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

1.1. Product identifier

TIP TOP NANO CHAIN LUBE SPRAY

Art.-No. 593 2290

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

Use of the substance/mixture

Bicycle polish

1.3. Details of the supplier of the safety data sheet

REMA TIP TOP GmbH Gruber Strasse 63 D-85586 Poing

Telephone: +49 (0) 8121 / 707 - 0

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: England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: F+ - Extremely flammable

R phrases:

Extremely flammable.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS classification

Hazard categories:

Flammable aerosol: Flam. 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

Pictograms: GHS02



Signal word: Danger

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/sparks/open flames/hot surfaces. - No smoking.

P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

P273 Avoid release to the environment.

P501 Dispose of contents/container to in accordance with local and national regulations.

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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		
203-448-7	Butane	10 - 20 %
106-97-8	F+ - Extremely flammable R12	
601-004-00-0	Flam. Gas 1; H220	
01-2119474691-32		
200-827-9	Propane	1 - 10 %
74-98-6	F+ - Extremely flammable R12	
601-003-00-5	Flam. Gas 1; H220	
01-2119486944-21		
200-857-2	isobutane	1 - 10 %
75-28-5	F+ - Extremely flammable R12	
601-004-00-0	Flam. Gas 1; H220	
01-2119485395-27		
406-940-1	Thio phosphoric acid ester	1 - 10 %
126019-82-7	N - Dangerous for the environment R51-53	
	Aquatic Chronic 2; H411	
	Aquatic Unronic 2; H411	

Full text of R and H 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.

If eye irritation persists, consult a specialist.

After ingestion

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.

Never give anything by mouth to an unconscious person.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

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 .

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

Treat symptoms.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Extinguishing media which must not be used for safety reasons

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.

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

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.

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7.3. Specific end use(s)

Bicycle polish

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

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.

Respiratory protection

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

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.

Eye protection

Safety goggles with side protection (EN 166).

Skin protection

Long sleeved clothing (EN 368).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Aerosol
Colour: Light brown
Odour: characteristic

Test method

Changes in the physical state

Flash point: $-60 \, ^{\circ}\mathrm{C}$ Lower explosion limits: $1,5 \, \mathrm{vol.} \, \%$ Upper explosion limits: $8,5 \, \mathrm{vol.} \, \%$ Ignition temperature: $365 \, ^{\circ}\mathrm{C}$ Vapour pressure: $4000 \, \mathrm{hPa}$

(at 20 °C)

Density (at 20 °C): 0,76 g/cm³
Water solubility: Immiscible

(at 20 °C)

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

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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

No toxicological data available.

Irritation and corrosivity

Skin irritation: Not classified. Eye irritation: Not classified.

Sensitising effects

Not classified.

Severe effects after repeated or prolonged exposure

STOT - Single exposure: Not classified. STOT - Repeated exposure: Not classified.

Aspiration hazard: Not classified.

Carcinogenic/mutagenic/toxic effects for reproduction

Carcinogenicity: Not classified. Mutagenicity: Not classified. Teratogenicity: Not classified. Additional information on tests

Additional information on tests

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

Empirical data on effects on humans

Contact with eyes may cause irritation.

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

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

Low hazard to waters.

Further information

Do not flush into surface water or sanitary sewer system.

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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: 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es):2Hazard 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: 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2
Hazard label: 2.1



Classification code: 5

Limited quantity: 1 L / 30 kg

Marine transport (IMDG)

14.1. UN number: 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es):2.1Hazard label:2.1



Marine pollutant:

Limited quantity:

EmS:

No

1 L / 30 kg

F-D, S-U

Air transport (ICAO)

UN/ID number: 1950

14.2. UN proper shipping name: AEROSOLS, flammable

14.3. Transport hazard class(es):2.1Hazard label:2.1

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Limited quantity Passenger: Y203 / 30 kg G

IATA-packing instructions - Passenger:203IATA-max. quantity - Passenger:75 kgIATA-packing instructions - Cargo:203IATA-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): 30 %

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

Changes

Changes in chapter: 2, 3, 4, 6, 7, 9, 10, 11, 12, 14, 15

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

VOC = Volatile organic compound

STOT SE = Specific target organ toxicity single exposure

STOT RE = Specific target organ toxicity repeated exposure

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

bw = body weight

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LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Full text of R phrases referred to under Sections 2 and 3

12 Extremely flammable.51 Toxic to aquatic organisms.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

May cause long-term adverse effects in the aquatic environment.

Full text of H statements referred to under Sections 2 and 3

H220 Extremely flammable gas.H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

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.)



