



SAFETY DATA SHEET

BOSTIK TARBICOL PU 1 K

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

Identification of the substance or preparation

Product name : BOSTIK TARBICOL PU 1 K

Code : 165297/8

Use of the substance/preparation : Adhesive. Putty. Polyurethane liquid.

Company/undertaking identification

Manufacturer : BOSTIK SA
Immeuble IRIS
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FRANCE

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2. Composition/information on ingredients

Substance/preparation : Preparation

Nature of material : Adhesive. Putty.

Ingredient name	CAS number	%	EC number	Classification
alkanes, c11-15-iso-	90622-58-5	5 - 10	292-460-6	Xn; R65 Xi; R38
carbonic acid, calcium salt (1:1)	471-34-1	1 - 5	207-439-9	Not classified.
4,4'-methylenediphenyl diisocyanate	101-68-8	< 1	202-966-0	Xn; R20 Xi; R36/37/38 R42/43
methylenediphenyl diisocyanate	26447-40-5	< 1	247-714-0	Xn; R20 Xi; R36/37/38 R42/43
solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F). See section 16 for the full text of the R-phrases declared above	64742-95-6	< 1	265-199-0	R10 Xn; R65 Xi; R37 R66, R67 N; R51/53

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R42

Human health hazards : May cause sensitisation by inhalation.

See section 11 for more detailed information on health effects and symptoms.

4. First-aid measures

First-aid measures

- Inhalation** : Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Obtain medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific hazard.
- Hazardous thermal decomposition products** : These products are carbon oxides (CO, CO₂). Some metallic oxides.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dyke spilt material or otherwise contain material to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

7. Handling and storage

- Handling** : Keep container closed. Use only with adequate ventilation. Do not breathe vapour or mist.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended** : Use original container.

8. Exposure controls/personal protection

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
carbonic acid, calcium salt (1:1)	ACGIH TLV (United States, 1/2006). Notes: The value is for total dust containing no asbestos and < 1% crystalline silica. TWA: 10 mg/m ³ 8 hour/hours. Form: All forms
4,4'-methylenediphenyl diisocyanate	ACGIH TLV (United States, 1/2006). TWA: 0,05 mg/m ³ 8 hour/hours. Form: All forms TWA: 0,01 ppm 8 hour/hours. Form: All forms

Exposure controls

- Occupational exposure controls** : Use only with adequate ventilation. If user operations generate dust, fumes, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

General information

Appearance

- Physical state** : Liquid. (Paste.)
- Colour** : Light brown.
- Odour** : Characteristic.

Important health, safety and environmental information

- pH** : Neutral.
- Boiling point** : The lowest known value is 185 to 215°C (365 to 419°F) (alkanes, c11-15-iso-).
Weighted average: 223.19°C (433.7°F)
- Flash point** : The lowest known value is Closed cup: 64°C (147.2°F). (Pensky-Martens.). (alkanes, c11-15-iso-)
- Explosion limits** : The greatest known range is Lower: 0.6% Upper: 6.5% (alkanes, c11-15-iso-)
- Vapour pressure** : The highest known value is <0.1 kPa (<0.8 mm Hg) (at 20°C) (alkanes, c11-15-iso-).
- Relative density** : 1.25 g/cm³ (23°C / 73.4°F)
- Solubility** : Soluble in n-octanol, acetone.
Insoluble in cold water, hot water.
- Dispersibility properties** : Not dispersible in cold water, hot water.
See solubility in n-octanol, acetone.
- Octanol/water partition coefficient** : The product is much more soluble in octanol.
- Viscosity** : Kinematic (40C): The highest known value is 68 to 82 cSt (1,2-benzenedicarboxylic acid, diisononyl ester) Weighted average: 29.78 cSt

Other information

Auto-ignition temperature : The lowest known value is 375°C (707°F) (1,2-benzenedicarboxylic acid, diisononyl ester).

10. Stability and reactivity

Stability : The product is stable.

Materials to avoid : Slightly reactive or incompatible with the following materials: moisture.

11. Toxicological information**Potential acute health effects**

Inhalation : May cause sensitisation by inhalation.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Acute toxicity

<u>Product/ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
carbonic acid, calcium salt (1:1)	LD50	6450 mg/kg	Oral	Rat
4,4'-methylenediphenyl diisocyanate	LD50	9200 mg/kg	Oral	Rat
solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).	LD50	2200 mg/kg	Oral	Mouse
	LD50	8400 mg/kg	Oral	Rat
	LD50	>2150 mg/kg	Oral	quail

Potential chronic health effects

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

Target organs : Contains material which causes damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.

12. Ecological information**Other ecological information****Bioaccumulative potential**

<u>Ingredient name</u>	<u>LogP_{ow}</u>	<u>BCF</u>	<u>Potential</u>
solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).	3.7 to 4.5	-	high

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-		-
ADNR Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-

15. Regulatory information

EU regulations

Hazard symbol/symbols :



Harmful

Risk phrases : R42- May cause sensitisation by inhalation.

Safety phrases : S2- Keep out of the reach of children.
S23- Do not breathe vapour.
S37- Wear suitable gloves.

Contains : 4,4'-methylenediphenyl diisocyanate
methylenediphenyl diisocyanate

Not available.
Not available.

Product use : Classification and labelling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use.
- Consumer applications.

Other EU regulations

Additional warning phrases : Contains isocyanates. See information supplied by the manufacturer. This information is provided by the present Safety Data Sheet.

Tactile warning of danger : Yes, applicable.

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - Europe : R10- Flammable.
R20- Harmful by inhalation.
R65- Harmful: may cause lung damage if swallowed.
R36/37/38- Irritating to eyes, respiratory system and skin.
R37- Irritating to respiratory system.
R38- Irritating to skin.
R42- May cause sensitisation by inhalation.
R42/43- May cause sensitisation by inhalation and skin contact.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapours may cause drowsiness and dizziness.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications referred to in sections 2 and 3 - Europe : Xn - Harmful
Xi - Irritant
N - Dangerous for the environment.

History

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein we cannot guarantee that these are the only hazards that exist.