

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

Version number: 2.0  
Replaces version of: 2017-07-21 (1)

Revision: 2019-11-28  
First version: 2017-07-11

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

### 1.1 Product identifier

**Trade name**

V14S/10, V14S/40, V15/30, V15/50, V15/80,  
V1A15/30, V1A15/50, V1/30 HF, V1/60 HF, V3/50,  
VB-P10, VS-P, E1SF, M10, M10/02, M10/4, M10/  
12, M10/13, SP20, SP40, SP45, U02, U10, U20,  
U40, U80, U160, R20/02, R20/05, R20/10, R20/20,  
R20/40, R20/80, TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA Schlämme,  
RM20, SM20, CM20, P40, P80, FE20, TF10, IB20,  
KA-PH1, KA-RM05, RB50

**Registration number (REACH)**

Not relevant (mixture).

**CAS number**

not relevant (mixture)

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

**Relevant identified uses**

Building material  
Industrial use  
Professional use  
Consumer use (private households)

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

PAGEL Spezial-Beton GmbH & Co. KG  
Wolfsbankring 9  
45355 Essen  
Germany

Telephone: +49 201/68504-0  
Telefax: +49 201/68504-31  
e-mail: info@pagel.com  
Website: www.pagel.com

**e-mail (competent person)**

schempershofe@pagel.de, labor@pagel.de

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

#### 1.4 Emergency telephone number

Poison centre		
Name	Telephone	Telefax
Giftnotruf Mainz	+49 (0) 6131-19240	+49 (0) 6131 - 23 2468

Advisory service only German or English language.

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Classification				
Section	Hazard class	Category	Hazard class and category	Hazard statement
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.8R	specific target organ toxicity - single exposure (respiratory tract irritation)	3	STOT SE 3	H335

for full text of abbreviations: see SECTION 16

#### The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

**Signal word** danger

V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
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#### Pictograms

GHS05, GHS07



#### Hazard statements

- H315** Causes skin irritation.  
**H318** Causes serious eye damage.  
**H335** May cause respiratory irritation.

#### Precautionary statements

- P101** If medical advice is needed, have product container or label at hand.  
**P102** Keep out of reach of children.  
**P261** Avoid breathing dust.  
**P280** Wear protective gloves/protective clothing/eye protection/face protection.  
**P302+P352** IF ON SKIN: Wash with plenty of soap and water.  
**P304+P340** IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
**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/doctor.  
**P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Hazardous ingredients for labelling

portland cement

### 2.3 Other hazards

The product develops an alkaline pH value with moisture and can cause irritation. The product contains chromate reducer, which results in a content of water-soluble chrome (VI) of less than 0.0002 %. In case of improper storage (moisture ingress) or storage exceeding the recommended storage time, however, the contained chromate reducer may lose its effect prematurely and a sensitising effect of the cement/binder can occur upon skin contact (H317 and EUH203). The preparation is low in chromium. The content of soluble chromium (VI) compounds has been

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E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
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lowered with agent to below 2 ppm in the cement portion. Proper storage and compliance with the expiration date is a prerequisite for the effectiveness of the chromate reduction.

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not relevant (mixture).

#### 3.2 Mixtures

##### Description of the mixture

Hazardous ingredients					
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
portland cement	CAS No 65997-15-1  EC No 266-043-4	15 – 60	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 STOT SE 3 / H335		
quartz	CAS No 14808-60-7  EC No 238-878-4	10 – 75			IOELV

##### Notes

IOELV: Substance with a community indicative occupational exposure limit value

for full text of H-phrases: see SECTION 16

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V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Take off immediately all contaminated clothing.

In all cases of doubt, or when symptoms persist, seek medical advice.

In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

Provide fresh air.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

In case of respiratory tract irritation, consult a physician.

#### Following skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.

Brush off loose particles from skin.

If skin irritation or rash occurs: Get medical advice/attention.

#### Following eye contact

Rinse immediately carefully and thoroughly with eye shower or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Get immediate medical advice/attention.

#### Following ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Get immediate medical advice/attention.

#### Notes for the doctor

None.

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E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

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

Cough, pain, choking, and breathing difficulties.  
Risk of serious damage to eyes.

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

None.

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

**Suitable extinguishing media**

water, foam, alcohol resistant foam, fire extinguishing powder, co-ordinate firefighting measures to the fire surroundings

**Unsuitable extinguishing media**

water jet

**5.2 Special hazards arising from the substance or mixture**

Hazardous decomposition products: Section 10.

**5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes.  
Co-ordinate firefighting measures to the fire surroundings.  
Do not allow firefighting water to enter drains or water courses.  
Collect contaminated firefighting water separately.  
Fight fire with normal precautions from a reasonable distance.

**Special protective equipment for firefighters**

self-contained breathing apparatus (SCBA)

V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Control of dust.

Do not breathe dust.

Do not get in eyes, on skin, or on clothing.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

If substance has entered a water course or sewer, inform the responsible authority.

### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

take up mechanically

#### Advice on how to clean up a spill

Take up mechanically.

Collect spillage.

Vacuuming techniques.

Approved industrial vacuum cleaner.

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

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#### **Other information relating to spills and releases**

Place in appropriate containers for disposal.  
Ventilate affected area.

#### **6.4 Reference to other sections**

Personal protective equipment: see section 8.  
Incompatible materials: see section 10.  
Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

#### **Measures to prevent fire as well as aerosol and dust generation**

Use local and general ventilation.

#### **Specific notes/details**

Dust deposits may accumulate on all deposition surfaces in a technical room.  
When diluting, always stir the product into standing water.

#### **Measures to protect the environment**

Avoid release to the environment.

#### **Advice on general occupational hygiene**

Do not eat, drink and smoke in work areas.  
Remove contaminated clothing and protective equipment before entering eating areas.  
Do not breathe dust.  
Do not get in eyes, on skin, or on clothing.  
Wash hands after use.  
Preventive skin protection (barrier creams/ointments) is recommended.

### **7.2 Conditions for safe storage, including any incompatibilities**



**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

#### **Flammability hazards**

None.

#### **Incompatible substances or mixtures**

Incompatible materials: see section 10.

#### **Protect against external exposure, such as**

humidity

#### **Consideration of other advice**

Keep away from food, drink and animal feedingstuffs.

Store in a dry place. Store in a closed container.

#### **Ventilation requirements**

Provision of sufficient ventilation.

#### **Packaging compatibilities**

Keep only in original container.

Unsuitable materials: Aluminium.

### **7.3 Specific end use(s)**

Industry or sector specific available guidance(s): GISCODE ZP 1.

## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

<b>Occupational exposure limit values (Workplace Exposure Limits)</b>									
<b>Country</b>	<b>Name of agent</b>	<b>CAS No</b>	<b>Identifier</b>	<b>TWA [ppm]</b>	<b>TWA [mg/m<sup>3</sup>]</b>	<b>STEL [ppm]</b>	<b>STEL [mg/m<sup>3</sup>]</b>	<b>Notation</b>	<b>Source</b>
EU	silica, crystalline	14808-60-7	IOELV		0.1			r	2017/2398/EU

V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50

Occupational exposure limit values (Workplace Exposure Limits)									
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Notation	Source
GB	dust		WEL		10			i	EH40/2005
GB	dust		WEL		4			r	EH40/2005
GB	silica, crystalline	14808-60-7	WEL		0.1			r	EH40/2005
GB	portland cement	65997-15-1	WEL		10			i	EH40/2005
GB	portland cement	65997-15-1	WEL		4			r	EH40/2005
GB	silica, amorphous	69012-64-2	WEL		6			i	EH40/2005
GB	silica, amorphous	69012-64-2	WEL		2.4			r	EH40/2005

#### Notation

i inhalable fraction

r respirable fraction

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

## 8.2 Exposure controls

### Appropriate engineering controls

General ventilation.

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

**Individual protection measures (personal protective equipment)**

**Eye/face protection**

Wear eye/face protection.

**Hand protection**

Protective gloves		
Material	Material thickness	Breakthrough times of the glove material
NBR: acrylonitrile-butadiene rubber	≥ 0,15 mm	these information are not available

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Other protection measures**

Protective clothing for use against solid particulates.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

Particulate filter device (EN 143).

P1 (filters at least 80 % of airborne particles, colour code: White).

P2 (filters at least 94 % of airborne particles, colour code: White).

**Environmental exposure controls**

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

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V15/80, V1A15/30, V1A15/50, V1/30  
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E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	solid
Form	powder
Colour	grey - white
Odour	odourless
Odour threshold	these information are not available

#### Other safety parameters

pH (value)	alkaline (suspension)
Melting point/freezing point	>1,250 °C
Initial boiling point and boiling range	these information are not available
Flash point	not applicable
Evaporation rate	these information are not available
Flammability (solid, gas)	non-combustible
Explosion limits of dust clouds	not determined
Vapour pressure	these information are not available
Density	2.75 – 3.2 g/cm <sup>3</sup> at 20 °C
Vapour density	these information are not available
Relative density	2.75 – 3.2 at 20 °C (water = 1)

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E1SF, M10, M10/02, M10/4, M10/12,  
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U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
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TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
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#### **Solubility(ies)**

Water solubility not miscible in any proportion

#### **Partition coefficient**

n-octanol/water (log KOW) these information are not available

Auto-ignition temperature not relevant  
(Solid matter)

Relative self-ignition temperature for solids these information are not available

Decomposition temperature these information are not available

#### **Viscosity**

Kinematic viscosity not relevant  
(solid matter)

Dynamic viscosity not relevant  
(solid matter)

Explosive properties not explosive

Oxidising properties shall not be classified as oxidising

### **9.2 Other information**

None

## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

This material is not reactive under normal ambient conditions.

### **10.2 Chemical stability**

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
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E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

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**10.3 Possibility of hazardous reactions**

Reactions with light metals to form hydrogen.

**10.4 Conditions to avoid**

Protect from moisture.

**10.5 Incompatible materials**

acids, aluminium, ammonium compounds, metals

**10.6 Hazardous decomposition products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

## **SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Classification procedure**

If not otherwise specified the classification is based on:  
Ingredients of the mixture (additivity formula).

**Classification according to GHS (1272/2008/EC, CLP)**

**Acute toxicity**

Classification could not be established because:  
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/eye irritation**

Causes serious eye damage.

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E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

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#### **Respiratory or skin sensitisation**

##### **Skin sensitisation**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

##### **Respiratory sensitisation**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

##### **Germ cell mutagenicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

##### **Carcinogenicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

##### **Reproductive toxicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

##### **Specific target organ toxicity - single exposure**

May cause respiratory irritation.

##### **Specific target organ toxicity - repeated exposure**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

##### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity (acute)

Test data are not available for the complete mixture.

#### Aquatic toxicity (chronic)

Test data are not available for the complete mixture.

### 12.2 Persistence and degradability

#### Biodegradation

The study does not need to be conducted, the relevant substances in the mixture are inorganic.

#### Persistence

Data are not available.

### 12.3 Bioaccumulative potential

Test data are not available for the complete mixture.

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Other adverse effects

Data are not available.

#### Remarks

Wassergefährdungsklasse, WGK (water hazard class): 2



V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions.

## SECTION 14: Transport information

14.1	UN number	not subject to transport regulations
14.2	UN proper shipping name	-
14.3	Transport hazard class(es)	none
	Class	-
14.4	Packing group	not assigned to a packing group
14.5	Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations
14.6	Special precautions for user	
		There is no additional information.
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	
		The cargo is not intended to be carried in bulk.

V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50

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#### **14.8 Information for each of the UN Model Regulations**

**Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).**

Not subject to ADR, RID and ADN.

**International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

**International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

### **SECTION 15: Regulatory information**

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

**Relevant provisions of the European Union (EU)**

**Restrictions according to REACH, Annex XVII**

None of the ingredients are listed.

**List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list**

None of the ingredients are listed.

**Seveso Directive**

Not assigned.

**Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II**

None of the ingredients are listed.

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

**Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

None of the ingredients are listed.

**Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**

None of the ingredients are listed.

**Regulation 98/2013/EU on the marketing and use of explosives precursors**

None of the ingredients are listed.

**15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this mixture by the supplier. Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**Indication of changes (revised safety data sheet)**

Indication of changes (revised safety data sheet)		
Section	Former entry (text/value)	Actual entry (text/value)
1.1	Trade name: V15/30, V15/50, V15/80 V1A15/30, V1A15/50 V1/30 HF, V1/60 HF V3/50 VB-P10 VS-P E1SF M10, M10/02, M10/4, M10/12, M10/13 SP20 SP40 SP45 U02, U10, U20, U40, U80, U160 R20/02, R20/05, R20/10, R20/20, R20/40, R20/80 TW10, TW20, TW40, TW05 weiß, TW10 weiß, TW20 weiß, TW40 weiß KA20 KA Schlämme RM20 SM20 CM20 P40, P80 FE20	Trade name: V14S/10, V14S/40, V15/30, V15/50, V15/80, V1A15/30, V1A15/50, V1/30 HF, V1/60 HF, V3/50, VB-P10, VS-P, E1SF, M10, M10/02, M10/4, M10/12, M10/13, SP20, SP40, SP45, U02, U10, U20, U40, U80, U160, R20/02, R20/05, R20/10, R20/20, R20/40, R20/80, TW10, TW20, TW40, TW10 weiß, TW20 weiß, TW40 weiß, KA20, KA Schlämme, RM20, SM20, CM20, P40, P80, FE20, TF10, IB20, KA-PH1, KA-RM05, RB50

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

<b>Indication of changes (revised safety data sheet)</b>		
<b>Section</b>	<b>Former entry (text/value)</b>	<b>Actual entry (text/value)</b>
2.1		The most important adverse physicochemical, human health and environmental effects: Spillage and fire water can cause pollution of watercourses.

### **Abbreviations and acronyms**

<b>Abbreviations and acronyms</b>	
<b>Abbr.</b>	<b>Descriptions of used abbreviations</b>
2017/2398/EU	Directive of the European Parliament and of the Council amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

<b>Abbreviations and acronyms</b>	
<b>Abbr.</b>	<b>Descriptions of used abbreviations</b>
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

<b>Abbreviations and acronyms</b>	
<b>Abbr.</b>	<b>Descriptions of used abbreviations</b>
SVHC	Substance of Very High Concern
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### **Key literature references and sources for data**

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.  
Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

### **Classification procedure**

Physical and chemical properties.

Health hazards.

Environmental hazards.

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### **List of relevant phrases (code and full text as stated in chapter 2 and 3)**

<b>List of relevant phrases (code and full text as stated in chapter 2 and 3)</b>	
<b>Code</b>	<b>Text</b>
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

**V14S/10, V14S/40, V15/30, V15/50,  
V15/80, V1A15/30, V1A15/50, V1/30  
HF, V1/60 HF, V3/50, VB-P10, VS-P,  
E1SF, M10, M10/02, M10/4, M10/12,  
M10/13, SP20, SP40, SP45, U02, U10,  
U20, U40, U80, U160, R20/02, R20/  
05, R20/10, R20/20, R20/40, R20/80,  
TW10, TW20, TW40, TW10 weiß,  
TW20 weiß, TW40 weiß, KA20, KA  
Schlämme, RM20, SM20, CM20,  
P40, P80, FE20, TF10, IB20, KA-PH1,  
KA-RM05, RB50**

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