

Conforms to Regulation (EU) No. 1907/2006 - MSDS\_DE

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Brown Brothers Distribution Limited Wellington House, Starley Way Birmingham International Park, Solihull West Midlands B37 7HB  www.brownbrothers.com	<b>Emergency telephone</b> 0121 7817208  <b>Product Information</b> 0121 7817208
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Product name Plastic Repair Adhesive Black (Slow)  
 Product code BPAB50X  
 Product Use Description Adhesives

## 2. HAZARDS IDENTIFICATION

<b>Hazard Summary</b>	Harmful Irritant
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<b>Risks</b>	Harmful by inhalation., Harmful: danger of serious damage to health by prolonged exposure through inhalation. Limited evidence of a carcinogenic effect. May cause sensitization by inhalation and skin contact. Irritating to eyes, respiratory system and skin.
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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	EINECS-No.	Concentration	Symbol(s)	R-phrases
4,4'-Methylenediphenyl diisocyanate	101-68-8	202-966-0	>=25 - <40%	Carc.Cat.3 Xn Xi	R40 R20, R48/20 R36/37/38 R42/43
Calcium oxide	1305-78-8	215-138-9	>=1 - <2.5%	Xi	R36/38
Disodium oxide	1313-59-3	215-208-9	>=1 - <2.5%	C	R34
o-(p-Isocyanatobenzyl)phenyl isocyanate	5873-54-1	227-534-9	>=0.5 - <1%	Carc.Cat.3 Xn Xi	R40 R20, R48/20 R36/37/38 R42/43

For the full text of the R-phrases mentioned in this Section, see Section 16.

#### 4. FIRST AID MEASURES

##### **General Information**

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### **Eyes**

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. Remove contact lenses.

##### **Skin**

Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician.

##### **Ingestion**

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

##### **Inhalation**

Move to fresh air. Consult a physician after significant exposure. If symptoms persist, call a physician. In case of shortness of breath, give oxygen.

#### 5. FIRE-FIGHTING MEASURES

##### **Suitable extinguishing media**

ABC powder, Water mist, Carbon dioxide (CO<sub>2</sub>), Dry chemical

##### **Unsuitable extinguishing media**

**DO NOT USE:** Halons

##### **Hazardous combustion products**

carbon dioxide and carbon monoxide, nitrogen compounds, Hydrogen cyanide (hydrocyanic acid), Isocyanates, nitrogen oxides (NO<sub>x</sub>)

##### **Thermal decomposition**

no data available

##### **Precautions for fire-fighting**

Do not allow run-off from fire fighting to enter drains or water courses. Keep containers and surroundings cool with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

##### **Personal protective equipment**

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water. Do not let product enter drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Prevent further leakage or spillage if safe to do so.

### Methods for cleaning up

Neutralise with the following product(s): Ammonia Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Large spills should be collected mechanically (remove by pumping) for disposal. Keep in suitable, closed containers for disposal.

### Other information

Comply with all applicable federal, state, and local regulations. Keep the container open.

## 7. HANDLING AND STORAGE

### Handling

Avoid contact with skin and eyes. Do not breathe vapours or spray mist. For personal protection see section 8. Provide sufficient air exchange and/or exhaust in work rooms. Avoid exceeding of the given occupational exposure limits (see section 8). Smoking, eating and drinking should be prohibited in the application area. Normal measures for preventive fire protection.

### Storage

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Stable under recommended storage conditions.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

<b>4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)</b>			
TRGS 900	AGW:	0.05 mg/m <sup>3</sup>	Fume and aerosol
DFG MAK	MAK:	0.05 mg/m <sup>3</sup>	Inhalable fraction.
<b>Calcium oxide (CAS 1305-78-8)</b>			

### General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Ensure that eyewash stations and safety showers are close to the workstation location.

### Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

### Eye protection

Safety glasses with side-shields

### Skin and body protection

Wear as appropriate:

Safety shoes

Wear resistant gloves such as:

Nitrile rubber

### Respiratory protection

No personal respiratory protective equipment normally required.

In the case of vapour formation use a respirator with an approved filter.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	liquid
<b>Form</b>	viscous
<b>Colour</b>	beige
<b>Odour</b>	no data available
<b>Boiling point/boiling range</b>	(>) 200.00 °C
<b>Melting point/range</b>	no data available
<b>pH</b>	no data available
<b>Flash point</b>	(>) 100.00 °C
<b>Evaporation rate</b>	(<) 1 (n-Butyl Acetate)
<b>Lower explosion limit/Upper explosion limit</b>	no data available
<b>Vapour pressure</b>	0.01 hPa @ 25 °C
<b>Vapour density</b>	(>) 1 (AIR=1)
<b>Density</b>	1.288 g/cm <sup>3</sup> @ 68 °F / 20 °C
<b>Solubility</b>	Water practically insoluble
<b>Partition coefficient: n-octanol/water</b>	no data available
<b>log Pow</b>	no data available
<b>Autoignition temperature</b>	no data available
<b>Viscosity, dynamic</b>	(ca.) 20,000 mPa.s

<b>Viscosity, kinematic</b>	no data available
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## 10. STABILITY AND REACTIVITY

### Stability

No hazards to be specially mentioned.

### Conditions to avoid

Exposure to moisture., Freezing temperatures.

### Incompatible products

Acids, Bases, Amines, Ammonia, water, Strong oxidizing agents, chlorinated rubber, Copper alloys, aluminum, Iron, Zinc

### Hazardous decomposition products

carbon dioxide and carbon monoxide, nitrogen compounds, Hydrogen cyanide (hydrocyanic acid), Isocyanates, nitrogen oxides (NOx)

### Hazardous reactions

Hazardous polymerisation does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Routes of exposure

Skin contact, Eye Contact, Ingestion

### Eye contact

Causes eye irritation.

### Skin contact

Causes skin irritation.

### Ingestion

Not known to be harmful if swallowed.

### Inhalation

Harmful by inhalation. May cause allergic respiratory reaction.

### Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Upper respiratory tract, Skin, lung (for example, asthma-like conditions)

### Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Cough, Headache, chest pain, Difficulty in breathing, lung edema (fluid buildup in the lung tissue), Exposure to this product (or a component) may cause an allergic reaction (narrowing of the air passages of the lungs resulting in difficult breathing, tightness in the chest, coughing and wheezing) in some sensitive individuals. Other symptoms of an allergic reaction may include itchy and watery eyes, runny and stuffy nose, sweating, flushing, hives, rapid heart rate, and lowered blood pressure.

## Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: nasal damage, lung damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: effects on lung function

## Component data

4,4'-Methylenediphenyl diisocyanate	TRGS 905	Carcinogenic Category 3
The basis for the evaluation of this substance were compiled by the AGS and can be accessed as Announcements of the AGS at <a href="http://www.baua.de/prax/ags/begr_05.htm">www.baua.de/prax/ags/begr_05.htm</a> .		
Deviation from EU classification according to Annex I of Directive 67/548/EEC.		

### Acute oral toxicity

4,4'-Methylenediphenyl diisocyanate	LD 50 Rat: 9,200 mg/kg
Calcium oxide	no data available
Disodium oxide	no data available
o-(p-Isocyanatobenzyl)phenyl isocyanate	no data available

### Acute inhalation toxicity

4,4'-Methylenediphenyl diisocyanate	LC 50 Rat: 0.369 mg/l , 4 h
Calcium oxide	no data available
Disodium oxide	no data available
o-(p-Isocyanatobenzyl)phenyl isocyanate	no data available

### Acute dermal toxicity

4,4'-Methylenediphenyl diisocyanate	LD 50 Rabbit: > 7,900 mg/kg
Calcium oxide	no data available
Disodium oxide	no data available
o-(p-Isocyanatobenzyl)phenyl isocyanate	no data available

## 12. ECOLOGICAL INFORMATION

**Product information****Aquatic toxicity**

no data available

**Environmental fate and pathways****Biodegradation**

no data available

**Bioaccumulation**

The bioaccumulation potential cannot be determined.

**13. DISPOSAL CONSIDERATIONS****Waste disposal methods**

Dispose of in accordance with the European Directives on waste and hazardous waste. Do not contaminate ponds, waterways or ditches with chemical or used container. Container hazardous when empty. Dispose of in accordance with local regulations.

**Empty packaging**

Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

**European Waste Catalogue**

080501 waste isocyanates

**14. TRANSPORT INFORMATION****ADR**

Not dangerous goods

**ADNR**

Not dangerous goods

**RID**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA\_P**

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BPAB50X

Not dangerous goods

**IATA\_C**

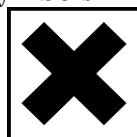
Not dangerous goods

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

<b>15. REGULATORY INFORMATION</b>
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**Product Use Description**

professional use

**Hazard symbols**

Harmful

**R-phrases(s)**

R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R40	Limited evidence of a carcinogenic effect.
R42/43	May cause sensitization by inhalation and skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

**S-phrases(s)**

S23	Do not breathe vapour.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
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.

**Contains**

4,4'-Methylenediphenyl diisocyanate	CAS 101-68-8
o-(p-Isocyanatobenzyl)phenyl isocyanate	CAS 5873-54-1



WGK Identification Number:

WGK 1: slightly water endangering

**16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R36/37/38	Irritating to eyes, respiratory system and skin.
R42/43	May cause sensitization by inhalation and skin contact.
R40	Limited evidence of a carcinogenic effect.
R20	Harmful by inhalation.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R36/38	Irritating to eyes and skin.
R34	Causes burns.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.