

Safety Data Sheet for:

16xxx Cramer Repair-Kit

This Kit contains: 17080 Cramer Repair Spray 50ml
 20010 Cramer Filler 30g
 21010 Cramer Hardener 8g

1 Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: **Repair-Spray 50 ml**

· Article number: 17000 - 17999

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

· Application of the substance / the mixture *Lacquer*

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Cramer GmbH

Salzstrasse 8 A

D-85622 Feldkirchen

Tel.: +49(0)89-99909770

Fax.: +49(0)89-99909777

E-Mail: info@cramer-gmbh.de

www.cramer-gmbh.de

· Further information obtainable from:

QHSE Department

Department Product Safety

· 1.4 Emergency telephone number:

+49(0)89 99909770

(Mo-Do 08:00 -16:00 Uhr, Fr 08:00-12:00 Uhr)

2 Hazards identification

· 2.1 Classification of the substance or mixture

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



GHS02 flame

Flam. Aerosol 1 H222-H229. Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36: Irritating to eyes.



F+; Extremely flammable

R12: Extremely flammable.

R66-67: Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Warning! Pressurized container.

Has a narcotizing effect.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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· 2.2 Label elements**· Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms

GHS02 GHS07

· Signal word Danger**· Hazard-determining components of labelling:***n*-butyl acetate**· Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

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

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P260 Do not breathe spray.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents / container in accordance with regional regulations.

· Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

Buildup of explosive mixtures possible without sufficient ventilation.

· 2.3 Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

3 Composition/information on ingredients

· 3.2 Chemical characterization: Mixtures**· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous components:**

CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	<i>n</i> -butyl acetate R10-66-67 ☠ Flam. Liq. 3, H226; ☠ STOT SE 3, H336	25-<50%
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49	acetone ☠ Xi R36; ☠ F R11 R66-67 ☠ Flam. Liq. 2, H225; ☠ Eye Irrit. 2, H319; STOT SE 3, H336	25-<50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane ☠ F+ R12 ☠ Flam. Gas 1, H220; Press. Gas, H280	5-<10%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane ☠ F+ R12 ☠ Flam. Gas 1, H220; Press. Gas, H280	5-<10%

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CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate R10 ⚠ Flam. Liq. 3, H226	2.5-<5.0%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27	isobutane 🔥 F+ R12 ⚠ Flam. Gas 1, H220; Press. Gas, H280	2.5-<5.0%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 02-2119752448-30	xylene, mixture of isomers ☒ Xn R20/21; ☒ Xi R38 R10 ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	<2.5%
CAS: 64742-94-5 EINECS: 265-198-5 Reg.nr.: 01-2119510128-50	Solvent naphtha (petroleum), heavy arom. ☒ Xn R65 ⚠ Asp. Tox. 1, H304	<2.5%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 02-2119752543-38 01-2119457558-25	propan-2-ol ☒ Xi R36; 🔥 F R11 R67 ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	<2.5%
CAS: 64742-95-6 EINECS: 265-199-0 Reg.nr.: 01-2119486773-24	Solvent naphtha (petroleum), light arom. ☒ Xn R65; ☒ Xi R37; 🌿 N R51/53 R10-66-67 ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; 🐟 Aquatic Chronic 2, H411; ⚠ STOT SE 3, H335-H336	≤0.5%

Additional information:

The content of Benzene (EINECS-Nr. 200-753-7) in the ingredients is less than 0,1% (Note P Annex 1 67/548 EU), so the classification as carcinogen need not to apply.

For the wording of the listed risk phrases refer to section 16.

4 First aid measures**4.1 Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

5 Firefighting measures**5.1 Extinguishing media**

· **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:**

Water

Water with full jet

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters -**

· **Protective equipment:** No special measures required.

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6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
Do not allow product to reach sewage system or any water course.
- **6.3 Methods and material for containment and cleaning up:**
Do not flush with water or aqueous cleansing agents
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Storage class:** 2B
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:

123-86-4 n-butyl acetate

WEL ()	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
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67-64-1 acetone

WEL ()	Short-term value: 3620 mg/m ³ , 1500 ppm Long-term value: 1210 mg/m ³ , 500 ppm
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106-97-8 butane

WEL ()	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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108-65-6 2-methoxy-1-methylethyl acetate

WEL () Short-term value: 548 mg/m³, 100 ppm
Long-term value: 274 mg/m³, 50 ppm
Sk

1330-20-7 xylene, mixture of isomers

WEL () Short-term value: 441 mg/m³, 100 ppm
Long-term value: 220 mg/m³, 50 ppm
Sk; BMGV

67-63-0 propan-2-ol

WEL () Short-term value: 1250 mg/m³, 500 ppm
Long-term value: 999 mg/m³, 400 ppm

· Ingredients with biological limit values:**1330-20-7 xylene, mixture of isomers**

BMGV () 650 mmol/mol creatinine
Medium: urine
Sampling time: post shift
Parameter: methyl hippuric acid

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls**· Personal protective equipment:****· General protective and hygienic measures:**

-
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.

· Respiratory protection:

- Not necessary if room is well-ventilated.
- Otherwise, filter class A / P2 or self contained.

· Protection of hands:

Protective gloves

Solvent resistant gloves

In case of contact with spray dust protective gloves made of butyl should be used (min. 0.4 mm thick), e.g. KCL Camatril, article no. 898 or similar products

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves Butyl rubber, BR**· Penetration time of glove material**

Butyl rubber gloves with a thickness of 0.4 mm are resistant to:

- Acetone: 480 min
- Butyl acetate: 60 min
- Ethyl acetate: 170 min
- Xylene: 42 min

· Eye protection: Safety glasses

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9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Aerosol
· Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Not applicable, as aerosol.

· Flash point: Not applicable, as aerosol.

· Flammability (solid, gaseous): Not applicable.

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: In use, may form flammable/explosive vapour-air mixture.

· Explosion limits:

· Lower:	1.2 Vol %
· Upper:	13.0 Vol %

· Vapour pressure at 20 °C: 233 hPa

· Density at 20 °C:	0.85 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

· Dynamic:	Not determined.
· Kinematic:	Not determined.

· Solvent content:

· VOC-(EU)	---
	712.8 g/l

· 9.2 Other information: No further relevant information available.

10 Stability and reactivity

· 10.1 Reactivity

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions: No dangerous reactions known.

· 10.4 Conditions to avoid: No further relevant information available.

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

67-64-1 acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

Vapours have narcotic effect.

12 Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
15 01 04	metallic packaging
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name · ADR · IMDG · IATA	UN1950 AEROSOLS AEROSOLS AEROSOLS, flammable
· 14.3 Transport hazard class(es) · ADR	
	
· Class · Label	2 5F Gases. 2.1
· IMDG, IATA	
	
· Class · Label	2.1 2.1
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Gases. - F-D,S-U
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Transport category · Tunnel restriction code	1L 2 D
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture .
- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· **Relevant phrases**

- H220 *Extremely flammable gas.*
 H225 *Highly flammable liquid and vapour.*
 H226 *Flammable liquid and vapour.*
 H280 *Contains gas under pressure; may explode if heated.*
 H304 *May be fatal if swallowed and enters airways.*
 H312 *Harmful in contact with skin.*
 H315 *Causes skin irritation.*
 H319 *Causes serious eye irritation.*
 H332 *Harmful if inhaled.*
 H335 *May cause respiratory irritation.*
 H336 *May cause drowsiness or dizziness.*
 H411 *Toxic to aquatic life with long lasting effects.*
 R10 *Flammable.*
 R11 *Highly flammable.*
 R12 *Extremely flammable.*
 R20/21 *Harmful by inhalation and in contact with skin.*
 R36 *Irritating to eyes.*
 R37 *Irritating to respiratory system.*
 R38 *Irritating to skin.*
 R51/53 *Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*
 R65 *Harmfull: may cause lung damage if swallowed*
 R66 *Repeated exposure may cause skin dryness or cracking.*
 R67 *Vapours may cause drowsiness and dizziness.*

· **Department issuing MSDS: Laboratory**

· **Contact: Anwendungstechnik**

· **Abbreviations and acronyms:**

- RID: *Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*
 ICAO: *International Civil Aviation Organization*
 ADR: *Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*
 IMDG: *International Maritime Code for Dangerous Goods*
 IATA: *International Air Transport Association*
 GHS: *Globally Harmonized System of Classification and Labelling of Chemicals*
 EINECS: *European Inventory of Existing Commercial Chemical Substances*
 ELINCS: *European List of Notified Chemical Substances*
 CAS: *Chemical Abstracts Service (division of the American Chemical Society)*
 VOC: *Volatile Organic Compounds (USA, EU)*
 LC50: *Lethal concentration, 50 percent*
 LD50: *Lethal dose, 50 percent*

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1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: Repair-Kit / Filler 30 g**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Knife filler/ Surfacer
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Cramer GmbH
Salzstrasse 8 A
85622 Feldkirchen
Tel.: +49(0)89 99909 770
Fax.: +49(0)89 99909 7777
E.Mail: info@cramer-gmbh.de
www.cramer-gmbh.de
- **1.4 Emergency telephone number:**
+49 (0)89 99909770
(Mo-Do 08:00 - 16:00 Uhr, Fr 08:00 - 12:00 Uhr)

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

R10: Flammable.

- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

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Trade name: Repair-Kit / Filler 30 g

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· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

styrene

· **Hazard statements**

H226 *Flammable liquid and vapour.*

H315 *Causes skin irritation.*

H319 *Causes serious eye irritation.*

H372 *Causes damage to organs through prolonged or repeated exposure.*

· **Precautionary statements**

P101 *If medical advice is needed, have product container or label at hand.*

P102 *Keep out of reach of children.*

P103 *Read label before use.*

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

P241 *Use explosion-proof electrical/ventilating/lighting/equipment.*

P260 *Do not breathe dust/fume/gas/mist/vapours/spray.*

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

P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Additional information:**

Exemptions according to CLP-Regulation 1.5.2.1., Labelling of packages where the contents do not exceed 125 ml, have been used.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

· **vPvB:** *Not applicable.*

3 Composition/information on ingredients

· **3.2 Chemical characterization: Mixtures**

· **Description:** *Mixture of substances listed below with nonhazardous additions.*

· **Dangerous components:**

CAS: 100-42-5	styrene	10-<12.5%
EINECS: 202-851-5	Xn R20; Xi R36/38 R10	
	Flam. Liq. 3, H226; STOT RE 1, H372; Asp. Tox. 1, H304; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

· **Additional information:** *For the wording of the listed risk phrases refer to section 16.*

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Trade name: Repair-Kit / Filler 30 g

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4 First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:** 3
- **7.3 Specific end use(s)** No further relevant information available.

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Trade name: Repair-Kit / Filler 30 g

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8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

100-42-5 styrene

WEL	Short-term value: 1080 mg/m ³ , 250 ppm
	Long-term value: 430 mg/m ³ , 100 ppm

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

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according to 1907/2006/EC, Article 31

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Trade name: Repair-Kit / Filler 30 g

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Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	145 °C
· Flash point:	31 °C (DIN 53213)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	480 °C (DIN 51794)
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.2 Vol %
Upper:	8.9 Vol %
· Vapour pressure at 20 °C:	6 hPa
· Density at 20 °C:	1.767 g/cm ³ (DIN 53217)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic at 20 °C:	115000 mPas
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	12.8 %
VOC (EC)	20.0 g/l
 Solids content (weight-%):	87.2 %
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide

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Trade name: Repair-Kit / Filler 30 g

(Contd. of page 5)

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

100-42-5 styrene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)
Inhalative	LC50/4 h (Dämpfe)	11.8 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) : hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN3269
- **14.2 UN proper shipping name**
- **ADR** 3269 POLYESTER RESIN KIT
- **IMDG, IATA** POLYESTER RESIN KIT

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Trade name: Repair-Kit / Filler 30 g

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· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 3 (FT3) Flammable liquids.
· **Label** 3

· **IMDG, IATA**



· **Class** 3 Flammable liquids.
· **Label** 3

· **14.4 Packing group**

· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Danger code (Kemler):**

-

· **EMS Number:**

F-E,S-D

· **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Transport category** 3

· **Tunnel restriction code** E

· **UN "Model Regulation":** UN3269, POLYESTER RESIN KIT, 3, III

15 Regulatory information

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

· **National regulations:**

Class	Share in %
NK	10-<25

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

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- H319 Causes serious eye irritation.*
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.
R10 Flammable.
R20 Harmful by inhalation.
R36/38 Irritating to eyes and skin.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· * Data compared to the previous version altered.

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according to 1907/2006/EC (REACH)

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

1.1 Product identifier

· Trade name: **Repair-Kit / Hardener 8 g**

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

No further relevant information available.

· Application of the substance / the mixture

Dibenzoyl peroxide, paste
Hardening agent/ Curing agent
Catalyst

1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

CRAMER GmbH
Salzstrasse 8 A
85622 Feldkirchen (Germany)
Tel. +49 (0)89 99909 770
Fax. +49 (0)89 99909 7777
e-mail: info@cramer-gmbh.de
www.cramer-gmbh.de

· Further information obtainable from: Laboratory

· 1.4 Emergency telephone number: Tel. +49 (0)89 99909 770 (Mo-Thursday 8:00-16:00, Friday 08:00-12:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Org. Perox. EF H242 Heating may cause a fire.
Aquatic Acute 1 H400 Very toxic to aquatic life.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R36: Irritating to eyes.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

O; Oxidising

R7: May cause fire.

N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The Dibenzoyl Peroxide is classified as Oxidizing because it's strongly desensitized by organic liquids and/or inert solid materials and/or water.

2.2 Label elements

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

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS02

GHS07

GHS09

· Signal word Warning

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Trade name: **Repair-Kit / Hardener 8 g**

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- **Hazard-determining components of labelling:**

dibenzoyl peroxide

- **Hazard statements**

H242 Heating may cause a fire.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

- **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P411+P235 Store at temperatures not exceeding 30 °C. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

Exemptions according to CLP-Regulation 1.5.2.1., Labelling of packages where the contents do not exceed 125 ml, have been used.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Components:**

CAS: 94-36-0 EINECS: 202-327-6 Index number: 617-008-00-0 Reg.nr.: 01-2119511472-50-XXXX	dibenzoyl peroxide ☒ Xi R36; ☒ Xi R43; ☒ E R3; ☒ O R7; ☒ N R50 ☒ Org. Perox. B, H241; ☒ Aquatic Acute 1, H400; ☒ Eye Irrit. 2, H319; Skin Sens. 1, H317	45-52%
CAS: 131-11-3 EINECS: 205-011-6 Reg.nr.: 01-2119437229-36-XXXX	dimethyl phthalate substance with a Community workplace exposure limit	25-35%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** Do not induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **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 agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

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

In case of fire, the following can be released:

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Carbonic anhydride (CO₂)

Carbon monoxide (CO)

Benzoic acid

Benzene

Biphenyl

Phenyl benzoate

Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters**· Protective equipment:**

Do not inhale explosion gases or combustion gases.

Mouth respiratory protective device.

Wear suitable fire protection equipment.

· Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures**· 6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Keep away from ignition sources.

Ensure adequate ventilation

· 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

· 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Do not allow to dry out

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage**· 7.1 Precautions for safe handling**

Use only in well ventilated areas.

Ensure good ventilation/exhaustion at the workplace.

Keep away from heat and direct sunlight.

Protect against electrostatic charges.

· Information about fire - and explosion protection:

Protect from heat.

Keep ignition sources away - Do not smoke.

Substance/product is oxidizing when dry.

· 7.2 Conditions for safe storage, including any incompatibilities**· Storage:****· Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Store only in the original receptacle.

· Information about storage in one common storage facility:

Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.

· Further information about storage conditions:

Keep container tightly sealed.

Prevent from drying out.

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area.

The product, stored in the original containers, away from sunlight, maintains its properties for 12 months from the delivery date.**· 7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

94-36-0 dibenzoyl peroxide

WEL (Great Britain)	Long-term value: 5 mg/m ³
PEL (USA)	Long-term value: 5 mg/m ³
REL (USA)	Long-term value: 5 mg/m ³
TLV (USA)	Long-term value: 5 mg/m ³

131-11-3 dimethyl phthalate

WEL (Great Britain)	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³
PEL (USA)	Long-term value: 5 mg/m ³
REL (USA)	Long-term value: 5 mg/m ³
TLV (USA)	Long-term value: 5 mg/m ³

· DNELs

94-36-0 dibenzoyl peroxide

Oral	DNEL/ Long term exposure- Systemic effects	1.65 mg/kg bw/d (general population)
Dermal	DNEL/ Long term exposure- Systemic effects	3.3 mg/kg bw/d (general population) 6.6 mg/kg bw/d (workers)
Inhalative	DNEL/ Long term exposure- Systemic effects	2.9 mg/m ³ (general population) 11.75 mg/m ³ (workers)

131-11-3 dimethyl phthalate

Oral	DNEL/ Long term exposure- Systemic effects	25 mg/kg bw/d (general population)
Dermal	DNEL/ Long term exposure- Systemic effects	60 mg/kg bw/d (general population) 100 mg/kg bw/d (workers)
Inhalative	DNEL/ Long term exposure- Systemic effects	86.96 mg/m ³ (general population) 293.86 mg/m ³ (workers)

· PNECs

94-36-0 dibenzoyl peroxide

PNEC/ STP	0.35 mg/l (sewage treatment plant)
PNEC/ sediment	0.338 mg/kg dw (freshwater) 0.0338 mg/kg dw (marine water)
PNEC/ soil	0.0758 mg/kg dw (-)
PNEC/aqua	0.602 mg/l (freshwater) 0.602 mg/l (intermittent releases) 0.0602 mg/l (marine water)

131-11-3 dimethyl phthalate

PNEC/ STP	4 mg/l (-)
PNEC/ sediment	1.403 mg/kg dw (freshwater)
PNEC/aqua	0.192 mg/l (freshwater) 0.39 mg/l (intermittent releases) 0.0192 mg/l (marine water)

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing

Do not inhale gases / fumes / aerosols.

Keep away from foodstuffs, beverages and feed.

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- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

- Neoprene gloves

- Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Light weight protective clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

- **General Information**

- **Appearance:**

- **Form:**

Pasty

- **Colour:**

Different according to colouring

- **Odour:**

Characteristic

- **Odour threshold:**

Not determined.

- **pH-value:**

Not determined.

- **Change in condition**

- **Melting point/Melting range:**

Undetermined.

- **Boiling point/Boiling range:**

Undetermined.

- **Flash point:**

Not applicable.

- **Flammability (solid, gaseous):**

May cause fire.

- **Ignition temperature:**

- **Decomposition temperature:**

Not determined.

SADT = 50 °C

The SADT (self-accelerating decomposition temperature) is an experimentally determined temperature at which the product, in its conventional packaging will decompose in a selfaccelerating reaction.

- **Self-igniting:**

Not determined.

- **Danger of explosion:**

Product does not present an explosion hazard.

- **Explosion limits:**

- **Lower:**

Not determined.

- **Upper:**

Not determined.

- **Vapour pressure:**

Not determined.

- **Density at 20 °C:**

1.1 g/cm³

- **Relative density**

Not determined.

- **Vapour density**

Not determined.

- **Evaporation rate**

Not determined.

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· Solubility in / Miscibility with · water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity: · Dynamic: · Kinematic:	Not determined. Not determined.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Exothermic thermal decomposition.
Visible decomposition with spontaneous ignition on heating.
SADT = 50 °C
SADT (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport.
A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT.
Contact with incompatible substances can cause decomposition at or below the SADT.
- **10.3 Possibility of hazardous reactions**
Reacts with reducing agents.
Reacts with heavy metals.
Reacts with alkali, amines and strong acids.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Reducing agents like amines, acids, alkali, compounds based on heavy metals (p.e. accelerators)
- **10.6 Hazardous decomposition products:**
Benzoic acid
Benzene
Biphenyl
Phenyl benzoate

* SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity:**

· LD/LC50 values relevant for classification:		
94-36-0 dibenzoyl peroxide		
Oral	LD0	5000 mg/kg (rat)
Inhalative	LC0	24.3 mg/l (rat)
131-11-3 dimethyl phthalate		
Oral	LD50	>2400 mg/kg (rat)
Dermal	LD50	> 10000 mg/kg (rabbit)

- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

No further relevant information available.

94-36-0 dibenzoyl peroxide

EC50 / 48h	0.110 mg/l (crustacea - <i>Daphnia magna</i>) (OECD TG 202)
ErC50 / 72h	0.0711 mg/l (algae - <i>Pseudokirchneriella subcapitata</i>) (OECD TG 201)
LC50 / 96h	0.0602 mg/l (fish - <i>Oncorhynchus mykiss</i>) (OECD TG 203)
M Factor	10 (-)

131-11-3 dimethyl phthalate

EC50 / 48h	52 mg/l (<i>daphnia</i>)
ErC50 / 72h	259.76 mg/l (algae)
LC50 / 96h	39 mg/l (fish)

12.2 Persistence and degradability

No further relevant information available.

94-36-0 dibenzoyl peroxide

Ready Biodegradability in water / 28d	68 % (-) (OCDE TGD301 D)
---------------------------------------	--------------------------

131-11-3 dimethyl phthalate

Ready Biodegradability in water / 28d	>91 % (-)
---------------------------------------	-----------

12.3 Bioaccumulative potential

No further relevant information available.

94-36-0 dibenzoyl peroxide

Log Kow	3.2 (-) (OECD TG 117)
---------	-----------------------

131-11-3 dimethyl phthalate

BCF	57 (fish)
Log Kow	2.12 (-)

12.4 Mobility in soil

No further relevant information available.

94-36-0 dibenzoyl peroxide

Log Koc	3.8 (-) (OCDE TGD 121)
---------	------------------------

131-11-3 dimethyl phthalate

Log Koc	1.57 (-)
---------	----------

Ecotoxicological effects:

- **Remark:** Very toxic for fish

Additional ecological information:

General notes:

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

12.6 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN3108
· 14.2 UN proper shipping name · ADR · IMDG · IATA	3108 ORGANIC PEROXIDE TYPE E, SOLID ORGANIC PEROXIDE TYPE E, SOLID, MARINE POLLUTANT ORGANIC PEROXIDE TYPE E, SOLID
· 14.3 Transport hazard class(es) · ADR, IATA	
	
· Class · Label	5.2 Organic peroxides. 5.2
· IMDG	
 	
· Class · Label	5.2 Organic peroxides. 5.2
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	Yes Symbol (fish and tree)
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Organic peroxides. - F-J,S-R
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
	If the catalyst (organic peroxide, class 5.2) is packaged in a kit with basic product (polyester resin, class 3, PG III), can be considered as polyester resin kit. Description of goods: <u>UN 3269, POLIESTER RESIN KIT</u> Class: 3 Limited Quantities (LQ): 5 L Packaging Group: III Transport category: 3 Tunnel restriction code: E EMS Number: F-E, S-D
· ADR · Limited quantities (LQ) · Transport category · Tunnel restriction code	500 g 2 D
· UN "Model Regulation":	UN3108, ORGANIC PEROXIDE TYPE E, SOLID, ENVIRONMENTALLY HAZARDOUS, 5.2

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GB

Safety data sheet
according to 1907/2006/EC (REACH)

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Trade name: **Repair-Kit / Hardener 8 g**

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SECTION 15: Regulatory information

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

· **National regulations:**

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **Other regulations, limitations and prohibitive regulations**

The data and the informations reported in the present Material Safety Data Sheet are consistent to the Directives 1967/548/EEC, 1999/45/EC, 76/769/EEC, to the Regulation 1907/2006/EC (REACH) and 1272/2008/CE (CLP) and to what prescribed by the in force regulation in matter of classification, packaging and labelling of dangerous substances and preparations. Finally, users should check and comply with specific national and local laws in matters of hazardous activities and environmental protection (e.g.: gassy, liquid and solid emissions) not specifically covered in this document. Compilation of Safety Data Sheet: Reg.UE n.453/2010 (amending Reg.EC n.1907/2006, Annex II)

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H241 Heating may cause a fire or explosion.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.

R36 Irritating to eyes.

R43 May cause sensitisation by skin contact.

R50 Very toxic to aquatic organisms.

R7 May cause fire.

· **Contact:** Cramer GmbH

· **Abbreviations and acronyms:**

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CLP: Classification, Labelling and Packaging

TLV: Threshold Limit Value

TLV-TWA: Threshold Limit Value - Time Weighted Average

TLV-STEL: Threshold Limit Value - Short Term Exposure Limit

IOELV: Indicative Occupational Exposure Limit Value

BEI: Biological Exposure Indices

LD50: Lethal dose, 50 percent

LC50: Lethal Concentration, 50 percent

Kow: Octanol-Water partition coefficient

BCF: BioConcentration Factor

LC50: LC50: Lethal Concentration, 50 percent

EC50: Effective Concentration, 50 percent

ErC50: Effective Concentration, 50 percent, growth rate

WGK: Wassergefährdungsklasse - Water hazard class [Germany]

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists [USA]

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· *** Data compared to the previous version altered.**