

**SAFETY DATA SHEET**  
**According to 1907/2006/EC**



Version: 1.1

Printing date: 11.01.08

**ARPOLITH**

page: 1 of 5

Revision date: 11.01.08

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

**Product/Trade name:**

Arpolith

**Manufacturer/Supplier:**

Arpadis Deutschland GmbH  
Nordsternstraße 65  
D- 45329 Essen

telephone: +49 (0)201 320 34 0  
fax: +49 (0)201 320 34 10

**Emergency contact**

Anti poison centre: +49 (0)6131 19 240 or any national anti poison centre

**Application/Use**

soil conditioner (ameliorant)

**2. HAZARDS IDENTIFICATION**

**Particular hazards information for human and the environment**

The product does not have to be labelled due the latest valid version of the relevant EC regulations.

**Further info**

Water endangering class (Germany) WGK: 1 (self classification/calculation)

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Chemical characterisation:**

natural ground rocks (volcanic origin), sands and mineral aggregates, embedded in a polymer matrix.

CAS-Nr.	EC-Nr.	Chemical Name	weight%	classification
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Does not contain hazardous components according to the applicable regulations. Under normal use, no dangerous substances will be released.

**4. FIRST AID MEASURES**

**General advice**

First Aiders should take care of their self-protection.

**After inhalation**

Remove from exposure to fresh air and lie down. If symptoms persist, call a doctor.

**After skin contact**

Wash off with water and soap.

**After eye contact**

Rinse immediately with plenty of water, also under the eyelids. Protect unharmed eye. If eye irritation persists, consult a specialist.

**After ingestion**

After swallowing small amounts there is usually no special action required, in case of persistent symptoms consult a doctor. After swallowing larger amount call a doctor immediately, because of the expansion of the material.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Large amounts of water (as water spray), CO<sub>2</sub>, Powder, wet (heavy) foam.

**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 dangers caused by the substance or preparation itself, results of fire/burning, or ensuing gases**

In the event of a fire harmful or toxic gases and vapours might be released. In case of a fire CO, CO<sub>2</sub> and organic crack products will be released. Ensuing gases from a fire may contain sulphurous compounds (SO<sub>2</sub> or H<sub>2</sub>S). Prevent fire fighting water from entering the drainage system.

**Special protective equipment for fire fighters**

In the event of fire and/or explosion do not breathe fumes. Water mist may be used to cool closed containers. In the event of fire, wear self-contained breathing apparatus and a chemical protection suit.. Take care of self-protection.

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### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Remove possible causes of ignition - do not smoke. Ensure adequate ventilation. If air supply is not sufficient, wear protective breathing apparatus. Avoid inhalation, and contact with eyes or skin.

#### Environmental precautions

Do not flush into surface water or sanitary sewer system. If accidental entry into drainage system occurs, inform responsible authorities.

#### Methods for cleaning up

Dam up and close leak, if this can be achieved safely. Spilled material is to be taken up mechanically. Clean contaminated areas with water.

#### Additional advice

Never return spills or residues in original containers for re-use!

### 7. HANDLING AND STORAGE

#### Handling

##### Safe handling advice

Keep containers tightly closed. Protect from direct sunlight and warming and against moisture. Handle and open container with care. Never return residues in storage containers for re-use. Observe directions on the label.

##### Advice on protection against fire and explosion

The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Keep product and empty container away from heat and sources of ignition.

#### Storage

##### Requirements for storage rooms and containers

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Use only suitable containers for storage.

##### Advice on common storage

Do not store together with food stuff.

##### Special storage conditions

Keep containers dry and tightly closed. Protect against moisture and store closed. Protect from direct sunlight and warming. Keep at temperatures between 0 °C and 50 °C.

##### VCI storage class (Germany) 13

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Engineering measures

Ensure adequate ventilation, especially in confined areas.

#### Exposure limits

Chemical name	weight%	TLV/OEL
		ppm   mg/m <sup>3</sup>
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While grinding or milling the product, particulate matter might be generated, which might contain trace amounts of crystalline silica (quartz). Silicosis however must not be considered.

#### Personal protective equipment

##### Respiratory protection

In case of insufficient ventilation and in case of intense dust occurrence wear suitable respiratory equipment with P2 filter.

##### Eye protection

Tight fitting safety glasses.

##### Hand protection

Coated gloves are recommended. As the product does not penetrate, a breakthrough time cannot be determined. Leather gloves might be used, as far as there is no other mechanical impact and if no liquids are used within the same process. The choice of gloves should be agreed with the glove manufacturer. Do not use uncoated cotton gloves.

##### Skin and body protection

Usual working garment. Avoid contact with skin.

##### Industrial hygiene

The usual precautions when handling chemicals should be applied. Wash hands before breaks and at end of work.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form</b>	Blocks and granules	<b>Colour</b>	brown, earth like
<b>Odour</b>	Practically odourless	<b>Viscosity</b>	--
<b>pH value</b>	5 – 7	<b>Melting point / range</b>	--
<b>Boiling point / range</b>	--	<b>Auto ignition temperature</b>	--
<b>Decomposition temperature</b>	>200 °C	<b>flammability (solid, gas)</b>	--
<b>Oxidising properties</b>	--	<b>Flashpoint</b>	--
<b>Explosion limits</b>	<b>lower</b> --	<b>upper</b> --	--
<b>Vapour pressure</b>	--	<b>Vapour density (air=1,0)</b>	--
<b>Density</b>	--	<b>Bulk density</b>	500 – 700 g/l
<b>Water solubility</b>	Practically insoluble	<b>Fat solubility</b>	insoluble
<b>Solubility in other solvents</b>			
<b>Partition coefficient (n-Octanol/Water)</b>			
<b>Other info</b>			Expansion with water >3000%

**10. STABILITY AND REACTIVITY**

**Conditions to avoid**

Decomposes above 200 °C. No decomposition if stored and applied as directed.

**Materials to avoid**

Oxidising agents, strongly alkaline and strongly acid materials.

**Hazardous decomposition products**

Organic crack products (in a fire), Carbon oxides, sulphurous compounds.

**Further information**

The thermal decomposition applies primarily to the polymer matrix. A decomposition of the mineral components will occur only at much higher temperatures.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

**Ingestion**

LD50 oral rat: -- .

The components of this preparation are not classified as harmful or toxic.

**Skin contact**

LD50 dermal rabbit: --

The components of this preparation are not classified as harmful or toxic.

**Inhalation**

LC50 inhal. rat: --

The components of this preparation are not classified as harmful or toxic.

**Further information**

Health injuries are not known or expected under normal use. Due to the expansion capacity and the ability to take up larger amounts of liquid it is likely to receive severe damage to health after ingestion of larger amounts (50ml and more). These injuries are primarily of mechanical nature. The product itself is not considered to be toxic.

**Primary irritation**

**Inhalation**

Inhalation of dusts may cause mild irritation to the mucous membrane.

**Skin contact**

No skin irritation.

**Eye contact**

Very mild eye irritation.

**Ingestion**

Ingestion may cause irritation of the upper respiratory system and gastrointestinal disturbance.

**Further information**

Health injuries are not known or expected under normal use.

**Chronic toxicity**

**Sensitization**

No data available

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**Carcinogenicity**

No data available

**Mutagenicity**

No data available

**Reproductive toxicity**

No data available

**Narcosis**

Not known and not expected.

**Further information**

Health injuries are not known or expected under normal use.

**12. ECOLOGICAL INFORMATION**

<b>Theoretical oxygen demand (ThOD)</b>	--	<b>BOD5</b>	--	<b>COD</b>	--
<b>Aquatic toxicity</b>		<b>Toxicity to algae</b>			
--		--			
<b>Toxicity to fish</b>		<b>Toxicity to bacteria</b>			
--		--			

**Bioaccumulation**

no data available.

**Mobility**

no data available.

**Persistence and degradability**

The polymer is biodegradable. The mineral components (inorganic) are not biodegradable.  
Water endangering class (Germany) WGK 1 (calculation)

**Further information**

Ecological injuries are not known or expected under normal use.

**13. DISPOSAL CONSIDERATIONS**

**EWC waste catalog number:** Has to be agreed with the disposal company.

**Waste from residues / unused products**

If recycling is not practicable, dispose of in compliance with the Environmental Protection (Duty of Care) Regulations. Offer surplus and non- recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product. Offer rinsed packaging material to local recycling facilities or to the supplier.

**14. TRANSPORT INFORMATION**

**UN-No.:** --

**Road / rail transport (ADR/RID)**

No dangerous good

**Sea transport IMO/IMDG**

No dangerous good

**Air transport ICAO-TI/IATA-DGR**

No dangerous good

**Further information**

None

**15. REGULATORY INFORMATION**

**Labelling according to EC Directives**

**Symbol(s)**

- None -

**R-phrases**

- None -

**S-phrases**

- None -

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**Special labelling**

None

**Further Information**

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**Other national regulations**

Water endangering class WGK 1 (self classification, calculation)

VCI storage class 13

Restriction in handling chemicals for youth, pregnant women and other certain people must be observed. All local and national regulations on chemicals and similar substances must be observed.

**16. OTHER INFORMATION**

**Further Information**

This data sheet contains changes from the previous version(1.0 / 27.08.2007) in section(s): 12.

**Contact details**

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The information herein is based on the present state of knowledge. It is believed to be correct but is not necessarily all inclusive and shall be used as a guide only. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.