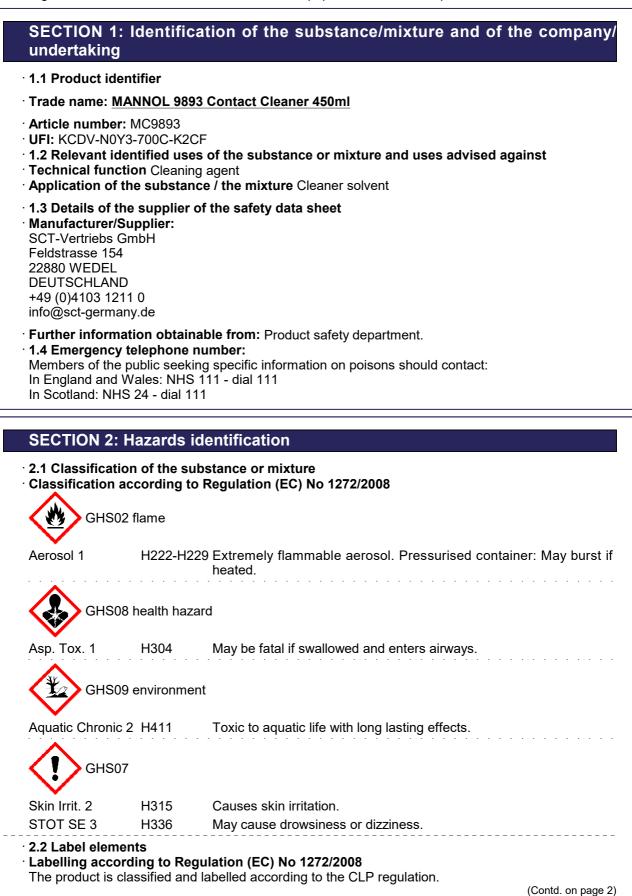


according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024

Version number 2305 (replaces version 2209)

Revision: 22.04.2024





according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024

Version number 2305 (replaces version 2209)

Revision: 22.04.2024





· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

	· Dangerous components:		
Ī		2-methylpentane	50-70%
	EINECS: 203-523-4	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	
	CAS: 106-97-8 EINECS: 203-448-7	butane, pure Flam. Gas 1A, H220; Press. Gas (Comp.), H280	15–20%
		(Conte	d. on page 3)



according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024

Version number 2305 (replaces version 2209)

Revision: 22.04.2024

Trade name: MANNOL 9893 Contact Cleaner 450ml (Contd. of page 2) CAS: 74-98-6 propane 5-10% EINECS: 200-827-9 Flam. Gas 1A, H220; Press. Gas (Comp.), H280 Additional information: For the wording of the listed hazard phrases refer to section 16. **SECTION 4: First aid measures** · 4.1 Description of first aid measures · General information: Immediately remove any clothing soiled by the product. Take affected persons out into the fresh air. After inhalation: Supply fresh air: consult doctor in case of complaints. In case of unconsciousness place patient stably in side position for transportation. After skin contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor. • After eye contact: Rinse opened eye for several minutes under running water. After swallowing: If symptoms persist consult doctor. 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available. 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available. **SECTION 5: Firefighting measures** 5.1 Extinguishing media · Suitable extinguishing agents: CO2. Do not use water. Use fire extinguishing methods suitable to surrounding conditions. Foam Fire-extinguishing powder Sand • For safety reasons unsuitable extinguishing agents: Water with full jet 5.2 Special hazards arising from the substance or mixture No further relevant information available. 5.3 Advice for firefighters · Protective equipment: No special measures required. · Additional information Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. **SECTION 6: Accidental release measures** · 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Particular danger of slipping on leaked/spilled product. Wear protective clothing.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up: Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.

(Contd. on page 4)

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according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024 Version number 2305 (replaces version 2209)

Revision: 22.04.2024

(Contd. of page 3)

Trade name: MANNOL 9893 Contact Cleaner 450ml

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

• 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
 Observe official regulations on storing packagings with pressurised containers. Provide ventilation for receptacles.
 Store in a cool location.
 Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Keep container tightly sealed.
- Protect from heat and direct sunlight.

Store in a cool place.

Store in dry conditions.

Store receptacle in a well ventilated area.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

107-83-5 2-methylpentane (70.0%)

OEL Short-term value: 3600 mg/m³, 1000 ppm Long-term value: 1800 mg/m³, 500 ppm

106-97-8 butane, pure (20.0%)

OEL Short-term value: 1000 ppm

74-98-6 propane (10.0%)

OEL Asphx

• Additional information: The lists valid during the making were used as basis.

- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

(Contd. on page 5)



according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024 Ver

Version number 2305 (replaces version 2209)

Revision: 22.04.2024

Trade name: MANNOL 9893 Contact Cleaner 450ml

(Contd. of page 4)

· Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection Not required.

· Body protection: Light weight protective clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chem	nical properties	
General Information		
· Colour:	Clear	
· Odour:	Specific type	
· Odour threshold:	Not determined.	
 Melting point/freezing point: 	Undetermined.	
Boiling point or initial boiling point and		
boiling range	Not applicable, as aerosol.	
· Flammability	Not applicable.	
• Lower and upper explosion limit		
· Lower:	Not determined.	
· Upper:	Not determined.	
[·] Flash point:	Not applicable, as aerosol.	
 Decomposition temperature: 	Not determined.	
· pH	Not determined.	
· Viscosity:		
Kinematic viscosity	Not determined.	
· Dynamic:	Not determined.	
· Solubility		
· water:	Not miscible or difficult to mix.	
 Partition coefficient n-octanol/water (log 		
value)	Not determined.	
· Vapour pressure:	Not determined.	
Density and/or relative density		
[·] Density at 20 °C:	0.665 g/cm ³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
	(Contd.	on page 6)



according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024

Version number 2305 (replaces version 2209)

Revision: 22.04.2024

Trade name: MANNOL 9893 Contact Cleaner 450ml

	(Contd. of page 5
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of hea	alth
and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Not determined.
Solvent content:	
VOC (EC)	70–100 %
Solids content:	0.0 %
Change in condition	
Evaporation rate	Not applicable.
Information with regard to physical haz	
classes	aiu
Explosives	Void
Flammable gases	Void
Aerosols	Extremely flammable aerosol. Pressurised
Aerosols	container: May burst if heated.
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit	VOIG
flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products:
- Carbon monoxide
- Aldehyde
- Poisonous gases/vapours
- Carbon dioxide

(Contd. on page 7)



according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024 Version nu

Version number 2305 (replaces version 2209)

Revision: 22.04.2024

Trade name: MANNOL 9893 Contact Cleaner 450ml

(Contd. of page 6)

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

106-97-8 butane, pure

Inhalative LC50/4 h 658 mg/l (rat)

- Skin corrosion/irritation
- Causes skin irritation.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure
- May cause drowsiness or dizziness.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard
- May be fatal if swallowed and enters airways.
- · 11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties
- The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 8)

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according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024

Version number 2305 (replaces version 2209)

Revision: 22.04.2024

Trade name: MANNOL 9893 Contact Cleaner 450ml

	(Contd. of page 7)
·Europ	ean waste catalogue
HP3	Flammable
HP4	Irritant - skin irritation and eye damage
HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity	
HP14	Ecotoxic

· Uncleaned packaging:

• **Recommendation:** Disposal must be made according to official regulations.

14.1 UN number or ID number	
ADR, IMDG, IATA	UN1950
14.2 UN proper shipping name ADR	1950 AEROSOLS, ENVIRONMENTALL HAZARDOUS
IMDG IATA	AEROSOLS (2-methylpentane), MARIN POLLUTANT
	AEROSOLS, flammable
14.3 Transport hazard class(es)	
ADR	
Class	2 5F Gases.
Label	2.1
IMDG	
Class	2.1 Gases.
Label	2.1
ΙΑΤΑ	
Class	2.1 Gases.
Label	2.1
14.4 Packing group	
ADR, IATA	not regulated
IMDG	III
14.5 Environmental hazards:	Product contains environmentally hazardou substances: 2-methylpentane
Marine pollutant:	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024

Version number 2305 (replaces version 2209)

Revision: 22.04.2024

Trade name: MANNOL 9893 Contact Cleaner 450ml

	(Contd. of page
14.6 Special precautions for user	Warning: Gases.
 Hazard identification number (Kemler co 	ode): -
EMS Number:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacit of 1 litre: Category A. For AEROSOLS with capacity above 1 litre: Category B. For WASTI AEROSOLS: Category C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacit of 1 litre: Segregation as for class 9. Stow "separated from class 1 except for division 1.4.
	For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision c class 2.
	For WASTE AEROSOLS: Segregation as for the appropriate subdivision c class 2.
 14.7 Maritime transport in bulk accordin IMO instruments 	g to Not applicable.
Transport/Additional information:	
ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0
 Transport category Tunnel restriction code 	Not permitted as Excepted Quantity 2 D
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0
	Not permitted as Excepted Quantity
UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALL

SECTION 15: Regulatory information

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

- · Directive 2012/18/EU
- Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

P3a FLAMMABLE AEROSOLS

E2 Hazardous to the Aquatic Environment

- \cdot Qualifying quantity (tonnes) for the application of lower-tier requirements $150\,t$
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

 DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

(Contd. on page 10)



according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.04.2024 Version number 2305 (replaces version 2209)

Revision: 22.04.2024

Trade name: MANNOL 9893 Contact Cleaner 450ml

(Contd. of page 9)

· REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H220 Extremely flammable gas.

- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.
- · Department issuing SDS: Product safety department.

Date of previous version: 08.05.2023

· Version number of previous version: 2209

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Gas 1A: Flammable gases - Category 1A Aerosol 1: Aerosols - Category 1 Press. Gas (Comp.): Gases under pressure - Compressed gas Flam. Liq. 2: Flammable liquids – Category 2 Skin Irrit. 2: Skin corrosion/irritation - Category 2 STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 Asp. Tox. 1: Aspiration hazard - Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2 ** Data compared to the previous version altered.