

**Brake Cleaner**

Print date : 14.04.2008

Product code : 191

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

**Identification of the substance or preparation**

Brake Cleaner

**Use of the substance/preparation**

Cleaning agent.

**Company/undertaking identification**

Company name : PRO-TEC Deutschland  
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 Place : D-07330 Probstzella  
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**Further Information**

Article Number: 2201

**2. Hazards identification**

**Classification**

Indications of danger : Highly flammable, Irritant, Dangerous for the environment  
 R-phrases :  
 Highly flammable.  
 Irritating to skin.  
 Vapours may cause drowsiness and dizziness.  
 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**3. Composition/information on ingredients**

**Chemical characterization ( preparation )**

Surface tension compounds  
 Cleaning and care agent  
 Anti wear agents not classified  
 corrosion preventing agent

Sum of ingredients:  
 > 55 %

Aerosol propellant: Carbon dioxide (CO<sub>2</sub>).

**Hazardous components**

EC-No.	CAS-No.	Chemical name	Quantity	Classification
265-151-9	64742-49-0	Low boiling point hydrogen treated naphtha, Naphtha (petroleum, gasoline), hydrotreated light	60 - 95 %	F, Xn, Xi, N R11-38-65-67-51-53
203-777-6	110-54-3	n-hexane	1 - 5 %	F, Xn, Xi, N R11-38-65-67-48/20-51-53

Full text of each relevant R phrase can be found in heading 16.

**4. First aid measures**

**General information**

Move victim out of danger zone and lay down.  
 Change contaminated clothing.



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**After inhalation**

Provide fresh air.  
If victim is at risk of losing consciousness, position and transport on their side.

**After contact with skin**

After contact with skin, wash immediately with plenty of Water and soap.  
In case of skin irritation, seek medical treatment.

**After contact with eyes**

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

**After ingestion**

Do not induce vomiting. Consult physician.

**5. Fire-fighting measures**

**Suitable extinguishing media**

Extinguishing powder.  
Carbon dioxide (CO<sub>2</sub>).  
Water fog.  
alcohol resistant foam.

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

High power water jet.

**Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases**

Swims on the water. Vapours are heavier than air and will spread at floor level.

**Special protective equipment for fire-fighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Cool endangered container in case of fire.

**6. Accidental release measures**

**Personal precautions**

Provide adequate ventilation. Wear suitable solvent-proof protective clothing according to EN 465.  
Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes.  
Do not breathe gas/fumes/vapour/spray.

**Environmental precautions**

Do not empty into drains or the aquatic environment.  
In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

**Methods for cleaning up/taking up**

Absorb with liquid-binding material ( e.g. sand, diatomaceous earth, acid- or universal binding agents).

**Additional information**

Explosive. Vapours may form explosive mixtures with air.

**7. Handling and storage**

**Handling**

**Advice on safe handling**

Keep only in the original container in a cool, well ventilated place. Have to care for a good Ventilation at workplace.

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**Advice on protection against fire and explosion**

Vapours may form explosive mixtures with air.

**Storage**

**Requirements for storage rooms and vessels**

The floor should be leak tight, jointless and not absorbent. Keep only in the original container in a cool, well ventilated place. Do not store at temperatures over: 50 °C  
Heating causes rise in pressure with risk of bursting.

**8. Exposure controls/personal protection**

**Exposure limit values**

**Exposure limits (EH40)**

CAS-No.	Chemical name	ml/m <sup>3</sup>	mg/m <sup>3</sup>	F/ml	Category	Origin
110-54-3	n-Hexane	20	72		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

**Exposure controls**

**Occupational exposure controls**

Carbon dioxide (CO<sub>2</sub>). MAK 5000 ppm

**Protective and hygiene measures**

Keep away from food, drink and animal feeding stuffs.

Take off immediately all contaminated clothing "Wash hands when done working with material; at breaks, lunch, shift changes, etc."

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin and eyes.

**Respiratory protection**

Have to care for a good Ventilation at workplace.

**Hand protection**

Tested protective gloves are to be worn: FKM (Fluoroelastomer (Viton)).NBR (Nitrile rubber).

**Eye protection**

Wear tightly sealed safety glasses against possible splashes into the eyes.

**9. Physical and chemical properties**

**General information**

Physical state : Aerosol  
Colour : colourless  
Odour : aromatic

**Important health, safety and environmental information**

**Changes in the physical state**

	Test method
Lower explosion limits :	0,6 vol. %
Upper explosion limits :	
Vapour pressure : (at 20 °C)	4000 hPa
Vapour pressure : (at 50 °C)	7000 hPa
Density (at 20 °C) :	0,70 g/cm <sup>3</sup>
Water solubility : (at 20 °C)	slightly soluble

**Other information**

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Ignition temperature : > 200 °C

**10. Stability and reactivity**

**Conditions to avoid**

Do not store at temperatures over: 50 °C  
Keep away from heat.

**Hazardous decomposition products**

No dangerous reactions are known.  
No hazardous decomposition products are known.

**11. Toxicological information**

**Corrosive and irritant effects**

Frequently or prolonged contact with skin may cause dermal irritation.  
Irritation of eyes: Irritant effect possible.

**12. Ecological information**

**Bioaccumulative potential**

Swims on the water. Low potential of bio-accumulation.

**Further information**

Do not empty into drains or the aquatic environment.

**13. Disposal considerations**

**Advice on disposal**

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.  
Arrange about the exact waste code with the local waste disposal expert.

Do not dispose with household waste.

**Contaminated packaging**

Waste disposal according to official state regulations. Contaminated packing must be completely emptied and can be re-used following appropriate cleaning.

**14. Transport information**

**Land transport (ADR/RID)**

UN number : 1950  
ADR/RID class : 2  
Classification code : 5A  
Warning plate  
Hazard-no. : -  
Hazard label : 2.2  
ADR/RID packing group : -  
Limited quantity : 1 l

**Description of the goods**

Aerosols (Carbon dioxide (CO<sub>2</sub>).)

**Inland waterways transport**

UN number : 1950  
ADNR class : 2  
Classification code : 5A  
Hazard label : 2.2

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Packing group : -  
Limited quantity : LQ2

**Description of the goods**  
AEROSOLS

**Marine transport**

UN number : 1950  
IMDG code : 2  
Marine pollutant : -  
Hazard label : 2.2  
IMDG packing group : -  
EmS : F-D, S-U

**Description of the goods**  
Aerosols Carbon dioxide (CO2).

**Air transport**

UN/ID number : 1950  
ICAO/IATA-DGR : 2.2  
Hazard label : 2.2  
ICAO packing group : -  
Limited quantity Passenger : 30 Kg G  
IATA-packing instructions - Passenger : 203  
IATA-max. quantity - Passenger : 75 Kg  
IATA-packing instructions - Cargo : 203  
IATA-max. quantity - Cargo : 150 Kg

**Description of the goods**  
Aerosols (Carbon dioxide (CO2).)

**15. Regulatory information**

**Labelling**

Danger symbols : F - Highly flammable; Xi - Irritant; N - Dangerous for the environment



F - Highly flammable

Xi - Irritant

N - Dangerous for the environment

**R phrases**

11 Highly flammable.  
38 Irritating to skin.  
67 Vapours may cause drowsiness and dizziness.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S phrases**

02 Keep out of the reach of children.  
16 Keep away from sources of ignition - No smoking.  
23 Do not breathe Aerosol.  
51 Use only in well-ventilated areas.

**Special labelling for certain preparations**

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

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**National regulatory information**

Water contaminating class : 1 - slightly water contaminating

**16. Other information**

**Full text of R-phrases referred to under sections 2 and 3**

- |       |   |
|-------|---|
| 11    | Highly flammable.   |
| 38    | Irritating to skin.   |
| 48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation.       |
| 51    | Toxic to aquatic organisms.   |
| 51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 53    | May cause long-term adverse effects in the aquatic environment.                             |
| 65    | Harmful: may cause lung damage if swallowed.  |
| 67    | Vapours may cause drowsiness and dizziness.   |

**Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*