

Page 1 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

# Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

**1.1 Product identifier** 

(GB)

### All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

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

Cleaning product Uses advised against: No information available at present.

#### 1.3 Details of the supplier of the safety data sheet

Theo Förch GmbH & Co. KG Theo-Förch-Str. 11 – 15 74196 Neuenstadt Tel.: 07139/95-0 Fax: 07139/95-199 Email: info@foerch.de Homepage: www.foerch.com

Details of the supplier of the safety data sheet see section 16 of this safety data sheet.

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number Emergency information services / official advisory body:

**Telephone number of the company in case of emergencies:** +49 (0) 700 / 24 112 112 (TFC)

#### **SECTION 2: Hazards identification**

	of the substance or mix ording to Regulation (E	
Hazard class	Hazard category	Hazard statement
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
STOT SE	3	H336-May cause drowsiness or dizziness.
Aerosol	1	H222-Extremely flammable aerosol.
Aerosol	1	H229-Pressurised container: May burst if heated.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



Page 2 of 16

(GB)

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963



H336-May cause drowsiness or dizziness. H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

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. P261-Avoid breathing vapours or spray. P312-Call a POISON CENTRE / doctor if you feel unwell. P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50

EUH066-Repeated exposure may cause skin dryness or cracking.

Without adequate ventilation, formation of explosive mixtures may be possible. Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

#### n.a. 3.2 Mixtures

9-857-5
100
H066
m. Liq. 3, H226
OT SE 3, H336
р. Тох. 1, H304
1 F

Carbon dioxide	Substance for which an EU exposure limit value applies.
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	204-696-9
CAS	124-38-9
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here. Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."



Page 3 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

First-aiders should ensure they are protected! Never pour anything into the mouth of an unconscious person!

#### Inhalation

(GB)

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

If the person is unconscious, place in a stable side position and consult a doctor.

#### Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

#### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Typically no exposure pathway. Rinse the mouth thoroughly with water. Do not induce vomiting. Consult doctor immediately. Danger of aspiration. In case of vomiting, keep head low so that the stomach content does not reach the lungs. **4.2 Most important symptoms and effects, both acute and delayed** 

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

- The following may occur: Irritation of the eyes Inhalation: Irritation of the respiratory tract Headaches Dizziness Effects/damages the central nervous system Unconsciousness with long-term contact: Product removes fat. Dermatitis (skin inflammation) Indestion: Nausea Vomiting Danger of aspiration. Lung damage Oedema of the lungs Chemical pneumonitis (condition similar to pneumonia) Other dangerous properties cannot be ruled out. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. 4.3 Indication of any immediate medical attention and special treatment needed
- n.c.

SECTION 5: Firefighting measures

#### 5.1 Extinguishing media Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher Cool container at risk with water.

#### Unsuitable extinguishing media

High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Hydrocarbons Toxic pyrolysis products. Danger of bursting (explosion) when heated



Page 4 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

## Explosive vapour/air or gas/air mixtures. **5.3 Advice for firefighters**

(GB)

For personal protective equipment see Section 8. In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. According to size of fire Full protection, if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.

#### **SECTION 6: Accidental release measures**

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

#### 6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.

Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products. Leave the danger zone if possible, use existing emergency plans if necessary.

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin. If applicable, caution - risk of slipping.

#### 6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

#### **6.2 Environmental precautions**

#### Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

#### 6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Active substance: Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

#### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

#### **SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

#### 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Keep away from sources of ignition - Do not smoke.

Do not use on hot surfaces.

Take measures against electrostatic charging, if appropriate.

Avoid long lasting or intensive contact with skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

#### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

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

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing. Do not store with flammable or self-igniting materials.

Observe special regulations for aerosols!

Observe special storage conditions.



Page 5 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

Observe special storage conditions. Keep protected from direct sunlight and temperatures over 50°C. Store in a well ventilated place.

#### 7.3 Specific end use(s)

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No information available at present.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

Chemical Name	Hydrocarbons C	9-C11 n-alkanes	, isoalkanes, cyclic	s. <2% aromatics	
WEL-TWA: 800 mg/m3	, d. e carbono, e	WEL-STEL:		c, _// a.c.//a.loo	
Monitoring procedures:	-	-	carbons 0,1%/c (81	03 571)	
	-		carbons 2/a (81 03		
	-	Compur - KITA-			
BMGV:			( /	Other information: (	OEL acc. to RCP-method,
				paragraphs 84-87, EF	
Chemical Name     (0150 (	Carbon dioxide		45000 (0740		
WEL-TWA: 5000 ppm (9150 mg/m	13) (WEL), 5000	WEL-STEL:	15000 ppm (2740	0 mg/m3) (WEL)	
ppm (9000 mg/m3) (EU)			<b>B</b> : <b>A</b> 40/7 /		
Monitoring procedures:	-		n Dioxide 0,1%/a (		
	-		n Dioxide 0,5%/a (		
	-		n Dioxide 1%/a (Cl		
	-	•	n Dioxide 100/a (8	,	
	-	0	n Dioxide 5%/A (Cl	H 20 301)	
	-	Compur - KITA-	, ,		
	-		126 SA (549 467)		
	-		126 SB (548 816)		
	-		126 SF (549 491)		
	-		126 SG (550 210)		
	-		126 SH (549 509)		
	-		126 UH (549 517)		
	-	· ·	arbon dioxide) - 199		
	-	OSHA ID-172 (0	Carbon dioxide in w	orkplace atmospheres)	- 1990
BMGV:				Other information:	

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Consumer	Human - oral	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	900	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	125	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	185	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	125	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	1500	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	208	mg/kg bw/day	



Page 6 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	871	mg/m3	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

(8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE).
(11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).
(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit

value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

\*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision. (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

#### 8.2 Exposure controls

(GB)

#### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

#### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: With danger of contact with eyes. Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection: Solvent resistant protective gloves (EN ISO 374). Recommended Protective nitrile gloves (EN ISO 374). Minimum layer thickness in mm: >= 0,4 Permeation time (penetration time) in minutes: > 480 Protective hand cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: Normally not necessary. If OES or MEL is exceeded. Filter A2 P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

Additional information on hand protection - No tests have been performed. In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.



Page 7 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

#### 8.2.3 Environmental exposure controls

No information available at present.

(GB)

#### **SECTION 9: Physical and chemical properties**

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

Physical state: Colour: Odour: Melting point/freezing point: Boiling point or initial boiling point and boiling range: Flammability: Lower explosion limit: Upper explosion limit: Flash point: Auto-ignition temperature: Decomposition temperature: pH: Kinematic viscosity: Solubility: Partition coefficient n-octanol/water (log value): Vapour pressure: Density and/or relative density: Relative vapour density: Particle characteristics:

#### 9.2 Other information

Explosives: Oxidising liquids:

Aerosol. Active substance: liquid. Colourless Characteristic There is no information available on this parameter. There is no information available on this parameter. Does not apply to aerosols. 0,7 Vol-% (Active substance) 6 Vol-% (Active substance) >=36 °C (ASTM D 56 (Tag, closed cup)) Does not apply to aerosols. There is no information available on this parameter. n.a. Does not apply to aerosols. Soluble Does not apply to mixtures. There is no information available on this parameter. 0,778 g/ml Does not apply to aerosols. Does not apply to aerosols.

There is no information available on this parameter. No

#### **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

The product has not been tested.

10.2 Chemical stability

#### Stable with proper storage and handling.

#### **10.3 Possibility of hazardous reactions**

#### No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7. Heating, open flame, ignition sources

Pressure increase will result in danger of bursting.

#### 10.5 Incompatible materials

See also section 7. Avoid contact with strong oxidizing agents.

#### 10.6 Hazardous decomposition products

See also section 5.2 No decomposition when used as directed.

#### **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Possibly more information on health effects, see Section 2.1 (classification). All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963 Toxicity / effect Endpoint Value Unit Organism Test method Notes



B Page 8 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

Acute toxicity, by oral route:	n.d.a.
Acute toxicity, by dermal route:	n.d.a.
Acute toxicity, by inhalation:	n.d.a.
Skin corrosion/irritation:	n.d.a.
Serious eye damage/irritation:	n.d.a.
Respiratory or skin	n.d.a.
sensitisation:	
Germ cell mutagenicity:	n.d.a.
Carcinogenicity:	n.d.a.
Reproductive toxicity:	n.d.a.
Specific target organ toxicity -	n.d.a.
single exposure (STOT-SE):	
Specific target organ toxicity -	n.d.a.
repeated exposure (STOT-RE):	
Aspiration hazard:	n.d.a.
Symptoms:	n.d.a.

Hydrocarbons, C9-C11, n-alka Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000		Rat	OECD 401 (Acute Oral	NOLES
	LD50	>5000	mg/kg	Rai	Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute	
					Dermal Toxicity)	
Acute toxicity, by inhalation:	LD50	>18,5	mg/l/4h	Rat	OECD 403 (Acute	
<u>, , , , , , , , , , , , , , , , , , , </u>			Ŭ		Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant,
					Dermal	Repeated
					Irritation/Corrosion)	exposure may
						cause skin
						dryness or
						cracking.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant
Schous eye damage/imation.				T CODDIC	Irritation/Corrosion)	Not initiant
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin contact
sensitisation:				Guinea pig	Sensitisation)	
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
Gerni cell mulagenicity.					Reverse Mutation Test)	Analogous
				typhimurium	Reverse Mutation Test)	conclusion
Germ cell mutagenicity:				Human being	OECD 473 (In Vitro Mammalian	Negative,
						Analogous
					Chromosome	conclusion
<b>O</b>					Aberration Test)	
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro	Negative,
					Mammalian Cell Gene	Analogous
<u> </u>					Mutation Test)	conclusion
Germ cell mutagenicity:				Rat	OECD 478 (Genetic	Negative,
					Toxicology - Rodent	Analogous
					dominant Lethal Test)	conclusion
Germ cell mutagenicity:					OECD 479 (Genetic	Negative,
					Toxicology - In Vitro	Analogous
					Sister Chromatid	conclusion
					Exchange assay in	Chinese hamste
					Mammalian Cells)	
Reproductive toxicity:					OECD 414 (Prenatal	Negative,
					Developmental Toxicity	Analogous
					Study)	conclusion
Carcinogenicity:	NOAEC	1100	mg/m3	Mouse	OECD 453 (Combined	Female
					Chronic	
					Toxicity/Carcinogenicity	
					Studies)	
Carcinogenicity:	NOAEC	>= 2200	mg/m3	Mouse	OECD 453 (Combined	Male
			-		Chronic	
					Toxicity/Carcinogenicity	
					Studies)	



 Page 9 of 16
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015
 Replacing version dated / version: 01.11.2021 / 0014
 Valid from: 21.09.2022
 PDF print date: 23.09.2022
 All Brake Cleaner R503
 600 ml Art.: 6110 0963, Art.: 6114 0963

Reproductive toxicity (Effects on fertility):	NOAEL	>= 3000	mg/kg bw/d	Rat	OECD 415 (One- Generation Reproduction Toxicity Study)	Male
Reproductive toxicity (Effects on fertility):	NOAEL	>= 1500	mg/kg bw/d	Rat	OECD 415 (One- Generation Reproduction Toxicity Study)	Female
Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness., STOT SE 3, H336
Aspiration hazard:						Yes
Symptoms:						unconsciousness , headaches, dizziness, discoloration of the skin, vomiting, diarrhoea
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	3000	mg/kg/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	1444	ppm	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90- Day Study)	Analogous conclusion

#### Carbon dioxide

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Symptoms:						unconsciousness , blisters by skin- contact, vomiting, frostbite,
						annoyance, palpitations, itching, headaches,
						cramps, ear noises, dizziness

#### 11.2. Information on other hazards

All Brake Cleaner R503						
600 ml Art.: 6110 0963, Art.: 611	4 0963					
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply
						to mixtures.
Other information:						No other
						relevant
						information
						available on
						adverse effects
						on health.

#### **SECTION 12: Ecological information**

Possibly more information on environmental effects, see Section 2.1 (classification).

All Brake Cleaner R503											
600 ml Art.: 6110 0963, Art.: 6114 0963											
Toxicity / effect         Endpoint         Time         Value         Unit         Organism         Test method         Notes											
12.1. Toxicity to fish:							n.d.a.				
12.1. Toxicity to daphnia:							n.d.a.				



B Page 10 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

12.1. Toxicity to algae:		n.d.a.
12.2. Persistence and		Isolate as much
degradability:		as possible with
		an oil separator.
12.3. Bioaccumulative		n.d.a.
potential:		
12.4. Mobility in soil:		n.d.a.
12.5. Results of PBT		n.d.a.
and vPvB assessment		
12.6. Endocrine		Does not apply
disrupting properties:		to mixtures.
12.7. Other adverse		No information
effects:		available on
		other adverse
		effects on the
		environment.
Other information:	AOX	According to the
		recipe, contains
		no AOX.
Other information:	DOC	DOC-elimination
		degree(complexi
		ng organic
		substance)>=
		80%/28d: n.a.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to bacteria:	EL50	48h	0,95	mg/l			QSAR
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	0,13	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	ErC50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EbC50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOELR	72h	100	mg/l	Raphidocelis subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	80	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.1. Toxicity to algae:	NOELR	72h	3	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.3. Bioaccumulative potential:			5-6,7				High
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substanc

Carbon dioxide							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	35	mg/l	Salmo gairdneri		
Other information:	Log Kow		0,83				
							1



Page 11 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

12.7. Other adverse effects:				Greenhouse effect
Global warming potential (GWP):		1		

#### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods For the substance / mixture / residual amounts

EC disposal code no.:

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The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

07 06 04 other organic solvents, washing liquids and mother liquors

14 06 03 other solvents and solvent mixtures

16 05 04 gases in pressure containers (including halons) containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations. E.g. suitable incineration plant.

#### For contaminated packing material

Pay attention to local and national official regulations. Recommendation:

Return to manufacturer with residual pressure.

Do not perforate, cut up or weld uncleaned container.

15 01 04 metallic packaging

#### **SECTION 14: Transport information**

General statements		
14.1. UN number or ID number:	1950	
Transport by road/by rail (ADR/RID)		
14.2. UN proper shipping name:		
UN 1950 AEROSOLS		
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	
Classification code:	5F	
LQ:	1 L	
14.5. Environmental hazards:	Not applicable	
Tunnel restriction code:	D	
Transport by sea (IMDG-code)		
14.2. UN proper shipping name:		
AEROSOLS		
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	
EmS:	F-D, S-U	
Marine Pollutant:	n.a	
14.5. Environmental hazards:	Not applicable	
Transport by air (IATA)		
14.2. UN proper shipping name:		
Aerosols, flammable		
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	
14.5. Environmental hazards:	Not applicable	
14.6. Special precautions for user		
Unless specified otherwise, general measures for safe transport must be	followed.	
14.7. Maritime transport in bulk according to IMO		
Non-dangerous material according to Transport Regulations.	matiumenta	
SECTION 15: Regu	latory information	



Page 12 of 16

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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

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

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of	Qualifying quantity (tonnes) of
		dangerous substances as	dangerous substances as
		referred to in Article 3(10) for the	referred to in Article 3(10) for the
		application of - Lower-tier	application of - Upper-tier
		requirements	requirements
P3b	11.1, 11.2	5000 (netto)	50000 (netto)

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

97.64 %

Directive 2010/75/EU (VOC):

#### **REGULATION (EC) No 648/2004**

30 % and more aliphatic hydrocarbons less than 5 % aromatic hydrocarbons

#### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

#### **SECTION 16: Other information**

Revised sections:

2

These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

# Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Asp. Tox. 1, H304	Classification according to calculation procedure.
STOT SE 3, H336	Classification according to calculation procedure.
Aerosol 1, H222	Classification based on test data.
Aerosol 1, H229	Classification based on test data.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

Asp. Tox. — Aspiration hazard STOT SE — Specific target organ toxicity - single exposure - narcotic effects Aerosol — Aerosols Flam. Lig. — Flammable liquid

#### Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended. Guidelines for the preparation of safety data sheets as amended (ECHA). Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA). Safety data sheets for the constituent substances.



Page 13 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

ECHA Homepage - Information about chemicals. GESTIS Substance Database (Germany). German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany). EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended. National Lists of Occupational Exposure Limits for each country as amended. Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

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Page 14 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

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#### Any abbreviations and acronyms used in this document:

acc., acc. to according, according to Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the ADR International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF **Bioconcentration factor** BSEF The International Bromine Council body weight bw CAS **Chemical Abstracts Service** CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level

DOC Dissolved organic carbon



Page 15 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963 dw drv weight for example (abbreviation of Latin 'exempli gratia'), for instance e.g. EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants) European Community EC ECHA European Chemicals Agency ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect European Economic Community EEC European Inventory of Existing Commercial Chemical Substances EINECS ELINCS European List of Notified Chemical Substances ΕN European Norms EPA United States Environmental Protection Agency (United States of America) ErCx,  $E\mu Cx$ , ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants) et cetera etc. EU **European Union** EVAL Ethylene-vinyl alcohol copolymer Fax. Fax number aen. general GHS Globally Harmonized System of Classification and Labelling of Chemicals GWP Global warming potential Adsorption coefficient of organic carbon in the soil Koc Kow octanol-water partition coefficient International Agency for Research on Cancer IARC International Air Transport Association IATA IBC (Code) International Bulk Chemical (Code) International Maritime Code for Dangerous Goods IMDG-code incl. including, inclusive IUCLID International Uniform Chemical Information Database IUPAC International Union for Pure Applied Chemistry Lethal Concentration to 50 % of a test population LC50 LD50 Lethal Dose to 50% of a test population (Median Lethal Dose) Log Koc Logarithm of adsorption coefficient of organic carbon in the soil Log Kow, Log Pow Logarithm of octanol-water partition coefficient Limited Quantities LQ MARPOL International Convention for the Prevention of Marine Pollution from Ships not applicable n.a. not available n.av. not checked n.c. n.d.a. no data available NIOSH National Institute for Occupational Safety and Health (USA) NI P No-longer-Polymer NOEC, NOEL No Observed Effect Concentration/Level OECD Organisation for Economic Co-operation and Development organic org. OSHA Occupational Safety and Health Administration (USA) PBT persistent, bioaccumulative and toxic ΡE Polyethylene PNEC Predicted No Effect Concentration parts per million ppm PVC Polyvinylchloride REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals) REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT. RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail) SVHC Substances of Very High Concern Tel. Telephone TOC Total organic carbon UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VOC Volatile organic compounds vPvB very persistent and very bioaccumulative wet weight wwt

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The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.



Page 16 of 16 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0015 Replacing version dated / version: 01.11.2021 / 0014 Valid from: 21.09.2022 PDF print date: 23.09.2022 All Brake Cleaner R503 600 ml Art.: 6110 0963, Art.: 6114 0963

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