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## Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

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

#### 1.1. Product identifier

**CURTIS Rostlöser-Spray AR 40**

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

##### Use of the substance/mixture:

Anti-corrosion oil - Propellant

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

##### Supplier (manufacturer/importer/only representative/downstream user/distributor):

**Curtis Systems GmbH**

Geheimrat-Hummel-Platz Nr. 4  
65239 Hochheim  
Germany

**Telephone:** 0614690738-0

**Telefax:** 061469073845

**E-mail:** info@curtis-systems.de

**E-mail (competent person):** weimer@curtis-systems.de

#### 1.4. Emergency telephone number

Technical department:, 06146-90738-33 (Only available during office hours.)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Flammable aerosols ( <i>Flam. Aerosol 1</i> )	H222: Extremely flammable aerosol.	

#### 2.2. Label elements

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

##### Hazard pictograms:



**GHS02**  
Flame

**Signal word:** Danger

hazard statements for physical hazards	
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

Supplemental Hazard information (EU)	
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements	
P102	Keep out of reach of children.

Precautionary statements 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.

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

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**Special rules for supplemental label elements for certain mixtures:**

Contains: Hydrocarbons C10-C13

**Labelling (67/548/EEC or 1999/45/EC)**

**Hazard pictograms:**



**F+**  
 Extremely flammable

Hazard statements	
R12	Extremely flammable.
R66	Repeated exposure may cause skin dryness or cracking.

Precautionary statements	
S16	Keep away from sources of ignition. - No smoking.
S23.5	Do not breathe aerosol.
S51	Use only in well-ventilated areas.

**Hazard components for labelling:**

Propane / butane.

**2.3. Other hazards**

**Adverse human health effects and symptoms:**

Processing vapours can irritate the respiratory tracts, skin and eyes.

**Other adverse effects:**

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

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

**3.2. Mixtures**









**Description:**

Mixture of hydrocarbons, additives and propellant.

**Additional information:**

Substance with a common (EC) occupational exposure limit value. See section 8.

**Hazardous ingredients / Hazardous impurities / Stabilisers:**

Product identifiers	Substance name Classification according to 67/548/EEC Classification according to Regulation (EC) No. 1272/2008 [CLP]	Concentration
CAS No.: 64742-48-9 EC No.: 918-481-9 REACH No.: 01-21194-57273-39-0001	<b>Carbon hydrogens, C10-C13, n-alkanes</b>  <b>Danger H304</b>  Xn R65, R66	25 - 50 Vol-%
CAS No.: 106-97-8 EC No.: 203-448-7	<b>butane</b> Flam. Gas 1, Press. Gas   <b>Danger H220</b>  F+; R12	15 - 30 Vol-%
CAS No.: 74-98-6 EC No.: 200-827-9	<b>propane</b> Flam. Gas 1, Press. Gas   <b>Danger H220</b>  F+; R12	15 - 30 Vol-%

Full text of R-, H- and EUH-phrases: see section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information:**

Change contaminated, saturated clothing.

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Following inhalation:**

Following inhalation - Provide fresh air.

In case of respiratory tract irritation, consult a physician.

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**In case of skin contact:**

After contact with skin, wash immediately with plenty of water and soap.  
In case of skin irritation, consult a physician.

**After eye contact:**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

**After ingestion:**

Let water be drunk in little sips (dilution effect).  
Do NOT induce vomiting.  
Call a physician immediately.

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

No data available

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

No data available

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media:**

Suitable extinguishing media Sand alcohol resistant foam Extinguishing powder Dry extinguishing powder

**Unsuitable extinguishing media:**

Full water jet

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

In case of fire may be liberated: the formation of dangerous gases is possible.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**5.4. Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures**

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

**6.1.1. For non-emergency personnel**

**Personal precautions:**

Keep unprotected people away and stay on the upwind side. Remove all sources of ignition.

**6.1.2. For emergency responders**

No data available

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.  
Prevent spread over a wide area (e.g. by containment or oil barriers).

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

**For cleaning up:**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).  
Collect in closed containers for disposal.

**6.4. Reference to other sections**

No data available

**6.5. Additional information**

See section 8. + 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Protective measures**

**Advices on safe handling:**

All work processes must always be designed so that the following is as low as possible: Inhalation Skin contact Eye contact  
Always close containers tightly after the removal of product.



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**Fire prevent measures:**

Usual measures for fire prevention.  
 Keep away from sources of ignition. - No smoking.  
 Do not spray on naked flames or any incandescent material.  
 Caution! Container under pressure.

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

**Requirements for storage rooms and vessels:**

Keep container tightly closed.  
 Keep/Store only in original container.  
 Store in a cool dry place.

**Hints on storage assembly:**

-

**Storage class:** 2 B

**Further information on storage conditions:**

Recommended storage temperature 15-25 °C

**7.3. Specific end use(s)**

**Recommendation:**

Observe technical data sheet.

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

**8.1. Control parameters**

**8.1.1. Occupational exposure limit values**

Limit value type (country of origin)	Substance name	① long-term occupational exposure limit value ② short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ remark
DFG (DE)	Carbon hydrogens, C10-C13, n-alkanes CAS No.: 64742-48-9	① 50 ppm (300 mg/m <sup>3</sup> ) ② 100 ppm (600 mg/m <sup>3</sup> )
TRGS 900 (DE)	butane CAS No.: 106-97-8	① 1,000 ppm (2,400 mg/m <sup>3</sup> ) ② 4,000 ppm (9,600 mg/m <sup>3</sup> )
TRGS 900 (DE)	propane CAS No.: 74-98-6	① 1,000 ppm (1,800 mg/m <sup>3</sup> ) ② 4,000 ppm (7,200 mg/m <sup>3</sup> )

**8.1.2. biological limit values**

No data available

**8.1.3. DNEL-/PNEC-values**

No data available

**8.2. Exposure controls**

**8.2.1. Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

**8.2.2. Personal protection equipment**

**Eye/face protection:**

Tightly sealed safety glasses.

**Skin protection:**

Hand protection: Tested protective gloves must be worn - In case of prolonged or frequently repeated skin contact:

Suitable material: Suitable material: NBR (Nitrile rubber) Butyl caoutchouc (butyl rubber)

Thickness of the glove material: > 0,5 mm

Breakthrough time (maximum wearing time): > 240

**Respiratory protection:**

With correct and proper use, and under normal conditions, breathing protection is not required.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.



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**Other protection measures:**

Protective clothing: Only wear fitting, comfortable and clean protective clothing.  
 General health and safety measures:  
 Set out skin protection guidelines. Before starting work, apply solvent-resistant skincare preparations.  
 Avoid contact with skin, eyes and clothes.

**8.2.3. Environmental exposure controls**

No data available

**8.3. Additional information**

No data available

**SECTION 9: Physical and chemical properties**

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

**Appearance**

**Physical state:** Aerosol

**Colour:** light brown

**Odour:** characteristic

**Safety relevant basis data**

		at °C	Method	remark
pH	<i>not determined</i>			
Melting point/freezing point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	<i>not applicable</i>			
Decomposition temperature (°C):	<i>not determined</i>			
Flash point	<i>not applicable</i>			
Evaporation rate	<i>not determined</i>			
Ignition temperature in °C	> 200 °C			Active agent
Upper/lower flammability or explosive limits	0.6 - 11 Vol-%			not explosive according to EU A.14. Vapours can form explosive mixtures with air.
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Density	0.82 g/cm <sup>3</sup>	15 °C	DIN EN ISO 12185	Active agent
Bulk density	<i>not determined</i>			
Water solubility (g/L)	<i>not determined</i>			
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not applicable</i>			
Kinematic viscosity	<i>not applicable</i>			

**9.2. Other information**

No data available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Heating causes rise in pressure with risk of bursting.

**10.2. Chemical stability**

The product is stable.

**10.3. Possibility of hazardous reactions**

No hazardous reactions known.

**10.4. Conditions to avoid**

Protect against: Heat

**10.5. Incompatible materials**

Materials to avoid Oxidising agent Acid

**10.6. Hazardous decomposition products**

No decomposition under normal conditions.

Combustion products:

Carbon dioxide. Carbon monoxide. Sulphur oxides

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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Acute oral toxicity:**

Toxicological data are not available.

**Acute dermal toxicity:**

Toxicological data are not available.

**Acute inhalation toxicity:**

Toxicological data are not available.

**Skin corrosion/irritation:**

There are no data available on the preparation/mixture itself.

No irritation effect known.

**Eye damage/irritation:**

Irritant effect possible.

**Respiratory or skin sensitisation:**

not sensitising.

**Carcinogenicity:**

The components in this formulation do not meet the criteria for classification as CMR category 1 or 2.

**STOT-single exposure:**

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Aquatic toxicity:**

There are no data available on the mixture itself.

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

### 12.2. Persistence and degradability

**Additional information:**

Further ecological information: Product is biodegradable.

There are no data available on the preparation/mixture itself.

The statement is derived from products of similar composition.

### 12.3. Bioaccumulative potential

**Accumulation / Evaluation:**

No indication of bioaccumulation potential.

### 12.4. Mobility in soil

There are no data available on the mixture itself.

### 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

### 12.6. Other adverse effects

Further ecological information: No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Dispose of waste according to applicable legislation. Delivery to an approved waste disposal company.

#### 13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

**Waste code product:**

16 05 04 *	Gases in pressure containers (including halons) containing dangerous substances
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\*: Evidence for disposal must be provided.

**Waste code packaging:**

15 01 04	Metallic packaging
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### Waste treatment options

**Appropriate disposal / Package:**





Dispose of waste according to applicable legislation. Delivery to an approved waste disposal company.

### 13.2. Additional information

No data available

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## SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1. UN-No.</b>			
1950	1950	1950	1950
<b>14.2. UN proper shipping name</b>			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
<b>14.3. Transport hazard class(es)</b>			
 2.1	 2.1	 2.1	 2.1
<b>14.4. Packing group</b>			
No data available			
<b>14.5. Environmental hazards</b>			
No	No	No	No
<b>14.6. Special precautions for user</b>			
<b>Special provisions:</b> 190, 327, 344, 625 <b>Limited quantity (LQ):</b> LQ2 <b>Hazard identification number (Kemler No.):</b> <b>Classification code:</b> F <b>tunnel restriction code:</b> D <b>remark:</b> Classification code: 5F	<b>Special provisions:</b> <b>Limited quantity (LQ):</b> LQ2 <b>Classification code:</b> F <b>remark:</b> Classification code: 5F	<b>Special provisions:</b> 63, 190, 277, 327, 344, 959 <b>Limited quantity (LQ):</b> <b>EmS-No.:</b> F-D, ; S-U <b>remark:</b>	<b>Special provisions:</b> A145, A167 <b>Limited quantity (LQ):</b> LQ Passenger: 30 kg <b>remark:</b>

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
 not applicable

## SECTION 15: Regulatory information

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

**15.1.1. EU legislation**

No data available

**15.1.2. National regulations**

 [DE] National regulations

**Störfallverordnung**

**remark:**

-

**Technische Anleitung Luft (TA-Luft)**

**remark:**

Volatile organic compounds (VOC) content in percent by weight: > 90%

**Water hazard class (WGK)**

**WGK:**

1 - schwach wassergefährdend

**Source:**

Anh. 4

**15.2. Chemical Safety Assessment**

No data available

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### 15.3. Additional information

No data available

## SECTION 16: Other information

### 16.1. Indication of changes

12.11.2014: Classification according to Regulation (EC) No. 1272/2008 [CLP]  
Version 2014.1

### 16.2. Abbreviations and acronyms

No data available

### 16.3. Key literature references and sources for data

No data available

### 16.4. Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Flammable aerosols ( <i>Flam. Aerosol 1</i> )	H222: Extremely flammable aerosol.	

### 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements (R-phrases)	
R12	Extremely flammable.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.

Hazard statements	
H220	Extremely flammable gas.
H304	May be fatal if swallowed and enters airways.

### 16.6. Training advice

No data available

### 16.7. Additional information

No data available