

## SAFETY DATA SHEET

### Brake Cleaner

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

1.1. Product identifier

Product name                      Brake Cleaner

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

Identified uses                      Brake Cleaner

1.3. Details of the supplier of the safety data sheet

Supplier                              Auto 4 Ltd  
Unit 4a Park Lane  
Business Park  
Kirkby in Ashfield  
Nottinghamshire  
NG17 9GU  
T+44 (0) 1623 727360

**SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

Classification

Physical hazards                      Aerosol 1 - H222, H229  
Health hazards                        Skin Irrit. 2 - H315 STOT SE 3 - H336  
Environmental hazards              Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC)      Xi;R38. F+;R12. N;R51/53. R67.

Human health                              Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environmental                              The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical                              Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Pictogram



# Brake Cleaner

Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	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. P271 Use only outdoors or in a well-ventilated area. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P102 Keep out of reach of children. P260 Do not breathe vapour/spray. P262 Do not get in eyes, on skin, or on clothing. P501 Dispose of contents/container in accordance with local regulations.
Contains	HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, PROPAN-2-OL
Detergent labelling	≥ 30% aliphatic hydrocarbons,< 5% perfumes,Contains d-LIMONENE

## 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS	30-60%
CAS number: 68476-85-7	EC number: 270-704-2
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Gas 1 - H220	F+;R12 Carc. Cat. 1;R45 Muta. Cat. 2;R46
Press. Gas, Liquefied - H280	
HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	30-60%
CAS number: —	EC number: 921-024-6
	REACH registration number: 01-2119475514-35
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225	Xn;R65. Xi;R38. F;R11. N;R51/53. R67.
Skin Irrit. 2 - H315	
Asp. Tox. 1 - H304	
STOT SE 3 - H336	
Aquatic Chronic 2 - H411	

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PROPAN-2-OL		1-5%
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC or 1999/45/EC) F;R11 Xi;R36 R67	
HEXANE-norm		<1%
CAS number: 110-54-3	EC number: 203-777-6	REACH registration number: 01-2119480412-44
Classification Flam. Liq. 2 - H225 STOT RE 2 - H373 Skin Irrit. 2 - H315 Repr. 2 - H361f STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) F;R11 Repr. Cat. 3;R62 Xn;R48/20,R65 Xi;R38 R67 N;R51/53	
TURPENTINE, OIL		<1%
CAS number: 8006-64-2	EC number: 232-350-7	REACH registration number: 01-2119502456-45
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Skin Irrit. 2 - H315 Acute Tox. 4 - H332 Eye Irrit. 2 - H319 Acute Tox. 4 - H302 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) R10 Xn;R20/21/22,R65 R43 Xi;R36/38 N;R51/53	
ETHYL ACETATE		<1%
CAS number: 141-78-6	EC number: 205-500-4	REACH registration number: 01-2119475103-46
Classification Flam. Liq. 2 - H225 STOT SE 3 - H336 Eye Irrit. 2 - H319	Classification (67/548/EEC or 1999/45/EC) F;R11 Xi;R36 R66 R67	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

## Brake Cleaner

General information	Move affected person to fresh air at once.
Inhalation	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.

### 4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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### 4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
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### 5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. The product is highly flammable. Forms explosive mixtures with air.
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### 5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.
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### 6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.
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### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion. Absorb spillage with non-combustible, absorbent material.
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### 6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
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# Brake Cleaner

Usage precautions Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Do not spray on a naked flame or any incandescent material. Eliminate all sources of ignition.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

## 7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m<sup>3</sup>

HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Long-term exposure limit (8-hour TWA): WEL 1200 mg/m<sup>3</sup>

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

HEXANE-norm

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m<sup>3</sup>

TURPENTINE, OIL

Long-term exposure limit (8-hour TWA): WEL 100 ppm 566 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 150 ppm 850 mg/m<sup>3</sup>

ETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm

Short-term exposure limit (15-minute): WEL 400 ppm

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

### PROPAN-2-OL (CAS: 67-63-0)

DNEL	Industry - Dermal; Long term systemic effects: 888 mg/kg/day Industry - Inhalation; Long term systemic effects: 500 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 319 mg/kg/day Consumer - Dermal; Long term systemic effects: 26 mg/kg/day Consumer - Inhalation; Long term systemic effects: 89 mg/m <sup>3</sup>
PNEC	- Fresh water; 140.9 mg/l - Marine water; 140.9 mg/l - Intermittent release; 140.9 mg/l - Sediment (Freshwater); 552 mg/kg - Sediment (Marinewater); 552 mg/kg - STP; 2251 mg/l - Soil; 28 mg/kg

## Brake Cleaner

### 8.2. Exposure controls

#### Protective equipment



- Appropriate engineering controls** Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.
- Personal protection** Do not eat, drink or smoke when using this product.
- Eye/face protection** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.
- Hand protection** Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material.
- Hygiene measures** Wash hands after handling. Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.
- Respiratory protection** If ventilation is inadequate, suitable respiratory protection must be worn.

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

Aerosol.

Colourless to pale yellow.

Organic solvents. Lemon.

-40 to -2°C @ 1013 hPa

< -40°C

Lower : 1.8% - Upper 9.5%

ca. 590 to 1760 kPa @ 45°C

ca. 1.5 at 15°C

log Pow: ca. 2.3 to 2.8

410-580°C

Information given is applicable to the major ingredient.

Not available.

This product contains a maximum VOC content of 598 g/litre.

Stable at normal ambient temperatures and when used as recommended.

# Brake Cleaner

Stability Avoid the following conditions: Heat, sparks, flames.

## 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

## 10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.

## 10.5. Incompatible materials

Materials to avoid Keep away from oxidising materials, heat and flames.

## 10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

General information Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.

Skin contact Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Vapour or spray in the eyes may cause irritation and smarting. Repeated exposure may cause chronic eye irritation.

Acute and chronic health hazards Arrhythmia (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Route of entry Inhalation Skin absorption

Target organs Central nervous system Respiratory system, lungs

Medical symptoms Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

## SECTION 12: Ecological Information

Ecotoxicity The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

### 12.1. Toxicity

Toxicity Not available.

### 12.2. Persistence and degradability

Persistence and degradability Not available.

### 12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

Partition coefficient log Pow: ca. 2.3 to 2.8

## Brake Cleaner

### 12.4. Mobility in soil

Mobility Not known.

### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not available.

### 12.6. Other adverse effects

Other adverse effects Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion.

## SECTION 14: Transport information

General This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.

### 14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

### 14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

### 14.3. Transport hazard class(es)

ADR/RID class 2.1

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

Transport labels





## Brake Cleaner

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

EmS F-D, S-U

Tunnel restriction code (D)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78  
and the IBC Code

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended). The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010.
Guidance	Workplace Exposure Limits EH40. CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131. British Aerosol Manufacturers Code of Practice 7th. Edition 1999

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

Revision comments	Supplemental information added.
Revision date	26/10/2015
Revision	2
SDS number	10960
SDS status	Approved.

## Brake Cleaner

Risk phrases in full R10 Flammable. R11 Highly

flammable.

R12 Extremely flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R36 Irritating to eyes.

R36/38 Irritating to eyes and skin. R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

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

R62 Possible risk of impaired fertility.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full H220 Extremely flammable gas. H222

Extremely flammable aerosol.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H229 Pressurised container: may burst if heated

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.