

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.03.2020

Version number 2003

Revision: 10.03.2020

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

- **1.1 Product identifier**
- **Trade name: MANNOL 9669 Motor Starter 450ml**
- **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** Additive
- **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.
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GHS08 health hazard

Repr. 2	H361f	Suspected of damaging fertility.
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.
STOT SE 3	H336	May cause drowsiness or dizziness.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

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

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## Hazard pictograms



GHS02 GHS07 GHS08

## Signal word Danger

## Hazard-determining components of labelling:

n-hexane  
diethyl ether  
Ligroine

## Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.  
H315 Causes skin irritation.  
H361f Suspected of damaging fertility.  
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.  
H412 Harmful to aquatic life with long lasting effects.

## 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.  
P264 Wash thoroughly after handling.  
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.  
P314 Get medical advice/attention if you feel unwell.  
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.

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**· Dangerous components:**

CAS: 60-29-7	diethyl ether	10–30%
EINECS: 200-467-2	Flam. Liq. 1, H224; Acute Tox. 4, H302; STOT SE 3, H336	
CAS: 68476-85-7	Petroleum gases, liquefied	10–30%
EINECS: 270-704-2	Flam. Gas 1, H220; Press. Gas (Comp.), H280	
CAS: 110-54-3	n-hexane	10–20%
EINECS: 203-777-6	Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	
CAS: 8032-32-4	Ligroine	10–20%
EINECS: 232-453-7	Flam. Liq. 2, H225; Asp. Tox. 1, H304	

**· 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.**· After swallowing:** If symptoms persist consult doctor.**· 4.2 Most important symptoms and effects, both acute and delayed**

Coughing

Dizziness

Headache

**· 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.

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### 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 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 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:

- Do not spray onto a naked flame or any incandescent material.
- 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:

##### 68476-85-7 Petroleum gases, liquefied (40.0%)

WEL	Short-term value: 2180 mg/m <sup>3</sup> , 1250 ppm
	Long-term value: 1750 mg/m <sup>3</sup> , 1000 ppm
	Carc (if LPG contains > 0.1% of buta-1.3-diene)

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**60-29-7 diethyl ether (40.0%)**

WEL	Short-term value: 620 mg/m <sup>3</sup> , 200 ppm Long-term value: 310 mg/m <sup>3</sup> , 100 ppm
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**110-54-3 n-hexane (20.0%)**

WEL	Long-term value: 72 mg/m <sup>3</sup> , 20 ppm
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- **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 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.
- **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

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**  
**Form:** Liquid

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· <b>Colour:</b>	Transparent
· <b>Odour:</b>	Product specific
· <b>Odour threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	Not applicable, as aerosol.
· <b>Flash point:</b>	Not applicable, as aerosol.
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Not determined.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 20 °C:</b>	0.7 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	30–60 %
<b>VOC (EC)</b>	30–60 %
· <b>9.2 Other information</b>	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.
- **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

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Poisonous gases/vapours  
Carbon dioxide

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## 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:**

**ATE (Acute Toxicity Estimates)**

Oral	LD50	4,050–12,150 mg/kg (rat)
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**60-29-7 diethyl ether**

Oral	LD50	1,215 mg/kg (rat)
Inhalative	LC50/4 h	73,000 mg/l (rat)

**110-54-3 n-hexane**

Oral	LD50	25,000 mg/kg (rat)
Inhalative	LC50/4 h	169 mg/l (rat)
	LC50/4 days	57.8 mg/L (rat)

- **Primary irritant effect:**
- **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.
- **CMR effects (carcinogenicity, 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 fertility.
- **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.

## 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.
- **Ecotoxicological effects:**
- **Remark:** Harmful to 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.

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Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

**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
HP6	Acute Toxicity
HP10	Toxic for reproduction
HP14	Ecotoxic

**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.

· **Label**

2.1

· **IMDG, IATA**· **Class**

2.1

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· Label	2.1
· 14.4 Packing group · ADR, IMDG, IATA	not regulated
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Code  · Segregation Code	Warning: Gases. - F-D,S-U 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. 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) · Excepted quantities (EQ)  · Transport category · Tunnel restriction code	1L Code: E0 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

### 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

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- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.
- H224 Extremely flammable liquid and vapour.
- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H361f Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

- **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 (Comp.): Gases under pressure – Compressed gas
- Flam. Liq. 1: Flammable liquids – Category 1
- Flam. Liq. 2: Flammable liquids – Category 2
- Acute Tox. 4: Acute toxicity - oral – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Repr. 2: Reproductive toxicity – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- Asp. Tox. 1: Aspiration hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

- **\* Data compared to the previous version altered.**