No special technical protective measures required.

#### \* Incompatible products

No special restrictions on storage with other products.

#### \* German storage class

12: Non-combustible liquids

### 08. Exposure controls and personal protection

#### \* National occupational exposure limits (Germany)

Components	AGW	
Triisobutyl phosphate	50 mg/m <sup>3</sup>	listed

#### \* ACGIH Exposure Limits

No exposure limits established.

#### \* Exposer controls

#### \* Engineering measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

#### \* Personal protective equipment

#### \* General advice

Avoid contact with skin and eyes.

#### \* Hygienic measures

Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.

#### \* Eye protection

safety glasses.

#### \* Hand protection

#### \* Chemicals resistant gloves

Suitable material: rubber gloves

Type: These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.

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## 09. \*Physical and chemical properties

### \* General Information

Form: liquid  
Colour: white  
Odour: of acrylic monomers

### \* Relevant safety data

Boiling point: approx. 100 °C (water)  
Flashpoint: not applicable  
Vapour pressure (20 °C): approx. 24 hPa  
Density (20 °C): 1,0 g/cm<sup>3</sup>  
method: ISO 8962  
Solubility in water (20 °C): miscible  
pH-value (20 °C): 7 – 9  
method: ISO 1148

## 10. Stability and reactivity

### \*Stability

Stable under recommended storage conditions.

### \* Conditions to avoid

Do not freeze

### \* Materials to avoid

materials that react with water.

### \* Thermal decomposition

No decomposition if stored and applied as directed.

### \* Hazardous reactions

No hazards to be especially mentioned.

## 11. Toxicological information

LD50/oral/rat: > 5000 mg/kg  
EEC 84/449, B.1  
Skin irritation: non-irritant  
EEC 84/449, B.4  
Species: rabbit

Eye irritation: non-irritant  
EEC 84/449, B.5  
Species: rabbit eye

Toxicological data given are determined by analogy.

## 12. Ecological information

Biodegradation: > 80%  
Zahn-Wellens-Test  
Toxicity to bacteria: ECO: approx. 1000 mg/l  
OECD 209  
Chemical Oxygen Demand: approx. 1300 mg/g  
Acute fish toxicity: LC50: > 500 mg/l  
Durations (hours): 96 h  
OECD 203  
Species: zebra fish

Ecological data are determined by analogy.

## 13. Disposal considerations

### \*Product information

Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal. Diluted solution may be introduced into a biological purification plant, with permission of the responsible authorities.

### \*Uncleaned empty packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Regulations concerning reuse or disposal of used packaging materials must be observed.

### \*European Waste Catalogue

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

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### 14. Transport information

Not a dangerous good according to the transport regulations.

### 15. Regulatory information

#### \*Labelling in accordance with EC directives

The product does not require a hazard warning label in accordance with EC directives/the relevant national laws.

#### \*Special regulations on certain preparations

Contains triisobutyl phosphate. May cause allergic reactions.

#### \*Water hazard Class (WGK)

WGK class: 1

WGK source: classification based on addendum 4 (VwVwS)

### 16. Other information

#### \* R-phrase(s):

R43 – May cause sensitization by skin contact.

R52/53 – Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### \* For further information, see:

For more information, consult the Technical Data Sheet.

#### \* Other Information:

Traces of residual monomers can be found in the product: Butylacrylate. Styrene.

Alterations/supplements to the previous version are marked with \*

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These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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# EC Material Safety Data Sheet

Manufacturer/Supplier: Vandex Isoliermittel-Gesellschaft mbH, D-21493 Schwarzenbek  
Product number: 192  
Trade name: VANDEX POLYCEM  
Printing date: 01. 04. 2006

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## 01. Identification of preparation and company

### Trade name

VANDEX POLYCEM

### \* Use of preparation

mixed with VANDEX POLYCEM LIQUID protective coating for sewage treatment facilities

### Manufacturer/Supplier

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## 02. Composition/Information on ingredients

### \* Chemical characterization

Preparation of cement, silica sands and additives

### \* Hazardous ingredients

Ingredients	CAS no.	EINECS no.	Concentration	Hazard symbols	R-phrases
Cement ( $\leq 2$ ppm CrVI)	65997-15-1	266-043-4	25-50%	Xi, irritant	R 38, 41
Silica SiO <sub>2</sub>	14808-60-7	238-878-4	1-5%	Xn	R 48/20

## 03. Hazards identification

### \* Classification

Xi irritant

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes.

### \* Particular information pertaining specific risk for humans and environment

Prolonged contact with the product may cause skin disorders / chemicals burns

### \* Further information

The content of hexavalent chromium in the cement is reduced to  $\leq 2$  ppm. The chromate reduction is effective within the shelf life and when properly stored. Please refer to chapter 7.

## 04. First aid measures

### \* Inhalation

Remove person from exposure. In case of irritation of respiratory system seek medical advice.

### Skin contact

After contact with skin wash immediately with plenty of water. If irritation persists seek medical advice.

### \* Eye contact

In case of contact with the eyes rinse immediately with plenty of water (eye lid wide open) for at least 10 minutes and seek medical advice urgently.

### Ingestion

Drink plenty of water. Seek medical advice.

## 05. Fire-fighting measures

### \* Suitable extinguishing media

Adapt to surrounding fire; product is not combustible.

### \* Special exposure hazards arising from the preparation itself, combustion products, resulting gases

Avoid extinguishing water entering into water courses, drains or ground water.

In contact with extinguishing water an alkaline solution – which can cause irritation – is produced.

### \* Special protective equipment for fire-fighters

Use self-contained breathing apparatus

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### 06. Accidental release measures

#### \* Personal precautions

Avoid contact with skin and eyes. Do not breathe dust. Refer to chapter 8.

#### Environmental precautions

Avoid uncontrolled contact with water. Avoid uncontrolled discharge into environment after contact with water. Do not allow to enter into water courses, drains or ground water.

#### Methods for cleaning up/collecting

Clean up dry. Avoid dust formation.

### 07. Handling and storage

#### \* Information for safe handling

Keep out of the reach of children.

Avoid dust formation and dust deposit.

Avoid contact with skin and eyes.

Do not breathe dust.

Refer to chapter 8 – Personal protective equipment

#### Information about protection against explosions and fires

Not applicable.

#### \* Requirements to be met by storerooms and containers

Store protected from humidity in unopened, undamaged original packaging. Shelf life: 12 months

#### \* Information about separation of incompatible products

Keep away from food, drink and animal feedingstuffs.

### 08. Exposure controls and personal protection

#### \* Exposure limit values (Great Britain)

65997-15-1	Portland cement inhalable dust respirable dust	EH40 / 2005: OEL 8-hour TWA EH40 / 2005: OEL 8-hour TWA	10 4	mg/m <sup>3</sup> mg/m <sup>3</sup>
14808-60-7	Silica SiO <sub>2</sub> Respirable crystalline	EH40 / 2005: OEL 8-hour TWA	0.3	mg/m <sup>3</sup>

OEL = Occupational Exposure Limit; TWA = Time Weighted Average; Observe country specific occupational exposure limits

#### \* Occupational exposure controls

Avoid dust formation. Avoid creating dust. Provide appropriate ventilation or local exhaust ventilation. If it is not possible to reduce exposure levels to below exposure limit values with ventilation use appropriate respirator according to national regulations.

#### \* Personal protective equipment

General protective and hygiene measures

Do not eat or drink during work – no smoking. Wash hands before breaks and after work. Use appropriate skin protection products.

#### \* Respiratory protection

Use approved dust mask/respirator

#### \* Hand protection

Use suitable impervious protective gloves

#### Eye protection

Use tightly fitting safety glasses.

#### \* Skin protection

To avoid skin contact use suitable protective clothing.

#### \* Environmental exposure controls

Do not allow to enter into water courses, drains or ground water.

### 09. Physical and chemical properties

#### \* General information

Appearance: grey powder

Odour: odourless

#### \* Important health, safety and environmental information

Boiling point: not applicable

Flashpoint: not applicable

Ignition temperature: not applicable

Explosive limits:

Lower/Upper: not applicable

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Vapour pressure: not applicable  
Bulk density: approx. 1.5 kg/l  
Solubility in water: (20 °C) up to 1.5 g/l  
pH-value: 11 – 13.5

## 10. Stability and reactivity

### Conditions to avoid

Avoid contact with humidity.

### \* Materials to avoid

Acid

### \* Hazardous decomposition products

Not applicable.

## 11. Toxicological information

### \* Irritant/Corrosive effects

Irritating to skin and mucous membranes. Risk of serious damage to eyes. Prolonged contact with the product may cause skin disorders / chemicals burns.

### \* Sensitization

As long as material is used within shelf life sensitization is not to be expected. Refer to chapter 3+7.

## 12. Ecological information

### \* Ecotoxicity

Eco-toxicological effect only possible in case of unintended release of big quantities in contact with water due to increased pH value. Product is slightly water pollutant (self assessment). Do not allow to enter into water courses, drains or ground water.

### \* Mobility

Refer to ecotoxicity

### \* Persistence and degradability

No data available for the preparation

### \* Bioaccumulative potential

No data available for the preparation

### \* Other adverse effects

No data available for the preparation

## 13. Disposal considerations

### Product/Preparation

#### Recommendation

Clean up dry, not contaminated material can be re-used. Hardens after contact with water, hardened material can be disposed of as *construction and demolition waste* – concrete (EWC-Code 170101). The listed waste number according to the European Waste Code (EWC) is a recommendation. The final classification has to be done together with the local waste disposal company / authority.

### Contaminated packaging

#### Recommendation

Contaminated packaging must be emptied of all residues and can be recycled following appropriate cleaning. Avoid dust formation. Uncleaned packaging must be disposed of in accordance with official local regulations (EWC-Code 150105 composite packaging (Paper/PE-foil)).

## 14. Transport information

Not a dangerous good according to the transport regulations.

## 15. Regulatory information

### Classification according to EEC directives

#### Danger symbol and danger designation

Xi irritant

#### Hazard-determining components of labelling

Cement

### \* Risk-phrases

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes

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\* Safety-phrases

S 2 Keep out of the reach of children.  
S 22 Do not breathe dust  
S 24/25 Avoid contact with skin and eyes.  
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S 37/39 Wear suitable gloves and eye/face protection

### 16. Other information

\* Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case  
EC Directive 91/155/EC as amended in each case  
EC Directive 2001/58/EC as amended in each case  
EC Directive 2000/39/EC as amended in each case  
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

\* Relevant R-phrases (chapter 2):

R 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R 38 Irritating to skin.  
R 41 Risk of serious damage to eyes

Alterations/supplements to the previous version are marked with \*

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