Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

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

· **1.1 Product identifier**

· **Trade name: MANNOL 9873 Intake Valve Cleaner 400ml**
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture** Cleaning agent/ Cleaner

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
SCT-Vertriebs GmbH
Feldstrasse 154
22880 WEDEL
DEUTSCHLAND
info@sct-germany.de

· **Further information obtainable from:** Product safety department.
· **1.4 Emergency telephone number:** Giftinformationszentrum-Nord +49-551-19240

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**


GHS02 flame

Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.


GHS08 health hazard

Repr. 2	H361d	Suspected of damaging the unborn child.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.


GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
STOT SE 3	H336	May cause drowsiness or dizziness.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**


GHS02 GHS07 GHS08

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 1)

· **Signal word** Danger

· **Hazard-determining components of labelling:**
toluene
acetone
methanol

· **Hazard statements**

H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.

· **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

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

· **Dangerous components:**

CAS: 108-88-3 EINECS: 203-625-9	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	10–35%
CAS: 67-64-1 EINECS: 200-662-2	acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10–35%

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 2)

CAS: 74-98-6 EINECS: 200-827-9	propane Flam. Gas 1, H220; Press. Gas C, H280	5–19%
CAS: 106-97-8 EINECS: 203-448-7	butane Flam. Gas 1, H220; Press. Gas C, H280	1–8%
CAS: 67-56-1 EINECS: 200-659-6	methanol Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370	0–1%

· **Not dangerous substances**

CAS: 124-38-9 EINECS: 204-696-9	carbon dioxide	0–2%

· **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.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **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
· **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
· **5.3 Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.
· **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 3)

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
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 to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **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.
Open and handle receptacle with care.
· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurised containers.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep container tightly sealed.
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
108-88-3 toluene (35.0%)	
WEL	Short-term value: 384 mg/m³, 100 ppm Long-term value: 191 mg/m³, 50 ppm Sk
67-64-1 acetone (35.0%)	
WEL	Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 4)

106-97-8 butane (8.0%)	
WEL	Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
124-38-9 carbon dioxide (2.0%)	
WEL	Short-term value: 27400 mg/m³, 15000 ppm Long-term value: 9150 mg/m³, 5000 ppm
67-56-1 methanol (1.0%)	
WEL	Short-term value: 333 mg/m³, 250 ppm Long-term value: 266 mg/m³, 200 ppm Sk

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

· **8.2 Exposure controls**
· **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.
Store protective clothing separately.
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.
· **Protection of hands:**

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 protection:**

Tightly sealed goggles

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 5)

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Liquid
Colour:	Clear
· **Odour:**	Acetone-like
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Not applicable, as aerosol.
· **Flash point:**	Not applicable, as aerosol.
· **Flammability (solid, gas):**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Not determined.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density at 20 °C:**	0.818 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	26–98 %
VOC (EC)	26–98 %
· **9.2 Other information**	No further relevant information available.

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.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 6)

· **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

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
108-88-3 toluene		
Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	5,320 mg/l (mouse)
67-64-1 acetone		
Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)
106-97-8 butane		
Inhalative	LC50/4 h	658 mg/l (rat)
67-56-1 methanol		
Oral	LD50	5,628 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes skin irritation.
· **Serious eye damage/irritation**
Causes serious eye irritation.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **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**
Suspected of damaging the unborn child.
· **STOT-single exposure**
May cause drowsiness or dizziness.
· **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
· **Aspiration hazard**
May be fatal if swallowed and enters airways.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 7)

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.
· **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.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

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.

· **European waste catalogue**	
HP3	Flammable
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP10	Toxic for reproduction

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN1950
· **14.2 UN proper shipping name**	
· **ADR**	1950 AEROSOLS
· **IMDG**	AEROSOLS
· **IATA**	AEROSOLS, flammable
· **14.3 Transport hazard class(es)**	
· **ADR**	

· **Class**	2 5F Gases.

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 8)

· **Label**	2.1
· **IMDG, IATA**	
	
· **Class**	2.1
· **Label**	2.1
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	not regulated
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user**	Warning: Gases.
· **Danger code (Kemler):**	-
· **EMS Number:**	F-D,S-U
· **Stowage Code**	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· **Segregation Code**	SG69 For AEROSOLS with a maximum capacity 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 of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **Transport category**	2
· **Tunnel restriction code**	D
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **UN "Model Regulation":**	UN 1950 AEROSOLS, 2.1

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 9)

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
· **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, 48, 69
· **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.
H301 Toxic if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H370 Causes damage to organs.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Department issuing SDS:** Product safety department.
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport 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 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas C: Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

(Contd. on page 11)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.07.2019 Version number 1907 Revision: 11.07.2019

Trade name: MANNOL 9873 Intake Valve Cleaner 400ml

(Contd. of page 10)

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1