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# SECTION 1 Designation of the substance or mixture and of the company

## **1.1 Product identifier**

Trade name:Rephalt 0/2, 0/4, 0/8, 0/11UFI:Not applicable for this mixture

### 1.2 Relevant identified uses of the substance or mixture and uses

### advised against

Relevant identified use:	Reactive cold mix for asphalt restoration
Uses advised against:	No data available

## 1.3 Details of the supplier providing the safety data sheet

Manufacturer/supplier: Company VIALIT ASPHALT GesmbH & Co KG Reiterstrasse 78 A - 5280 Braunau/ Inn

Telephone: +43 (0)7722/ 62977 - 0 Fax: +43 (0)7722/ 65758

Department providing information: Laboratory department, telephone: +43 (0)7722/ 62977 - 44; <u>Qualitaet@vialit.at</u> This number is only manned during office hours. **1.4 Emergency information** For Austria: Poisoning Information Centre, telephone: +43 (0)1/ 4064343

## SECTION 2 Possible hazards 2.1 Classification according to Regulation 1272/2008/EG (CLP)

Information concerning particular hazards for humans: The product is classified as harmless to humans.

Information concerning particular hazards for the environment: The product is classified as non-hazardous to the environment.

H-sets: not applicable P-sets: not applicable

## Other information

Full text of the codes, hazard statements and EU hazard statements in SECTION 16.

# 2.2 Labelling elements (Regulation 1272/2008/EC (CLP))

Labelling not applicable.



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## 2.3 Other hazards

PBT: not applicable. vPvB: not applicable. Endocrine disrupting properties: not applicable

## **SECTION 3 Composition/ information on ingredients**

## 3.1 Materials

Not applicable, product is a mixture

## 3.2 Mixture

Hazardous ingredients: The product does not contain any quantities of hazardous substances relevant for classification.

## SECTION 4 First-aid measures 4.1 Description of first aid measures

General information: Always assess the safety of the accident site before attempting to rescue casualties and provide first aid.

After inhalation: Not relevant

After contact with skin: Clean with soap and water.

After contact with eyes: Rinse with water for a few minutes with the eyelids open.

After ingestion: Consult a doctor if symptoms persist.

Self-protection of the first aider: No special instructions required.

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

None known.

## 4.3 Information on immediate medical assistance or specialised treatment

No information available

# **SECTION 5 Firefighting measures**

# 5.1 Extinguishing agent

Suitable extinguishing agents: Foam, powder, water in spray jet

Unsuitable extinguishing agents: Full water jet

## 5.2 Special hazards arising from the substance or mixture.

Carbon monoxide, carbon dioxide, nitrogen oxides and other hazardous decomposition products may be formed during combustion.



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## 5.3 Instructions for firefighting

Special firefighting procedures: No special procedures required.

Special protective equipment for firefighting: Use self-contained breathing apparatus.

## SECTION 6 Measures in the event of accidental release 6.1 Personal precautions, protective equipment and emergency procedures

Wear gloves to avoid contamination by the bituminous binder.

### 6.2 Environmental protection measures

Not relevant for this product.

### 6.3 Methods and material for retention and cleaning

Pick up with a shovel and dispose of. Cleaning can be carried out with biodiesel or similar cleaning agents.

### 6.4 Reference to other sections

See Section 13 for information on disposal.

## SECTION 7 Handling and storage 7.1 Protective measures for safe handling

Measures for preventing fires:

Keep away from direct sources of ignition.

Measures for preventing aerosol and dust formation:

Not relevant for this product.

Measures for protecting the environment:

Not relevant for this product.

Advice on general hygiene in the workplace:

Keep away from food and drink, do not eat, drink or smoke while working; Wash hands before breaks and after work

## 7.2 Conditions for safe storage in consideration of incompatibilities

Technical measures and storage conditions: Dry storage

Packaging materials: Original container

Requirements for storage rooms and containers: Keep material closed, it hardens in the air.



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Storage instructions: No known intolerances.

Storage class: 11 according to VCI

Substances to be avoided: Water causes product to harden prematurely

Further information on storage conditions Keep material well sealed.

## 7.3 Specific end uses

Specific use(s): 1.2; no further relevant information available.

# SECTION 8 Exposure controls / personal protective equipment 8.1 Parameters to be monitored

Material name: Bitumen CAS no.: 8052-42-4

DNEL values workers Long-term exposure - systemic effects: Inhalative DNEL 2.88 mg/m<sup>3</sup>

#### 8.2 Exposure controls and monitoring

Suitable technical control equipment: No special requirements

Personal protective equipment:

Eye protection:	Not required
Skin protection:	Suitable work clothing
Hand protection:	Work gloves
Respiratory protection:	Not required

Limitation and monitoring of environmental exposure: Not applicable



**SECTION 9** Physical and chemical properties

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9.1 Information on basic physical and chemical properties		
Aggregate state	solid	
Colour	black	
Odour	bitumen	
Melting point/freezing point	n/a	
Boiling point or start of boiling and boiling range	> 200 °C	
Flammability	yes	
Lower explosion limit	n/a	
Upper explosion limit	n/a	
Flash point	> 200 °C	
Ignition temperature	n/a	
Decomposition temperature	n/a	
pH value	n/d	
Kinematic viscosity	n/a	
Solubility	only slightly miscible with water	
Partition coefficient n-octanol/water (log value)	n/a	
Vapour pressure	n/a	
Density and/or relative density	2 – 2.5 kg/m³	
Relative vapour density	n/a	
Particle properties	n/d	
n/d = not determined n/a = not applicable		

## 9.2 Other information

Flammable solids

A2fi-s1 according to EN 13501-1:2007+A1:2009

## SECTION 10 Stability and reactivity 10.1 Reactivity

No hazardous reactions are to be expected if used as intended.

## **10.2 Chemical stability**

The product is stable under normal ambient conditions and under the temperature and pressure conditions to be expected during storage and handling.

## 10.3 Possibility of hazardous reactions

No hazardous reactions known if handled as directed.

#### 10.4 Conditions to avoid

No conditions known to be avoided if handled as directed.

## **10.5 Incompatible materials**

No incompatible materials known, if handled as directed.

## **10.6 Hazardous decomposition products**

No hazardous decomposition products known, if handled as directed and moderately heated.



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#### SECTION 11 Toxicological information 11.1 Information on toxicological effects

#### Acute toxicity:

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

#### Bitumen:

Acute oral:	LD50 rat Dose: > 5,000 mg/kg Method: OECD 401 Test substance: 64741-56-6
Acute inhalative:	LC50 rat Dose: > 94.4 mg/m3 Method: OECD 403 Test substance: Bitumen, vapour aerosol
Acute dermal:	LD50 rabbit Dose: > 2,000 mg/kg Method: OECD 402 Test substance: 64741-56-6
Repeated dose toxicity	: NOAEC inhalative Dose: 103.9 mg/m3 (systemic); Method: OECD 413 Test substance: Mixture of 64742-93-4 and 64741-56-6.Form: Aerosol of oxidised bitumen vapour

Method: OECD 413 Test substance: Mixture of 64742-93-4 and 64741-56-6,Form: Aerosol of oxidised bitumen vapour condensate;,Based on available data, the product is not classified for specific target organ toxicity at repeated exposure.

NOAEL dermal; dose: >=2000 mg/kg/day (systemic); Method: OECD 410, test substance: 64741-56-6, form: semi-solid;

#### Corrosive/irritant effect on the skin:

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

#### Severe eye damage/irritation:

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

## Sensitisation of the respiratory tract/skin:

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

#### **Bitumen:**

Sensitisation of the skin Guinea pig Result: not sensi Method: OECD Test substance:

Guinea pig Result: not sensitising Method: OECD 406 Test substance: 64741-56-6 Form: semi-solid;

#### Germ cell mutagenicity:

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

#### **Bitumen:**

Genotoxicity in vitro	Ames test
	Result: negative with metabolic activation
	Method: modified Ames test according to ASTM E 1687
	Test substance: 8052-42-4

#### Carcinogenicity:

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



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## **Bitumen:**

Carcinogenic effect	rat Test substance: Mixture of 64742-93-4 and 64741-56-6 Method: OECD 451 Inhalation; NOAEC (carcinogenic): > 103.9 mg/m <sup>3</sup> Chronic
	Mouse Test substance: 8052-42-4 Method: OECD 453 dermal Result: negative Chronic
Reproductive toxicity: Based on available data, the classification criteria are not met.	
Bitumen:	
Reproductive toxicity/fertility:	Test substance: Asphalt, oxidised Method: OECD 422 NOAEC inhalation: 300 mg/m3 (CSA) Form: Vapour condensate;
Reproductive toxicity/teratogenicity:	Test substance: Asphalt, oxidised Method: OECD Guideline 422 NOAEC; Dose 300 mg/m3 (subchronic rat) Inhalation; Form: Vapour condensate;

Specific target organ toxicity at single exposure: Based on available data, the classification criteria are not met.

Specific target organ toxicity with repeated exposure: Based on available data, the classification criteria are not met.

#### Danger of aspiration:

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

## 11.2 Further information:

The classification was carried out according to the calculation method of the Preparations Directive.



## **SECTION 12 Environmental information**

12.1 Toxicity

No further relevant data available

#### Bitumen: Acute toxicity in fish: LL50 Species: Oncorhynchus mykiss (rainbow trout) Dose: > 1,000 mg/l Exposure time: 96 h Test substance: Oxidised bitumen Method: QSAR Acute toxicity to aquatic invertebrates: LL50 Species: Daphnia magna (large water flea) Dose: > 1,000 mg/l Exposure time: 48 h Test substance: Oxidised bitumen Method: QSAR Toxicity to algae and aquatic plants: EL50 Species: Pseudokirchnerella subcapitata . Dose: > 1,000 mg/l Exposure time: 72 h Test substance: Oxidised bitumen Method: (Q)SAR LL50 Toxicity to microorganisms: Species: Tetrahymena pyriformis Dose: > 1,000 mg/l Exposure time: 40 h Test substance: Oxidised bitumen Method: QSAR Fish toxicity (chronic toxicity): LL50 Species: Oncorhynchus mykiss (rainbow trout) Dose: > 1,000 mg/l Exposure time: 28 h Test substance: Oxidised bitumen Method: QSAR Toxicity to daphnia and others Aquatic invertebrates (chronic toxicity): NOEL Species: Daphnia magna Dose: > 1,000 mg/l Exposure time: 21 h Test substance: Oxidised bitumen Method: QSAR

## 12.2 Persistence and degradability

## Bitumen

Not readily biodegradable.

## 12.3 Bioaccumulative potential

Bitumen

Bioaccumulation is unlikely due to the high molecular weight. Bioaccumulative potential (partition coefficient (n-octanol/water)): no data available

#### 12.4 Mobility in soil

No further relevant data available

## 12.5 Results of the PBT and vPvB assessment

No further relevant data available



## 12.6 Endocrine disrupting properties

No further relevant data available

## 12.6 Other adverse effects

Water hazard class 1 (according to calculation rule for preparations AwSV)

## **SECTION 13 Notes on disposal**

Product: Do not dispose of via household waste or sewer, hand over to a hazardous waste collector.

Packaging: Disposal in accordance with official regulations.

Waste code: ÖNORM 2100, code number 54 912 EN waste catalogue: 17 03 02

#### SECTION 14 Transport details 14.1 UN number

Not applicable.

#### 14.2 UN proper shipping name

Not applicable.

## 14.3 Transport hazard classes

Not applicable.

## 14.4 Packaging group

Not applicable.

#### 14.5 Environmental hazards

Not applicable.

## 14.6 Special precautions for the user

Not applicable.

## 14.7 Transport of bulk cargo by sea in accordance with IMO instruments

Not applicable.



## SECTION 15 Legal regulations

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

## **National regulations**

REACH Regulation (EC) No. 1907/2006 as amended CLP Regulation (EC) No 1272/2008 as amended Water hazard class (Germany):WgK 1 (slightly hazardous to water)

#### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## **SECTION 16 Other information**

The information is based on the current state of knowledge and experience. This data sheet describes products with regard to safety requirements. The information does not have the meaning of a guarantee of properties.

Clear indication of changes: Changes to the previous version are marked with the asterisk \* in the right-hand margin. Abbreviations and acronyms (Q)SAR = Quantitative structure-activity relationship ADN = European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ADR = Agreement on the International Carriage of Dangerous Goods by Road AGW = limit value for exposure at the workplace ASTM = International Standards Institute ATE = acute toxicity estimate AwSV = Ordinance on Installations for Handling Substances Hazardous to Water BCF = bioconcentration factor BGW = biological limit value CAS No. = Chemical Abstracts Service Number CLP = classification, labelling and packaging Classification, labelling and packaging CMR = carcinogen, mutagen or reproductive toxin CSA = chemical safety assessment CSR = chemical safety report DMEL = derived exposure level with minimal impairment DNEL = derived exposure level without impairment EC50 = The effective concentration of a substance that causes 50% of the maximum possible reaction. EC number = EINECS and ELINCS number (see also EINECS and ELINCS) EINECS = European Inventory of Existing Commercial Substances EL50 = effective level 50% IATA = International Air Transport Association IC50 = inhibitory concentration 50% ICAO-TI = Technical Instructions for the Carriage of Dangerous Goods by Air IMDG = International Maritime Dangerous Goods Code Kow = octanol-water partition coefficient Koc = organic soil carbon to water partition coefficient LC50 = lethal concentration for 50% of a test population LD50 = lethal dose for 50% of a test population (median lethal dose) LGK = storage class LL50 = lethal load 50% LOAEC = lowest concentration with observable adverse effect LOAEL = lowest observed adverse effect level MAK = maximum workplace concentration NOAEC = concentration with no observable adverse effect NOAEL = dose with no observable adverse effect NOEC = highest exposure concentration of a substance without observed effects NOEL = highest dose of a substance with no observed effects OECD = Organisation for Economic Co-operation and Development PBT = persistent, bioaccumulative and toxic substance PEC = estimated effect concentration



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PNEC = estimated no-effect concentration

RID = Regulations on the International Carriage of Dangerous Goods by Rail

QSAR = Quantitative/Qualitative Structure-Effect Relationship

SVHC = substances of very high concern

STEL = maximum workplace concentration (MAK) - short-term value

TLV = maximum workplace concentration (MAK)

TRGS = Technical Rules for Hazardous Substances

TWA = maximum workplace concentration (MAK) - daily average value

UVCB = substances with unknown or variable composition, complex reaction products and biological materials

VCI = German Chemical Industry Association

vPvB = very persistent and very bioaccumulative

#### Important literature references and data sources:

Information from our suppliers and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to prepare this safety data sheet.

#### Methods used for product categorisation:

The classification for health, physico-chemical and environmental hazards was derived from a combination of calculation methods and, if available, test data.

#### Full text of the H & P phrases referred to in items 2 and 3:

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Notes on training courses:

Workers must be regularly trained in the safe handling of the products based on the information in the safety data sheet and the local conditions of the workplace.

National regulations on the training of employees in the handling of hazardous substances must be observed.