

# Material Safety Data Sheet according to 91/155/EEC - ISO 11014-1

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## PLASTIC REPAIR KIT

SDS no. : SET00023030H

V001.2

Revision: 06.02.2004

printing date: 12.05.2004

### 1. Identification of the substance/preparation and of the company/undertaking

**Trade name:**

PLASTIC REPAIR KIT

**Intended use:**

Primer

**Company name:**

Henkel Teroson GmbH  
69112 Heidelberg  
Phone: +4962217040  
Fax-no.: +496221705242

**Emergency information:**

In case of an emergency information will be available 24h under phone +49-(0)6221-7040

**Information office (content SDS):**

Product safety / TECO, Tel: +49-(0)6221-7040 Fax: +49-(0)6221-704698

### 2. Composition / information on ingredients

**General chemical description:**

Primer, containing solvents

**Base substances of preparation:**

Mixture of organic solvents

**Declaration of ingredients:**

<= 60	%	Xylene - mixture of isomeres
		EINECS 215-535-7
		CAS 1330-20-7
		Symbol Xn
		R-phrases R10, R20/21, R38
>= 25	%	Dimethylether
		EINECS 204-065-8
		CAS 115-10-6
		Symbol F+
		R-phrases R12



**Technologies**  
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< 1 %	Methyldimethoxysilylpropyl)ethylenediamine N-(3-(
	EINECS 221-336-6
	CAS 3069-29-2
	Symbol Xi
	R-phrases R41, R43

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### 3. Possible product risks

R12 Extremely flammable.

R18 In use, may form flammable/explosive vapour-air mixture.

R20/21 Harmful by inhalation and in contact with skin.

R38 Irritating to skin.

Container is pressurized.

The solvent vapors are heavier than air and may collect in high concentrations at floor level. In use, may form explosive or highly flammable vapor-air mixtures

May produce an allergic reaction.

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### 4. First-aid measures

**After inhalation:**

Fresh air, consult doctor if complaint persist.

**After skin contact:**

Rinse with running water and soap. Skin care. Change all contaminated clothing.

**After eye contact:**

Wash with plenty of water immediately and continue for several minutes, holding eyelid open. Consult a doctor.

**After ingestion:**

Do not induce vomiting, seek medical advice immediately.

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### 5. Fire-fighting measures

**Suitable extinguishing media:**

carbon dioxide, foam, powder, water spray jet, fine water spray

**Special protection equipment for fire-fighters:**

Wear self-contained breathing apparatus.

**Special hazards by the product itself:**

Cool aerosol containers with jet of water. Containers may explode.

**Combustion products or gases to be formed:**

Toxic and irritating vapors forming ignitable mixtures with air.

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### 6. Accidental release measures

**General information:**

Sort out leaking cans, spray until empty and destroy.

**Personal precautions:**

Don't breathe vapours or aerosole.

Avoid contact with skin and eyes.

Ensure adequate ventilation.

If vapors are generated, wear suitable respiratory equipment.



**Environmental precautions:**

Do not empty into drains / surface water / ground water.

**Process for cleaning and take-up:**

For mechanical removal use explosion-proof devices.

Wipe up using absorbent material and subject to waste incineration.

**7. Handling and storage**

**Handling:**

When using do not eat, drink or smoke.

Avoid skin and eye contact.

Ensure good ventilation/suction at the workplace.

Take measures to prevent the build-up of electrostatic charges.

Do not spray against flames or glowing bodies. Keep away from sources of ignition - no smoking.

Use explosion-proof equipment.

Avoid open flames.

**Storage:**

Store in a cool place.

Protect from direct sunlight and temperatures above 50°C. The storage regulations for aerosols apply.

Storage at 15 to 25°C is recommended.

**8. Exposure controls / personal protection**

**Components with specific control parameters for workplace:**

Valid for

Germany

Basis

Germany - Occupational Exposure Limits

Ingredient	ppm	mg/m <sup>3</sup>	Type	Category	Remarks
xylene	100	440	MAK:	4	
xylene			Skin designation:		Can be absorbed through the skin.
xylene	50	221	EU - Time Weighted Average (TWA).		
xylene	100	442	UK Short Term Exposure Limit (STEL):		
xylene			Skin designation:		Can be absorbed through the skin.
dimethyl ether	1.000	1.900	Relevant German exposure-limit for working place (MAK-value)	Short Term Exposure Limit (STEL) - category 4.	

**Respiratory protection:**

The product should only be used at workplaces with intensive ventilation/extraction. If intensive ventilation/extraction is not possible then self-contained independent respiratory protection should be worn

Use filter A if vapours/aerosols occur which may be inhaled.

**Hand protection:**

Use suitable protective gloves made of nitrile rubber or butyl rubber. Please observe the glove manufacturer's instructions on permeability and rupture times as well as the specific workplace conditions.

**Eye protection:**

Goggles which can be tightly sealed.



**Body protection:**

suitable protective clothing

**Advices to personal protection equipment:**

Use solvent-resistant skin protection cream.

**General protection and hygiene measures:**

Avoid contact with skin and eyes. Remove soiled or soaked clothing immediately. Wash off any dirt that gets onto the skin with plenty of water and soap, skin care.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Ensure adequate ventilation/vacuum off.

Use only in well-ventilated areas.

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## 9. Physical and chemical properties

**General characteristics**

Delivery state:	aerosol
State:	liquid
Odor:	aromatic
Color(s):	yellowish

**Phys./chem. properties:**

Density (20 °C)	0,72 g/cm <sup>3</sup>
Solubility (qualitative) (Solvent: water)	insoluble

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## 10. Stability and reactivity

**Conditions to avoid:**

None known if used to the intended purpose.

**Materials to avoid:**

None if used for intended purpose.

Pressure build-up in closed containers.

**Dangerous decomposition products:**

No decomposition if used according to specifications.

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## 11. Toxicological information

**General toxicological information:**

The present product is a chemical preparation within the meaning of the chemicals act. The following evaluation has been made on the basis of the toxicological data and content by weight of the individual ingredients.

Vapors may cause drowsiness and dizziness.

**Acute inhalative toxicity:**

Harmful by inhalation.

**Skin irritation:**

Primary skin irritation: irritating

**Sensitizing:**

An allergic reaction cannot be excluded after repeated skin contact.



## 12. Ecological information

### General ecological information:

Do not empty into drains, soil or bodies of water.

The product contains organic solvents which are insoluble in water. According to the requirements of the ATV regulations for the discharge of wastewater from commercial and industrial plant, organic solvents which are immiscible with water can only be discharged to an extent which corresponds to their solubility in water. The local discharge regulations take precedence.

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## 13. Disposal considerations

### Waste code(EWC):

080111

### Product disposal:

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

Special waste incineration or special disposal with the approval of the responsible local authority.

### Disposal of uncleaned packages:

Completely empty pressurized gas containers (including propellant gas).

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## 14. Transport information

### Road transport ADR:

Class:	2
Packaging group:	
Classification code:	5F
Hazard ident. number:	
UN no.:	1950
Label:	2.1
Technical name:	AEROSOLS

### Railroad transport RID:

Class:	2
Packaging group:	
Classification code:	5F
Hazard ident. number:	23
UN no.:	1950
Label:	2.1
Technical name:	AEROSOLS



**Inland water transport ADN:**

Class:	2
Packaging group:	
Classification code:	5F
Hazard ident. number:	
UN no.:	1950
Label:	2.1
Technical name:	AEROSOLS

**Marine transport IMDG:**

Class:	2.1
Packaging group:	
UN no.:	1950
Label:	2.1
EmS:	F-D
Seawater pollutant:	
Proper shipping name:	AEROSOLS

**Air transport IATA:**

Class:	2.1
Packaging group:	
Packaging instructions (passenger)	203
Packaging instructions (cargo)	203
UN no.:	1950
Label:	2.1
Proper shipping name:	Aerosols, flammable

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## 15. Regulations - classification and identification

**Symbols of danger:**

Xn - Harmful  
F+ - Extremely flammable

**Hazard trigger:**

Xylene - mixture of isomeres

**R-phrases**

R20/21 Harmful by inhalation and in contact with skin.  
R38 Irritating to skin.  
R18 In use, may form flammable/explosive vapour-air mixture.

**S-phrases :**

S3 Keep in a cool place.  
S47/49 Keep only in the original container at a temperature not exceeding 50 °C.  
S20/21 When using do not eat, drink or smoke.  
S24/25 Avoid contact with skin and eyes.  
S51 Use only in well-ventilated areas.



**Special declaration:**

Container is pressurized. Keep away from direct sunlight and temperatures over 50°C. Do not open by force or throw into fire even after use.

Do not spray onto flames or red-hot objects. Keep away from sources of ignition - no smoking. Keep out of the reach of children.

Can produce allergical reactions; contains Methyldimethoxysilyl)propyl)ethylenediamine N-(3-(

**National regulations/information:**

WGK: 2, water-endangering product. (German VwVwS of May 17, 1999 )  
Classification in conformity with the calculation method

Storage class VCI: 2B  
VOCV 814.018 VOC regulation CH 99 %

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**16. Other information**

Full text of the R-phrases indicated by codes in this safety data sheet. The product code/identification/designation is indicated in Section 15.

R20/21 Harmful by inhalation and in contact with skin.

R38 Irritating to skin.

R18 In use, may form flammable/explosive vapour-air mixture.

**Further information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.



# Material Safety Data Sheet according to 91/155/EEC - ISO 11014-1

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## PLASTIC REPAIR KIT

SDS no. : SET00023030H

V001.2

Revision: 06.02.2004

printing date: 12.05.2004

### 1. Identification of the substance/preparation and of the company/undertaking

**Trade name:**

PLASTIC REPAIR KIT

**Intended use:**

Cleaner

**Company name:**

Henkel Teroson GmbH  
69112 Heidelberg  
Phone: +4962217040  
Fax-no.: +496221705242

**Emergency information:**

In case of an emergency information will be available 24h under phone +49-(0)6221-7040

**Information office (content SDS):**

Product safety / TECO, Tel: +49-(0)6221-7040 Fax: +49-(0)6221-704698

### 2. Composition / information on ingredients

**Base substances of preparation:**

Hydrocarbon mixture, low aromatics

**Declaration of ingredients:**

>= 60	%	Naphtha, hydrotreated light, <0,1% benzene
		EINECS 265-151-9
		CAS 64742-49-0
		Symbol F, Xn, N
		R-phrases R11, R38, R51/53, R65, R67

### 3. Possible product risks

R18 In use, may form flammable/explosive vapour-air mixture.

R38 Irritating to skin.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.



**Technologies**  
Industrial Adhesives

#### 4. First-aid measures

**After inhalation:**

Supply of fresh air, mouth-to-mouth resuscitation if necessary, keep warm. If adverse health effects persist seek medical advice.

**After skin contact:**

Rinse with running water. Apply skin care product. Remove contaminated clothes immediately.

**After eye contact:**

Wash with plenty of water immediately and continue for several minutes, holding eyelid open. Consult a doctor.

**After ingestion:**

Seek medical advice immediately and show this container or label.

Do not induce vomiting, seek medical advice immediately.

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#### 5. Fire-fighting measures

**Suitable extinguishing media:**

carbon dioxide, foam, powder, water spray jet, fine water spray  
Sand

**Extinguishing media which must not be used for safety reasons:**

Water jet (solvent-containing product).

**Special protection equipment for fire-fighters:**

Wear self-contained breathing apparatus.

Wear protective equipment.

**Combustion products or gases to be formed:**

Toxic and irritating vapors forming ignitable mixtures with air.

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#### 6. Accidental release measures

**General information:**

Keep away from sources of ignition and naked flames.

Danger of slipping on escaped product.

**Personal precautions:**

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Don't breathe vapours or aerosole.

If vapors are generated, wear suitable respiratory equipment.

**Environmental precautions:**

Do not empty into drains / surface water / ground water.

Inform respective authorities in case product reaches water or sewage system.

**Process for cleaning and take-up:**

Remove with liquid-absorbing material (sand, peat, sawdust).

Dispose of contaminated material as waste according to item 13.

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## 7. Handling and storage

### Handling:

- Ensure good ventilation/suction at the workplace.
- Avoid skin and eye contact.
- Take measures to prevent the build-up of electrostatic charges.
- Use explosion-proof equipment.
- Do not spray against flames or glowing bodies. Keep away from sources of ignition - no smoking.
- Avoid open flames.
- If ignition sources are present, there is danger of fire breaking out and spreading.

### Storage:

- Store in a cool, well-ventilated place.
- Storage at 15 to 25°C is recommended.

## 8. Exposure controls / personal protection

### Components with specific control parameters for workplace:

Valid for

Germany

Basis

Germany - Occupational Exposure Limits

Ingredient	ppm	mg/m <sup>3</sup>	Type	Category	Remarks
hydrocarbon mix, free of aromatics	200	1.000			Group 1, See TRGS 901, Explanations and Basis for Exposure Limits in the Workplace Air, Part II Number 22.
hydrocarbon mix, free of aromatics	200	1.000	MAK:	4	

### Respiratory protection:

The product should only be used at workplaces with intensive ventilation/extraction. If intensive ventilation/extraction is not possible then self-contained independent respiratory protection should be worn  
Filter A1-A3 (brown)

### Hand protection:

Use suitable protective gloves made of nitrile rubber or butyl rubber. Please observe the glove manufacturer's instructions on permeability and rupture times as well as the specific workplace conditions.  
Perforation time: >120 minutes

### Eye protection:

Goggles which can be tightly sealed.

### Body protection:

suitable protective clothing

### Advices to personal protection equipment:

Use solvent-resistant skin protection cream.

### General protection and hygiene measures:

Avoid contact with skin and eyes. Remove soiled or soaked clothing immediately. Wash off any dirt that gets onto the skin with plenty of water and soap, skin care.  
Do not eat, drink or smoke while working.  
Wash hands before work breaks and after finishing work.  
Use only in well-ventilated areas.  
Ensure adequate ventilation/vacuum off.



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## 9. Physical and chemical properties

### General characteristics

State:	thin, fine, liquid
Odor:	of petrol
Color(s):	colorless

### Phys./chem. properties:

Boiling point (1.013 hPa)	85 °C
Flash point	-15,5 °C
Vapor pressure (20 °C)	85 hPa
Density (20 °C)	0,705 g/cm <sup>3</sup>
Flow cup viscosity (23 °C; ; Nozzle: 4 mm)	9 s
Solubility (qualitative) (Solvent: water)	insoluble
Explosion limit lower [vol%]	1 %(V)
upper [vol%]	7 %(V)

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## 10. Stability and reactivity

### Conditions to avoid:

None known if used to the intended purpose.

### Materials to avoid:

Reacts with strong oxidants.

### Dangerous decomposition products:

No decomposition if used according to specifications.

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## 11. Toxicological information

### General toxicological information:

The present product is a chemical preparation within the meaning of the chemicals act. The following evaluation has been made on the basis of the toxicological data and content by weight of the individual ingredients.

Health hazard: may damage lungs if swallowed.

Vapors may cause drowsiness and dizziness.

### Skin irritation:

Primary skin irritation: irritating

Prolonged or repeated skin contact can lead to skin degreasing and hence to skin irritation.



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## 12. Ecological information

### General ecological information:

Toxic to aquatic organisms

May cause long-term adverse effects in the aquatic environment

Do not empty into drains, soil or bodies of water.

The product contains hydrocarbons. According to the requirements of the ATV regulations (Worksheet 105) for the discharge of wastewater from commercial and industrial plant into a public sewage treatment plant, hydrocarbons (according to DIN 38 409 P 18) can only be discharged to a maximum of 20 mg/l. The local discharge regulations take precedence.

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## 13. Disposal considerations

### Waste code(EWC):

140603

### Product disposal:

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

Special waste incineration or special disposal with the approval of the responsible local authority.

### Disposal of uncleaned packages:

Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

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## 14. Transport information

### Road transport ADR:

Class:	3
Packaging group:	II
Classification code:	F1
Hazard ident. number:	33
UN no.:	1268
Label:	3
Technical name:	PETROLEUM DISTILLATES, N.O.S.
Additional Information:	Special provision 640D

### Railroad transport RID:

Class:	3
Packaging group:	II
Classification code:	F1
Hazard ident. number:	33
UN no.:	1268
Label:	3
Technical name:	PETROLEUM DISTILLATES, N.O.S.
Additional Information:	Special provision 640D



**Inland water transport ADN:**

Class:	3
Packaging group:	II
Classification code:	F1
Hazard ident. number:	33
UN no.:	1268
Label:	3
Technical name:	PETROLEUM DISTILLATES, N.O.S.
Additional Information:	Special provision 640D

**Marine transport IMDG:**

Class:	3
Packaging group:	II
UN no.:	1268
Label:	3
EmS:	F-E
Seawater pollutant:	
Proper shipping name:	PETROLEUM DISTILLATES, N.O.S.

**Air transport IATA:**

Class:	3
Packaging group:	II
Packaging instructions (passenger)	305
Packaging instructions (cargo)	307
UN no.:	1268
Label:	3
Proper shipping name:	Petroleum distillates, n.o.s.

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## 15. Regulations - classification and identification

**Symbols of danger:**

Xn - Harmful  
F - Highly flammable  
N - Dangerous for the environment

**Hazard trigger:**

Naphtha, hydrotreated light, <0,1% benzene

**R-phrases**

R38 Irritating to skin.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness.



**S-phrases :**

- S16 Keep away from sources of ignition - No smoking.
- S24 Avoid contact with skin.
- S29 Do not empty into drains.
- S33 Take precautionary measures against static discharges.
- S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S51 Use only in well-ventilated areas.
- S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
- S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

**National regulations/information:**

WGK:	2, water-endangering product. (German VwVwS of May 17, 1999 ) Classification by KBwS
Storage class VCI:	3A
Technical regulations concerning air pollution:	100 % (Class III )
VOCV 814.018 VOC regulation CH	100 %

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**16. Other information**

Full text of the R-phrases indicated by codes in this safety data sheet. The product code/identification/designation is indicated in Section 15.

- R38 Irritating to skin.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R67 Vapours may cause drowsiness and dizziness.

**Further information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.



# Material Safety Data Sheet according to 91/155/EEC - ISO 11014-1

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## PLASTIC REPAIR KIT

SDS no. : SET00023030H

V001.2

Revision: 06.02.2004

printing date: 12.05.2004

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### 1. Identification of the substance/preparation and of the company/undertaking

**Trade name:**

PLASTIC REPAIR KIT

**Intended use:**

2-Component PU adhesive

**Company name:**

Henkel Teroson GmbH  
69112 Heidelberg  
Phone: +4962217040  
Fax-no.: +496221705242

**Emergency information:**

In case of an emergency information will be available 24h under phone +49-(0)6221-7040

**Information office (content SDS):**

Product safety / TECO, Tel: +49-(0)6221-7040 Fax: +49-(0)6221-704698

---

### 2. Composition / information on ingredients

**Base substances of preparation:**

Polyol mixture with fillers

**Declaration of ingredients:**

Contains no dangerous substances exceeding the limits of the EU-Directive

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### 3. Possible product risks

The product is not hazardous within the meaning of the valid (EU) preparation guideline.

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### 4. First-aid measures

**After inhalation:**

not relevant.

**After skin contact:**

Rinse under running water. Remove all contaminated clothing. Consult skin specialist if necessary.

**After eye contact:**

Rinse immediately with plenty of running water, seek medical advice from a specialist.



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Industrial Adhesives

**After ingestion:**

Seek medical advice immediately and show this container or label.

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## 5. Fire-fighting measures

**Combustion behavior:**

no restrictions

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## 6. Accidental release measures

**General information:**

Danger of slipping on escaped product.

**Process for cleaning and take-up:**

Remove mechanically.

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## 7. Handling and storage

**Handling:**

When using do not eat, drink or smoke.

**Storage:**

Store in a cool place.

Temperatures between + 10 °C and + 30 °C

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## 8. Exposure controls / personal protection

**Components with specific control parameters for workplace:**

none

**Respiratory protection:**

Not necessary.

**Hand protection:**

Use suitable protective gloves made of PVC (polyvinyl chloride). Please observe the glove manufacturer's instructions on permeability and rupture times as well as the specific workplace conditions.

**Eye protection:**

Protective goggles

**Body protection:**

suitable protective clothing

**General protection and hygiene measures:**

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Ensure adequate ventilation/vacuum off.

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## 9. Physical and chemical properties

### General characteristics

State:	liquid
Odor:	odorless
Color(s):	yellow

### Phys./chem. properties:

Density (20 °C)	1,43 g/cm <sup>3</sup>
Solubility (qualitative) (20 °C; Solvent: water)	insoluble

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## 10. Stability and reactivity

### Conditions to avoid:

None known if used to the intended purpose.

### Materials to avoid:

None if used for intended purpose.

### Dangerous decomposition products:

No decomposition if used according to specifications.

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## 11. Toxicological information

### General toxicological information:

To the best of our knowledge no harmful effects are to be expected if the product is handled and used properly.

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## 12. Ecological information

### General ecological information:

Do not empty into drains, soil or bodies of water.

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## 13. Disposal considerations

### Waste code(EWC):

080410

### Product disposal:

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

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## 14. Transport information

**General information:**

Not hazardous according to RID/ADR, GGVS/GGVE, ADNR, IMDG, ICAO-TI/IATA-DGR.

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## 15. Regulations - classification and identification

**Symbols of danger:**

Not necessary.

**R-phrases**

N/A.

**National regulations/information:**

WGK:	1, slightly water-endangering product. (German VwVwS of May 17, 1999 )
VbF class:	13 Not a combustible liquid according to the regulations governing combustible liquids (VbF) in Germany.
VOCV 814.018 VOC regulation CH	0,00 %

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## 16. Other information

Full text of the R-phrases indicated by codes in this safety data sheet. The product code/identification/designation is indicated in Section 15.

N/A.

**Further information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.



# Material Safety Data Sheet according to 91/155/EEC - ISO 11014-1

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## PLASTIC REPAIR KIT

SDS no. : SET00023030H

V001.2

Revision: 06.02.2004

printing date: 12.05.2004

### 1. Identification of the substance/preparation and of the company/undertaking

**Trade name:**

PLASTIC REPAIR KIT

**Intended use:**

2-c-polyurethane adhesive

**Company name:**

Henkel Teroson GmbH  
69112 Heidelberg  
Phone: +4962217040  
Fax-no.: +496221705242

**Emergency information:**

In case of an emergency information will be available 24h under phone +49-(0)6221-7040

**Information office (content SDS):**

Product safety / TECO, Tel: +49-(0)6221-7040 Fax: +49-(0)6221-704698

### 2. Composition / information on ingredients

**General chemical description:**

Hardening component of a 2-component PU adhesive

**Base substances of preparation:**

4,4'-Methylenediphenyl diisocyanate (MDI)

**Declaration of ingredients:**

< 15 %	4,4'- methylenediphenyl diisocyanate
	EINECS 202-966-0
	CAS 101-68-8
	Symbol Xn
	R-phrases R20, R36/37/38, R42/43

### 3. Possible product risks

R36/37/38 Irritating to eyes, respiratory system and skin.

R42/43 May cause sensitization by inhalation and skin contact.

Persons suffering from allergic reactions to isocyanates should avoid contact with the product.



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#### 4. First-aid measures

**After inhalation:**

Fresh air, consult doctor if complaint persist.

**After skin contact:**

Rinse with running water and soap. Skin care. Remove contaminated clothes immediately.

**After eye contact:**

Wash with plenty of water immediately and continue for several minutes, holding eyelid open. Consult a doctor.

**After ingestion:**

Seek medical advice immediately and show this container or label.

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#### 5. Fire-fighting measures

**Suitable extinguishing media:**

All common extinguishing agents are suitable.

**Special protection equipment for fire-fighters:**

Wear self-contained breathing apparatus.

Wear protective equipment.

**Combustion products or gases to be formed:**

Isocyanate vapors

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#### 6. Accidental release measures

**Personal precautions:**

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Keep unprotected persons away.

**Environmental precautions:**

Do not empty into drains / surface water / ground water.

**Process for cleaning and take-up:**

Neutralise any spillages with a mixture of alcohol, water and wetting agent, if necessary adding 1% ammonia relative to the isocyanate groups.

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#### 7. Handling and storage

**Handling:**

Ensure good ventilation/suction at the workplace.

Avoid skin and eye contact.

**Storage:**

Store in a cool, dry place.

Storage at 10 to 30°C is recommended.

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## 8. Exposure controls / personal protection

### Components with specific control parameters for workplace:

Valid for

Germany

Basis

Germany - Occupational Exposure Limits

Ingredient	ppm	mg/m <sup>3</sup>	Type	Category	Remarks
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate		0,05	MAK:	=1=	

### Respiratory protection:

Suitable breathing mask when there is inadequate ventilation.

### Hand protection:

Use suitable protective gloves made of nitrile rubber or butyl rubber. Please observe the glove manufacturer's instructions on permeability and rupture times as well as the specific workplace conditions.

Perforation time: >480 minutes

### Eye protection:

Goggles which can be tightly sealed.

### General protection and hygiene measures:

Do not eat, drink or smoke while working.

Avoid contact with skin and eyes. Remove soiled or soaked clothing immediately. Wash off any dirt that gets onto the skin with plenty of water and soap, skin care.

## 9. Physical and chemical properties

### General characteristics

State: liquid  
Odor: earthy  
Color(s): black

### Phys./chem. properties:

Density: 1,7 g/cm<sup>3</sup>  
(20 °C)  
Indication of (Solid content): 100 %  
Viscosity (dynamic) (Brookfield; 20 °C): 26 - 32 pa.s  
Solubility (qualitative) (Solvent: alcohol): insoluble

## 10. Stability and reactivity

### Conditions to avoid:

Avoid moisture.

Temperatures over appr. 250 °C

### Materials to avoid:

Reaction with water, formation of CO<sub>2</sub>



**Dangerous decomposition products:**

At higher temperatures isocyanate may be released.

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## 11. Toxicological information

**General toxicological information:**

The present product is a chemical preparation within the meaning of the chemicals act. The following evaluation has been made on the basis of the toxicological data and content by weight of the individual ingredients.

**Acute inhalative toxicity:**

Irritating to respiratory system

**Skin irritation:**

Primary skin irritation: irritating

**Eye irritation:**

Primary eye irritation: irritating

**Sensitizing:**

May cause sensitization by inhalation.

May cause sensitization by skin contact.

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## 12. Ecological information

**General ecological information:**

Do not empty into drains, soil or bodies of water.

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## 13. Disposal considerations

**Waste code(EWC):**

080501

080410 (after hardening with component A)

**Product disposal:**

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

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## 14. Transport information

**General information:**

Not hazardous according to RID/ADR, GGVS/GGVE, ADNR, IMDG, ICAO-TI/IATA-DGR.

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## 15. Regulations - classification and identification

**Symbols of danger:**

Xn - Harmful



**Hazard trigger:**

Diphenylmethane diisocyanate 4,4'-

**R-phrases**

R36/37/38 Irritating to eyes, respiratory system and skin.

R42/43 May cause sensitization by inhalation and skin contact.

**S-phrases :**

S2 Keep out of the reach of children.

S23 Do not breathe gas/fumes/vapour/spray.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of water.

S51 Use only in well-ventilated areas.

**Special declaration:**

Contains isocyanates. Observe manufacturer's instructions!

**National regulations/information:**

WGK:

2, water-endangering product. (German VwVwS of May 17, 1999 )  
Classification in conformity with the calculation method

BG regulations, rules, infos:

BG data sheet: BGI 524 Hazardous substances: polyurethane  
production and processing / isocyanates (M 044)  
13

VOCV 814.018 VOC regulation CH 0,00 %

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**16. Other information**

Full text of the R-phrases indicated by codes in this safety data sheet. The product code/identification/designation is indicated in Section 15.

R36/37/38 Irritating to eyes, respiratory system and skin.

R42/43 May cause sensitization by inhalation and skin contact.

**Further information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

