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



**Trade name :** Radiator Enamel 990 Heizkörperlack 990

**Revision date:** 16.03.2022 **Version (Revision):** 20.0.0 (19.0.0)

**Print date :** 16.03.2022

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

#### 1.1 Product identifier

Radiator Enamel 990 Heizkörperlack 990

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

#### **Relevant identified uses**

#### **Products Category [PC]**

PC 9 - Coatings and paints, fillers, putties, thinners.

#### Uses advised against

There are no information about relevant identified uses of the product according to the Regulation (EC) No. 1907/2006 (REACH-Regulation), which are advised against. For using the product observe the information in the Technical data sheet of the product.

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

#### **Supplier**

Brillux GmbH & Co KG www.brillux.de

Street: Weseler Straße 401

Postal code/City: D - 48163 Münster

**Telephone:** +49 (0)251-7188-0 **Telefax:** +49 (0)251-7188-280 **Information contact:** 

Electronic mail address of the well-informed person for safety data sheets:sdb@brillux.de

#### 1.4 Emergency telephone number

Outside the business hours (9 a.m. to 5 p.m.):

(Giftinformationszentrum-Nord, Göttingen, consultation in german or english language)

Telephone: +49 (0)551-19240.

#### **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

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

Flam. Liq. 3 ; H226 - Flammable liquids : Category 3 ; Flammable liquid and vapour.

Aquatic Chronic 3; H412 - Hazardous to the aquatic environment: Chronic 3; Harmful to aquatic life with long lasting effects.

## 2.2 Label elements

## Labelling according to Regulation (EC) No. 1272/2008 [CLP]

## **Hazard pictograms**



Flame (GHS02)

## Signal word

Warning

#### **Hazard statements**

H226 Flammable liquid and vapour.

H412 Harmful to aquatic life with long lasting effects.

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#### **Precautionary statements**

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P261 Avoid breathing spray.

P273 Avoid release to the environment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

[or shower].

P501 Dispose of contents/container to approved disposal company or local collection.

#### **Supplemental hazard information**

EUH066 Repeated exposure may cause skin dryness or cracking. Special rules for supplemental label elements for certain mixtures

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray

or mist.

#### 2.3 Other hazards

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605. The product does not contain any substances, which fulfil the criteria for PBT or vPvB in accordance with the Annex XIII of the Regulation (EC) No 1907/2006 (REACH-Regulation).

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

#### 3.2 Mixtures

#### Description

Paint based on alkyd resins;

Composition:

Alkyd resins, titanium dioxide, inorganic/organic coloured pigments (depending on the shade), silicates, aliphatic hydrocarbons and additives.

#### **Hazardous ingredients**

TITANIUM DIOXIDE; EC No.: 236-675-5; CAS No.: 13463-67-7

Weight fraction :  $\geq$  25 - < 30 % Classification 1272/2008 [CLP] : Carc. 2 ; H351i

HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS; REACH No.: 01-2119471991-29; EC No.: 923-037-2

Weight fraction :  $\geq$  20 - < 25 %

Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 Aquatic Chronic 2 ; H411 EUH066 HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS ; REACH No. : 01-2119472146-39 ; EC No. : 918-167-1

Weight fraction :  $\geq$  15 - < 20 %

 $\hbox{Classification 1272/2008 [CLP]:} \qquad \hbox{Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 EUH066}$ 

HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS; REACH No.: 01-2119457273-39; EC

No.: 918-481-9

Weight fraction :  $\geq$  1 - < 5 %

Classification 1272/2008 [CLP] : Asp. Tox. 1 ; H304 EUH066

#### **Additional information**

The used hydrocarbons contain no benzene or benzene in concentrations less than 0.1 percent by weight and fulfil therefore the default(handicap) of the remark P to the appendix VI of the order (EC) No. 1272/2008 (GHS order).

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

#### **General information**

Immediately remove all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical

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attention. In case of unconsciousness: lay on side - call a doctor. Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.

#### Following inhalation

When symptoms persists, take the casualty into the fresh air and keep warm. Irregular breathing/no breathing: artificial respiration. Call a doctor and tell him the exactly substance.

#### In case of skin contact

Take off immediately all contaminated clothes. Wash away with soap and water and rinse. Do NOT use solvents or thinners. If skin irritation continues, consult a doctor.

#### After eye contact

Remove contact lenses, keep eyelids open. Rinse open eye immediately with plenty of running water. Seek medical adivce if complaint continues.

#### Following ingestion

Drink water in small draught. Keep at rest. Do not induce vomiting. When swallowed immediately consult and show packing or label to physician.

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

Potential symptoms: Headache, dizziness, giddiness, skin irritation, eye iriitation and irritation to respiratory tract are possible.

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

No further relevant information available.

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

In case of fire: Use alcohol resistant foam, CO2, powders or water spray for extinction.

## Unsuitable extinguishing media

In case of fire: Do not use waterjet for extinction.

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

#### **Hazardous combustion products**

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

#### 5.3 Advice for firefighters

## **Special protective equipment for firefighters**

At a fire caused by the product a breathing apparatus with an independent source of air is to have ready and to use if necessary for the firefighting.

#### 5.4 Additional information

Cool endangered containers with water in case of fire. Do not allow run-off from fire-fighting to enter drains or water courses.

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. Keep away from ignition sources on account of the organic solvent content and air room well. Do not inhale vapours. Avoid contact with eyes and skin.

#### 6.2 Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations. Holding polluted washing water back and disposing of duly.

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

#### For cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous

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earth and place in container for disposal according to local regulations (see section 13). The areas concerned cleaning with a customary water based cleaning agent, not using organic solvents if possible.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling. You find information about the safety equipment of persons in the section 8, information about the refuse disposal in section 13.

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

### 7.1 Precautions for safe handling

#### **Protective measures**

Ensure a good ventilation in room and working area. Prevent the creation of inflammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the OEL (=Occupational Exposure Limit). Only use the material in places where open light, fire and other flammable sources can be kept away. For personal protection see Section 8. Avoid contact with skin and eyes. Read label before use. Use only outdoors or in a well-ventilated area.

#### Measures to prevent fire

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Avoid concentrations which form ignitable or explosive vapour and air mixtures. Likewise, avoid any concentration of vapour above the MAC-valve. Keep away from ignition sources - No smoking. Ground/bond container and receiving equipment. Use explosion-proof pipes, electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

#### Measures to prevent aerosol and dust generation

Do not breathe gas or spray.

#### Advices on general occupational hygiene

While working do not eat , drink or smoke. Wash hands and face before breaks and after work and take a shower if necessary. Immediately remove all contaminated clothing.

## 7.2 Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Electrical equipment should be protected to the appropriate standard. Floors should be of the conducting type. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Do not store the product in lounge room. Keep only in the original container. Keep out of the reach of children. Store in a well-ventilated place. Keep cool.

#### Hints on joint storage

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. Store away from foodstuffs.

Storage class (TRGS 510): 3

#### **Further information on storage conditions**

Keep container tightly sealed. Store at 5°-35°C. Containers should be kept dry and sealed.

#### 7.3 Specific end use(s)

For using the product observe the information in the Technical data sheet of the product.

#### **Industrial sector specific solutions**

**GISCODE:** Product code in accordance with GISBAU (hazardous materials information system of the German professional associations of the building and construction industry) for colours and varnishes (GISCODE): BSL20

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

#### 8.1 Control parameters

#### Occupational exposure limit values

HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS Limit value type (country of origin): TRGS 900 ( D )

Parameter: Group limit for the calculation of the occupational exposure limit for hydrocarbon

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mixtures (see section 2.9 of Technical Rule 900).

Limit value: 300 ma/m<sup>3</sup>

Version:

HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS Limit value type (country of origin): TRGS 900 ( D )

Group limit for the calculation of the occupational exposure limit for hydrocarbon

Parameter: mixtures (see section 2.9 of Technical Rule 900).

Limit value: 300 mg/m<sup>3</sup>

Version:

HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

Limit value type (country of origin): TRGS 900 ( D )

Group limit for the calculation of the occupational exposure limit for hydrocarbon

Parameter: mixtures (see section 2.9 of Technical Rule 900).

Limit value: 300 mg/m<sup>3</sup>

Version:

Short time value (STEL): Excess factor 2 (II) according to the german TRGS 900. Taking into account the details mentioned in the TRGS 900 for the supervision of AGW.

#### 8.2 Exposure controls

#### **Appropriate engineering controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn. Observe data available of section 7.

## Personal protection equipment

#### **Eve/face protection**

Use protection glasses in case of spattering.

#### Skin protection

#### Hand protection

At use as agreed a protective gloves from nitrile rubber, tested according to EN 374, with a material thickness 0,38 mm has to be used. Notes of the manufacturer have to be taken into account. Penetration time of the glove

By longer or repeated contact the penetration times can be considerably shorter. The protective gloves should replaced after the first wear out or a damage of the gloves. Gloves of cotton should be used under the gloves of polychloropren or nitrile rubber. After washing hands replace lost skin fat by fat containing skin creams.

#### **Body protection**

Using protective clothing. If the product must sprayed, use a disposable protective suit.

#### Respiratory protection

Breathing protection equipment is not required in good ventilated places. A respiratory protection (combination filter A2-P3) is required by inadequate ventilation and by spray application. Do not breathe gas or spray.

Avoid contact with eyes and skin. Immediately remove all contaminated clothing. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Ensure a good ventilation in room and working area. Do not breathe gas or spray.

#### Environmental exposure controls

The product should not reach waters and the ground. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

### **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties **Appearance**

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Physical state: Liquid.

**Colour:** conformable to product designation.

#### **Odour**

Poor, characteristic.

#### **Safety characteristics**

Melting point/freezing point: No data available (1013 hPa) Initial boiling point and boiling (1013 hPa) 150 - 200 range: **Decomposition temperature:** (1013 hPa) No data available °C Flash point : 41 Auto-ignition temperature : 200 °C Lower explosion limit: 0,6 Vol-% Upper explosion limit: 7 Vol-% Vapour pressure: (50°C) 13 hPa (20°C) Density: 1,1 - 1,15 a/cm3 approx. Solvent separation test : (20°C) ( 20 °C ) practically insoluble Water solubility:

pH: not applicable log P O/W: No data available

Flow time: (20 °C) No data available DIN-cup 4 mm

**Viscosity:** ( 20 °C ) thixotropic

Kinematic viscosity :  $(40 \, ^{\circ}\text{C})$  >  $20,5 \, \text{mm}^2/\text{s}$ Relative vapour density :  $(20 \, ^{\circ}\text{C})$  No data available

**VOC-value :** max. 500 g/l

**Flammable liquids :** The product is ignitable.

Particle Characterics : not applicable

#### 9.2 Other information

Other physical and chemical data have not been determined.

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

## 10.1 Reactivity

No dangers connected by a possible reactivity of the product are known to proper handling and storage.

#### 10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

#### 10.3 Possibility of hazardous reactions

Vapours can form explosive mixtures with air.

#### 10.4 Conditions to avoid

To avoid formation of ignitable vapour and air mixtures ensure good ventilation (inter alia extraction system). Keep away from frost, heat and direct sunlight.

Cleaning cloths saturated with solvent can ignite themselves. Therefore ensure safe disposal of waste.

#### 10.5 Incompatible materials

No dangerous reaction known. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

#### 10.6 Hazardous decomposition products

No dangerous decomposition product are known if stored and handled correctly. When exposed to high temperatures or in case of fire hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen, may produced.

## **SECTION 11: Toxicological information**

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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#### **Acute toxicity**

Acute toxicity:

- Acute oral toxicity: No data available; - Acute dermal toxicity: No data available; - Acute inhalation toxicity: No data available.

**Acute oral toxicity** 

Parameter: ATEmix calculated

Exposure route: Oral Effective dose: not relevant

LD50 ( HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS ) Parameter:

Exposure route: Species: Rat

Effective dose: > 5000 mg/kg

Parameter: LD50 ( HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS )

Exposure route: Oral Species: Rat

Effective dose: > 5000 mg/kg

LD50 ( HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, < 2% Parameter:

AROMATICS )

Exposure route: Oral Species: Rat

Effective dose: > 5000 mg/kg

Acute dermal toxicity

Parameter: ATEmix calculated

Exposure route: Dermal Effective dose: not relevant

LD50 ( HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS ) Parameter:

Exposure route: Dermal Species: Rabbit Effective dose: > 5000 mg/kg

Parameter: LD50 ( HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS )

Dermal Exposure route: Species: Rabbit Effective dose: > 5000 mg/kg

LD50 ( HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, < 2% Parameter:

AROMATICS )

Exposure route: Dermal Species: Rabbit Effective dose: > 5000 mg/kg

Acute inhalation toxicity

ATEmix calculated Parameter: Inhalation (vapour) Exposure route: Effective dose: not relevant

Parameter: LC50 ( HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS )

Exposure route : Inhalation Species: Rat  $> 5000 \text{ mg/m}^3$ Effective dose:

Exposure time:

Parameter: LC50 ( HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS )

Exposure route: Inhalation Species: Rat Effective dose:  $> 5000 \text{ mg/m}^3$ 

Exposure time:

Parameter: LC50 ( HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, < 2%

AROMATICS )

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Exposure route: Inhalation
Species: Rat
Effective dose: > 4,951 mg/l

Exposure time: 4 h

#### Corrosion

Irritation:

- To the skin: Repeated exposure may cause skin dryness or cracking.
- At the eye: May cause mild, short-lasting discomfort to eyes.
- Respiratory tract: Irritation of the respiratory tract possible.

#### Respiratory or skin sensitisation

A sensitizing effect by the product is not known.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The product is not classified as human germ cell mutagenic, carcinogenic or human reproductive toxic (CMR effects).

#### STOT-single exposure

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation, kidneys and liver damages, as well as leading the impairment of the central nervous system.

Symtoms and signs include headache: dizzines, fatique, muscular weakness, drowsiness and in extreme cases loss of consciouness.

The liquid splached in the eyes may cause irritation and reversible demage.

#### **STOT-repeated exposure**

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

#### Aspiration hazard

The product contains substances, which are classified as apiration toxicity, category 1 (May be fatal if swallowed and enters airways), in accordance to the Regulation (EC) No. 1272/2008 (CLP-Regulation) in there pure form. Based on available data the classification criteria according to Regulation (EC) No 1272/2008 [CLP] are not fulfilled.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605.

## Other adverse effects

This product is unlikely to harm health, given normal and proper handling and hygenic precautions.

#### **Additional information**

The product is classified in toxicological terms on the basis of the results of the calculation procedure outlined within the Regulation (EC) No 1272/2008 (CLP-Regulation), listed in sections 2 and 3.

At proper dealing and use as agreed the product does not cause any effects bad for health after our experiences and the information submitted to us.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

#### Aquatic toxicity

#### Acute (short-term) fish toxicity

Parameter: NOELR ( HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS )

Species: Pseudokirchneriella subcapitata

Effective dose: 1000 mg/l Exposure time: 72 h

Parameter: NOELR ( HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS )

Species: Daphnia magna (Big water flea)

Effective dose : < 1 mg/l Exposure time : <1 D

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Parameter: NOELR ( HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS )

Species: Pseudokirchneriella subcapitata

Effective dose: 1000 mg/l Exposure time: 72 h

Parameter: NOELR ( HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS )

Species: Daphnia magna (Big water flea)

Effective dose : > 1 mg/l Exposure time : 21 D

Acute (short-term) toxicity to algae and cyanobacteria

Parameter: EL0 ( HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS )

Species: Daphnia magna (Big water flea)

Effective dose : 1000 mg/l

Exposure time: 48 h

Parameter: EL0 ( HYDROCARBONS, C10-C12, ISOALKANES, < 2% AROMATICS )

Species: Pseudokirchneriella subcapitata

Effective dose: 1000 mg
Exposure time: 72 h

Parameter: EL0 ( HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS )

Species: Daphnia magna (Big water flea)

Effective dose : 1000 mg/l Exposure time : 48 h

Parameter: EL0 ( HYDROCARBONS, C11-C12, ISOALKANES, < 2% AROMATICS )

Species: Pseudokirchneriella subcapitata

Effective dose : 1000 mg/l Exposure time : 72 h

Parameter: EL0 ( HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, < 2%

AROMATICS )

Species: Daphnia magna (Big water flea)

Effective dose : 1000 mg/l Exposure time : 48 h

Parameter: EL0 ( HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, < 2%

AROMATICS )

Species: Pseudokirchneriella subcapitata

Effective dose : 1000 mg/l Exposure time : 72 h

### 12.2 Persistence and degradability

These are not data avaible about the potential of the product concerning his persistency and degradability.

#### 12.3 Bioaccumulative potential

These are not data availble about the bio accumulation potential of the product.

## 12.4 Mobility in soil

These are not datas availble about the potential of the product concerning his mobility in the ground.

A penetrating into soil, waters and sewage system should be prevented.

#### 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6 Endocrine disrupting properties

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605.

#### 12.7 Other adverse effects

Harmful to aquatic life, may cause long-term adverse effects in the aquatic environment.

## 12.8 Additional ecotoxicological information

Avoid exposing into ground, waterways and drainage.

The classification of the product is based on summation of classified components according to the Regulation (EC) No 1272/2008 (CLP-Regulation). See details in sections 2 and 3.

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#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

## **Directive 2008/98/EC (Waste Framework Directive)**

#### Before intended use

Dispose of contents/container to approved disposal company or local collection according to the local regulations. Packaging with not dry uped residues have to droped at official collecting sites. Packaging with dry uped residues can be disposed together with household garbage or building site garbage. Do not empty into waters or drains.

#### Waste codes/waste designations according to EWC/AVV

For the product:

Disposal-definition No.:  $08\ 01\ 11^*$  - Paint and varnish waste which contains organic solvents or other dangerous substances.

#### After intended use

Only empty packaging can be transfered to recycling. Uncleaned packaging must be disposed of in the same manner as the medium.

#### Waste codes/waste designations according to EWC/AVV

For the uncleaned packaging:

Disposal-definition No.:  $15\ 01\ 10$  \* packings which contain dangerous substances or are polluted by dangerous substances.

## **SECTION 14: Transport information**

#### 14.1 UN number

UN 1263

### 14.2 UN proper shipping name

Land transport (ADR/RID)

PAINT

Sea transport (IMDG)

**PAINT** 

Air transport (ICAO-TI / IATA-DGR)

PAINT

#### 14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es): 3
Classification code: F1
Hazard identification number (Kemler
No.): 30
Tunnel restriction code: D/E

**Special provisions:** LQ 5 | Eq. 1 Transport in containers with max. 450 litres contents are not

subject to the regulations of ADR/RID.

Hazard label(s):

Sea transport (IMDG)

**Class(es):** 3 **EmS-No.:** F-E / <u>S-E</u>

**Special provisions :** LQ  $5 \mid \cdot \mid E \mid 1 \cdot \mid IMDG \mid 2.3.2.5 \mid ( <= 450 \mid )$ 

Hazard label(s): 3
Air transport (ICAO-TI / IATA-DGR)
Class(es): 3
Special provisions: E 1
Hazard label(s): 3

14.4 Packing group

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#### 14.5 Environmental hazards

Land transport (ADR/RID): No Sea transport (IMDG): No

Air transport (ICAO-TI / IATA-DGR): No

#### 14.6 Special precautions for user

None

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant because the product in type of delivery does not transport in bulks according to the Internationa Maritime Organization (IMO) instruments.

## **SECTION 15: Regulatory information**

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

#### **EU** legislation

#### Authorisations and/or restrictions on use

#### **Restrictions on use**

## Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)

Use restriction according to REACH annex XVII, no.: 3

#### Other regulations (EU)

#### Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

 $\begin{array}{c} {\hbox{Product sub-category and VOC limiting values in accordance with appendix II, letter A of the guideline:} \\ \\ {\hbox{II}} \end{array}$ 

Category i, type Lb;

VOC limiting value of the category for 2010: 500 g/l.

This product contains max. 500 g/l VOC.

#### **National regulations**

#### Water hazard class

Classification according to AwSV - Class: 1 (Slightly hazardous to water)

#### **Additional information**

The product is not classified as a solid substance according to the criteria of the Penetrometer test (ADR, part 2, section 2.3.4) and also fulfils not the criteria for solid substances according to the TRwS 779 number 2.1.1. Maternity regulations and Young Persons Employment Act are to take into account.

#### 15.2 Chemical Safety Assessment

A chemical safety assessments was not carried out.

## **SECTION 16: Other information**

#### 16.1 Indication of changes

15. Water hazard class

### 16.2 Abbreviations and acronyms

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des merchandises dangereuses par route)

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany) AOX: Adsorbable Organic halogen compounds

ATEmix: Calculated acute toxicity estimate of mixture

BCF: Bio-Concentration Factor CAS: Chemical Abstract Service

CLP: Classification, Labelling and Packaging

CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction

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



**Trade name :** Radiator Enamel 990 Heizkörperlack 990

**Revision date:** 16.03.2022 **Version (Revision):** 20.0.0 (19.0.0)

**Print date :** 16.03.2022

CSR: Chemical Safety Report DNEL: Derived No Effect Level EC: European Commission EC50: Effective Concentration 50% ECHA: European Chemical Agency EEC: European Economic Community

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

EWC: European Waste Catalogue

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

IC50: Inhibition Concentration 50%

IMDG Code: International Maritime Dangerous Goods Code

IMO: International Maritime Organization

LC50: Lethal concentration 50%

LD50: Lethal Dose 50%

LOAEL: Lowest Observed Adverse Effect Level

LOEL: Lowest observable effect level

MAK: Treshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG)

MARPOL: Convention for the Preventation of Marine Pollution from Ships

MVZ: molar ratio n.a.: Not applicable n.d.: Not determined n.r.: Not relevant NLP: No Longer Polymers

NOAEC: No Observed Adverse Effect Concentration

NOAEL: No Observed Adverse Effect Level NOEC: No Observed Effect Concentration NOEL: No Observed Effect Level OEL: Occupational Exposure Limit PBT: Persistent, bioaccumulative, toxic PNEC: Predicted No Effect Concentration RCP: Reciprocal calculation procedure

REACH: Registration, Evaluation and Authorization of Chemical)

RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant

le transport de marchandises dangereuses par chemin de fer)

STEL: Short-term Exposure Limit SVHC: Substance of Very High Concern

TLV - TWA: Threshold Limit Value - Time Weighed Average

VOC: Volatile Organic Compounds

vPvB: Very persistent, very bioaccumulative.

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

None

# $^{16.4}$ Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The evaluation of hazard information of the product was carried out in accordance to Annex I of the REGULATION (EC) No 1272/2008 (CLP Regulation).

#### 16.5 Relevant H- and EUH-phrases (Number and full text)

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.
H351i Suspected of causing cancer if inhaled.
H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

## 16.6 Training advice

None

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



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**Revision date :** 16.03.2022 **Version (Revision) :** 20.0.0 (19.0.0)

**Print date :** 16.03.2022

#### 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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