according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

GB 600

Art.-No.

32103, 23700, 21000

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

Use of the substance/mixture

Preservative agent

1.3. Details of the supplier of the safety data sheet

Company name: AESCULAP AG
Street: Am AESCULAP-Platz
Place: D-78532 Tuttlingen/Donau

Telephone: +49 (0) 74 61 95-0 Telefax: +49 (0) 74 61 95-2600

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

number: In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Aerosol: Aerosol 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Pentane

Signal word: Danger

Pictograms:



Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
P210 Keep away from heat. No Smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aerosol with preparation of special oil and pentane

Volume: 300 ml

Propellant: propane/butan < 150 g

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according to Regula	•			
106-97-8	Butane				
	203-448-7	601-004-00-0	01-2119474691-32		
	Flam. Gas 1, Compressed gas; H2				
74-98-6	Propane		15 - 45 %		
	200-827-9	601-003-00-5	01-2119486944-21		
	Flam. Gas 1, Compressed gas; H2				
109-66-0	Pentane	< 15 %			
	203-692-4	601-006-00-1	01-2119459286-30		
	Flam. Liq. 1, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H224 H336 H304 H411 EUH066				

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Ensure of fresh air.

In the event of symptoms refer for medical treatment.

After contact with skin

Wash with water and soap as a precaution.

Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If eye irritation persists, consult a specialist.

After ingestion

Do not induce vomiting.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

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

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Evaporative cooling effect during use.

Contact with eyes, skin or oral tissues may cause irritation.

Attention. Beware, danger of aspiration.

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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO2), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:

carbon monoxide and carbon dioxide

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

Protective suit.

Additional information

Cool containers at risk with water spray jet. Heating will cause pressure rise with risk of bursting.

Vapours are heavier than air and spread along ground.

The vapour/air mixture is explosive, even in empty, uncleaned receptacles.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Remove all sources of ignition.

Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation.

Avoid contact with skin, eyes and clothing.

Do not breathe aerosol

Advice on protection against fire and explosion

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. Without adequate ventilation formation of explosive mixtures may be possible.

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place.

Advice on storage compatibility

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Preservative agent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
109-66-0	Pentane	600	1800		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Do not breathe aerosol

Wash hands before breaks and at the end of workday.

When using do not eat, drink or smoke.

Eye/face protection

If used properly, no need to wear eye protection.

Avoid contact with the eyes.

Hand protection

If used properly, protective gloves are normally not required.

Avoid contact with the skin.

Respiratory protection

No personal respiratory protective equipment normally required.

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type AX) (EN 14387).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Aerosol
Colour: Colourless
Odour: Characteristic

Test method

Changes in the physical state

Melting point: $< -138 ^{\circ}C ^{*}$ Initial boiling point and boiling range: $< 0 ^{\circ}C ^{*}$ Flash point: $-80 ^{\circ}C ^{*}$

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Explosive properties

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

Lower explosion limits: 1,5 vol. % *) Upper explosion limits: 10,9 vol. % *) Ignition temperature: 365 - 470 °C *) Vapour pressure: 2200 - 8400 hPa *)

(at 20 °C)

Density (at 20 °C): 0,58 g/cm³
Water solubility: Immiscible (at 20 °C)

9.2. Other information

*) *) Propellant

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with oxidizing agents.

10.4. Conditions to avoid

Fire or intense heat may cause violent rupture of packages.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met. No toxicological data available.

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

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Practical experience

Other observations

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Evaporative cooling effect during use.

Contact with eyes, skin or oral tissues may cause irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

Hazardous water pollutant.

Further information

Do not flush into surface water or sanitary sewer system.

Ecological injuries are not known or expected under normal use.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal.

Waste disposal number of waste from residues/unused products

150111 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging containing a hazardous solid porous

matrix (for example asbestos), including empty pressure containers; hazardous waste

Contaminated packaging

Offer empty spray cans to an established disposal company.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1950 **14.2. UN proper shipping name:** AEROSOLS

14.3. Transport hazard class(es):214.4. Packing group:-Hazard label:2.1

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Classification code: 5F

Limited quantity: 1 L / 30 kg
Excepted quantity: E0
Transport category: 2
Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number:UN 195014.2. UN proper shipping name:AEROSOLS

14.3. Transport hazard class(es):214.4. Packing group:-Hazard label:2.1



Classification code: 5F

Limited quantity: 1 L / 30 kg
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number:UN 195014.2. UN proper shipping name:AEROSOLS

14.3. Transport hazard class(es):2.114.4. Packing group:-Hazard label:2.1



Marine pollutant:

Limited quantity:

Excepted quantity:

EmS:

Yes

1 L / 30 kg

E0

F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:UN 195014.2. UN proper shipping name:AEROSOLS

14.3. Transport hazard class(es):2.114.4. Packing group:-Hazard label:2.1



Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0

IATA-packing instructions - Passenger: 203 IATA-max. quantity - Passenger: 75 kg

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IATA-packing instructions - Cargo: 203 IATA-max. quantity - Cargo: 150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 28: Butane

2004/42/EC (VOC): 95 %

Information according to 2012/18/EU

(SEVESO III):

P3a FLAMMABLE AEROSOLS

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.

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H224	Extremely flammable liquid and vapour.					
H229	Pressurised container: May burst if heated.					
H280	Contains gas under pressure; may explode if heated.					
H304	May be fatal if swallowed and enters airways.					
H336	May cause drowsiness or dizziness.					
H411	Toxic to aquatic life with long lasting effects.					
H412	Harmful to aquatic life with long lasting effects.					
EUH066	Repeated exposure may cause skin dryness or cracking.					

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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