

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

1.1. Product identifier

TIP TOP PUNCTURESpray

Art.-No.

593 2230, 593 1370, 593 1371, 5931372, 5210, 5210-10, 5210-15

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

Use of the substance/mixture

Tyres repair spray

1.3. Details of the supplier of the safety data sheet

Company name: REMA TIP TOP AG
Street: Gruber Strasse 63
Place: D-85586 Poing
Telephone: +49 (0) 8121 / 707 - 0
Verantwortlich für das Sicherheitsdatenblatt: sds@gbk-ingelheim.de

1.4. Emergency telephone

number: INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24
24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: F+ - Extremely flammable

R phrases:

Extremely flammable.

GHS classification

Hazard categories:

Aerosol: Aerosol 1

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

2.2. Label elements

Signal word: Danger

Pictograms: GHS02



Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.

Precautionary statements

P102 Keep out of reach of children.
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.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P260 Do not breathe spray.

2.3. Other hazards

In use, may form flammable/explosive vapour-air mixture.
Heating will cause pressure rise with risk of bursting.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aerosols

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
200-827-9	Propane	
74-98-6	F+ - Extremely flammable R12	20 - 30 %
601-003-00-5	Flam. Gas 1; H220	
01-2119486944-21		
203-448-7	Butane	
106-97-8	F+ - Extremely flammable R12	10 - 20 %
601-004-00-0	Flam. Gas 1; H220	
01-2119474691-32		
200-857-2	Isobutane	
75-28-5	F+ - Extremely flammable R12	1 - 10 %
601-004-00-0	Flam. Gas 1; H220	
01-2119485395-27		

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
Take away from danger area and lay down affected person.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.
If patient is not breathing, apply artificial respiration.
In the event of symptoms refer for medical treatment.

After contact with skin

Wash off with soap and plenty of water.
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.
Seek medical treatment by eye specialist.

After ingestion

Induce vomiting only upon the advice of a physician.
Do not induce vomiting.
Summon a doctor immediately.

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

Contact with eyes may cause irritation.
High concentration of vapours may cause irritation to eyes and respiratory system and produce narcotic effects.
Rapid evaporation of the liquid may cause frostbite.

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

Heating will cause pressure rise with risk of bursting.

Cool containers at risk with water spray jet.

Vapours can form an explosive mixture with air.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.

Use only explosion-proof equipment.

Ensure adequate ventilation.

Use personal protective clothing.

Keep away sources of ignition.

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

Avoid contact with the skin and the eyes.

Use only in thoroughly ventilated areas.

Advice on protection against fire and explosion

Do not smoke - volatile.

Keep away from open flames, hot surfaces and sources of ignition.

Pay attention to anti-explosion rules.

Do not spray on a naked flame or any other incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Protect against direct sun radiation.

Keep container tightly closed.

Use only in well-ventilated areas.

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)

Tyres repair spray

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

8.2. Exposure controls

Protective and hygiene measures

Avoid contact with eyes and skin.

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Do not breath vapours or spray mist.

Take off immediately all contaminated clothing.

Eye/face protection

Safety goggles with side protection (EN 166).

Hand protection

Protective gloves resistant to chemicals made of nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Camatril Velours 730> made by www.kcl.de.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (EN 368).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type AX) (EN 141).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	Colourless
Odour:	characteristic
Flash point:	- 97 °C
Lower explosion limits:	1,5 vol. %
Upper explosion limits:	10,9 vol. %
Vapour pressure:	6000 hPa
(at 20 °C)	
Density (at 20 °C):	0,73 g/cm ³
Water solubility:	Multimiscible
(at 20 °C)	
Ignition temperature:	365 °C
Explosive properties:	The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

9.2. Other information

No data available.

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

Vapours may form explosive mixture with air.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Heating will cause pressure rise with risk of bursting.

10.5. Incompatible materials

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.

STOT-single exposure

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

Severe effects after repeated or prolonged exposure

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.

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.

Practical experience

Other observations

Contact with eyes may cause irritation.

High concentration of vapours may cause irritation to eyes and respiratory system and produce narcotic effects .

Rapid evaporation of the liquid may cause frostbite.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

12.2. Persistence and degradability

No data available.

The product is highly volatile.

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

Low hazard to waters.

Further information

Do not flush into surface water or sanitary sewer system.

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 dangerous solid porous matrix (for example asbestos), including empty pressure containers
Classified as 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: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1



Classification code: 5F
Limited quantity: 1 L / 30 kg
Transport category: 2
Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1



Classification code: 5F
Limited quantity: 1 L / 30 kg

Marine transport (IMDG)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1



Marine pollutant:

No

Limited quantity:

1 L / 30 kg

EmS:

F-D, S-U

Air transport (ICAO)

14.1. UN number:

UN1950

14.2. UN proper shipping name:

AEROSOLS, flammable

14.3. Transport hazard class(es):

2.1

14.4. Packing group:

-

Hazard label:

2.1



Limited quantity Passenger:

Y203 / 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

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 MARPOL73/78 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

1999/13/EC (VOC):

< 50 %

National regulatory information

Employment restrictions:

Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

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

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant R-phrases (Number and full text)

12 Extremely flammable.

Relevant H- and EUH-phrases (Number and full text)

H220 Extremely flammable gas.

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

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.)