



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

### 1.1. Product identifier

Name of product Starthilfe-Spray

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

#### Recommended intended purpose(s)

Helps reliably with cold and humid Engines.

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

#### Manufacturer

F.W.Klever  
Hauptstraße 20, D-84168 Aham  
Phone +49 (0) 8744 96 99 10, Fax + 49 (0) 8744 96 99 96  
E-Mail [info@ballistol.de](mailto:info@ballistol.de)  
Internet [www.ballistol.de](http://www.ballistol.de)

#### Advice

Qualitätssicherung  
Phone +49 (0) 8744 96 99 30  
E-mail (competent person):  
[info@ballistol.de](mailto:info@ballistol.de)

### 1.4. Emergency telephone number

#### Emergency advice

Dr.Zettler (Werktags von 8.00 Uhr bis 16.00 Uhr) oder  
Giftnotrufzentrale 022819240  
Phone +49 (0) 8744 96 99 30

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Aerosol 1 STOT SE 3	H222, H229 H336	

#### Hazard statements for physical hazards

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

#### Hazard statements for health hazards

H336 May cause drowsiness or dizziness.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



GHS02



GHS07

#### Signal word

Danger



#### Hazard statements for physical hazards

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

#### Hazard statements for health hazards

H336 May cause drowsiness or dizziness.

#### Precautionary Statements

##### General

P102 Keep out of reach of children.

##### Prevention

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.  
P271 Use only outdoors or in a well-ventilated area.

##### ! Storage

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

##### Disposal

P501 Dispose of contents/container to recycling

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/ information on ingredients

#### 3.1. Substances

not applicable

#### 3.2. Mixtures

##### Hazardous ingredients

CAS No	EC No	Name	[%-Vol]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
60-29-7	200-467-2	diethylether	> 35	Flam. Liq. 1, H224 / Acute Tox. 4, H302 / STOT SE 3, H336
74-98-6	200-827-9	propane	ca. 15	Flam. Gas 1, H220 / Press. Gas
106-97-8	203-448-7	butane	ca. 33	Flam. Gas 1, H220 / Press. Gas

##### Additional advice

Aerosol: Propellant propane/butane gas

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### In case of inhalation

Remove the casualty into fresh air and keep him immobile.  
Refer for medical treatment.

##### In case of skin contact

In case of contact with skin wash off with soap and water.

##### In case of eye contact

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.



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**In case of ingestion**

Refer to medical treatment.

**4.2. Most important symptoms and effects, both acute and delayed**

**Physician's information / possible symptoms**

Anaesthetic state

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

**Treatment (Advice to doctor)**

Treat symptoms.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Foam

ABC-pulber

Carbon dioxide

sand

**Unsuitable extinguishing media**

Strong water jet

**5.2. Special hazards arising from the substance or mixture**

Vapours may form explosive mixtures with air

**5.3. Advice for firefighters**

**Additional information**

Heating causes rise in pressure with risk of bursting

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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

Ensure adequate ventilation.

Use personal protective clothing.

Keep away sources of ignition.

Do not breath vapour or spray.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

**6.3. Methods and material for containment and cleaning up**

Clean contaminated objects and floor thoroughly under consideration of environment regulations.

**6.4. Reference to other sections**

No information available.



## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Use only in well-ventilated areas.  
Follow the instructions!

#### General protective measures

Avoid contact with eyes and skin  
Do not inhale aerosols

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

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

#### Requirements for storage rooms and vessels

Keep in closed original container.

#### Advice on storage compatibility

Do not store with combustible materials.

#### Further information on storage conditions

Protect from extreme heat and cold.  
Storage temperature may not exceed 50°C (=122°F).

**Storage group** 2B

### 7.3. Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m <sup>3</sup> ]	[ppm]	Remark
60-29-7	diethylether	8 hours	308	100	
		Short-term	616	200	

#### Additional advice

When spraying the entire contents of a 200ml spray can in one room of 20m<sup>2</sup>, none of the limit values are reached, so that a limit measurement is not required.

### 8.2. Exposure controls

#### Limitation and surveillance of the environment

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## SECTION 9: Physical and chemical properties

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

#### Appearance

aerosol

#### Colour

colourless, clear

#### Odour

solvent-like

#### Odour threshold



not determined

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	not determined				
<b>Boiling temperature / boiling range</b>	not determined				
<b>Melting point / Freezing point</b>	not determined				
<b>Flash point</b>	ab -104 °C				(Propan)
<b>Vapourisation rate</b>	not determined				
<b>Flammable (solid)</b>	not determined				
<b>Flammability (gas)</b>	not determined				
<b>Ignition temperature</b>	170 °C				information concern solvent
<b>Self ignition temperature</b>	not determined				
<b>Lower explosion limit</b>	ca. 1,5 Vol-%				(Propan)
<b>Upper explosion limit</b>	ca. 10,9 Vol-%				(Propan)
<b>Vapour pressure</b>	587 hPa	20 °C			the data refer to the solvent
<b>Relative density</b>	0,71 g/cm <sup>3</sup>	20 °C			information concerns to liquid phase
<b>Vapour density</b>	not determined				
<b>Solubility in water</b>	12 g/l	20 °C		1013 hPa	
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	not determined				
<b>Decomposition temperature</b>	not determined				
<b>Viscosity</b>	not determined				

**Oxidising properties**

No information available.



**Explosive properties**

No information available.

**9.2. Other information**

No information available.

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No information available.

**10.2. Chemical stability**

No information available.

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

Formation of explosive gas/air mixtures.

Container under pressure. Protect from direct exposure to sunlight and temperatures exceeding 50°C.

**10.5. Incompatible materials**

**Substances to avoid**

Reactions with strong oxidising agents.

**10.6. Hazardous decomposition products**

No hazardous decomposition products known.

**Additional information**

Product is stable under normal storage conditions

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**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	1215 mg/kg	rat		Information concerns to main component.
<b>LC50 acute inhalation</b>	73000 mg/l (4 h)	rat		Details refer to the main component
<b>Skin irritation</b>	non-irritant			
<b>Eye irritation</b>	low irritant - no labeling duty			
<b>Skin sensitization</b>	non-sensitizing			

**Toxicity test (Additional information)**

When properly used the product according to our experience and the information available to us caused no harmful effects.

**Experiences made from practice**

Has a degreasing effect on the skin.

Frequent persistent contact with the skin may cause skin irritation.



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## SECTION 12: Ecological information

### 12.1. Toxicity

No information available.

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

No information available.

### 12.6. Other adverse effects

#### General regulation

The product floats on the water, is in liquid form, is not adsorbed on soil particles, and passes into the vapor phase. No groundwater contamination.

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Waste code No.

14 06 03\*

#### Name of waste

other solvents and solvent mixtures

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

#### Recommendations for the product

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany the Recycling and Waste Management Act (KrWG) stipulates recycling as a requirement.

#### Recommendations for packaging

Totally emptied packaging may be taken for recycling.

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## ! SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name	Druckgaspackung	Aerosols flammable	Aerosols, flammable
14.3. Transport hazard class(es)	2	2.1	2.1
14.4. Packing group	-	-	-



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	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA-DGR</b>
<b>14.5. Environmental hazards</b>	No	No	No
<b>14.6. Special precautions for user</b> No information available.			
<b>14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> No information available.			
<b>Land and inland navigation transport ADR/RID</b> tunnel restriction code D Classification code 5F			

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## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**  
**Other regulations (EU)**  
Observe regulation 98/24/EC for employee health protection against the threat of chemical substances in the workplace.  
Aerosol directive (75/324/EEC).

### National regulations

#### Restriction of occupation

Observe employment restrictions for young people.

**Water hazard class** 1 value from literature

**Decree for case of interference/remarks** Nr.: 7 b

### 15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

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## SECTION 16: Other information

### Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

### Further information

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 5.2

- H220 Extremely flammable gas.
- H224 Extremely flammable liquid and vapour.
- H302 Harmful if swallowed.
- H336 May cause drowsiness or dizziness.