

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Adhesive Spray KK 100

Revision date: 12.09.2017

Product code: VCSO-GD-012

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

### 1.1. Product identifier

Adhesive Spray KK 100

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

#### Use of the substance/mixture

adhesives

#### Uses advised against

Only use for the intended purpose. In case of doubt please contact our responsible department.

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

Company name:	GUNOLD GmbH	
Street:	Obernburger Straße 125	
Place:	GB-63811 Stockstadt	
Telephone:	+49 (0)6027 - 2 00 80	Telefax: +49 (0)6027 - 37 72
e-mail:	service@gunold.de	
Contact person:	Christoph Gunold	Telephone: +49 (0)6027 - 2 00 80
e-mail:	c.gunold@gunold.de	
Internet:	www.gunold.de	
Responsible Department:	Quality Control and Environment	

### 1.4. Emergency telephone

**number:** Poison Control Center (Mayence, GER)

+49 (0)6131-19240 (24h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories:

Aerosol: Aerosol 1

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

**Signal word:** Danger

**Pictograms:**



#### Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

#### Precautionary statements

P102 Keep out of reach of children.

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.

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

P261 Avoid breathing Aerosol.

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

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P501

Dispose of waste according to applicable legislation.

**2.3. Other hazards**

Prolonged/repetitive product contact may cause mucosa and skin irritation like redness, blistering, dermatitis etc.

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

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

**3.2. Mixtures**

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
115-10-6	dimethyl ether			50 - 70 %
	204-065-8	603-019-00-8	01-2119472128-37	
	Flam. Gas 1, Compressed gas; H220 H280			
109-87-5	dimethoxymethane			5 - 7 %
	203-714-2		01-2119664781-31	
	Flam. Liq. 2; H225			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

In case of troubles or persistent symptoms, consult an doctor/physician.

Remove persons from danger area and lie them down. Never orally infuse something to an unconscious person. No special first aid measures necessary. A vomiting, supine person must be brought into recovery position.

In case of irregular breathing or respiratory arrest, perform artificial respiration.

**After inhalation**

Provide fresh air.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing.

**After contact with eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**After ingestion**

Call a physician immediately. Do NOT induce vomiting.

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

Prolonged/repetitive product contact may cause mucosa and skin irritation like redness, blistering, dermatitis etc.

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

Treat symptomatically.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Foam. Water fog. Carbon dioxide (CO<sub>2</sub>).

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**Unsuitable extinguishing media**

High power water jet.

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

Heating causes rise in pressure with risk of bursting.

Thermal decomposition can lead to harmful gases and vapours.

**5.3. Advice for firefighters**

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

**Additional information**

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

**SECTION 6: Accidental release measures**

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

See protective measures under point 7 and 8.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. In case of product being released into lakes, rivers or the drainage system, appropriate authorities must be informed.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

For waste disposal see section 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Consider the usual precautions for handling chemicals.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

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

**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Ensure adequate ventilation of the storage area.

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

adhesives

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

**8.1. Control parameters**

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**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
109-87-5	Dimethoxymethane	1000	3160		TWA (8 h)	WEL
		1250	3950		STEL (15 min)	WEL
115-10-6	Dimethyl ether	400	766		TWA (8 h)	WEL
		500	958		STEL (15 min)	WEL

**8.2. Exposure controls**

**Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust at critical locations. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

**Protective and hygiene measures**

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. Avoid skin, eye and clothing contact. After contact with skin, wash immediately with plenty of water and soap or a suitable cleaning agent.

**Eye/face protection**

Tightly sealed safety glasses.

**Hand protection**

Chemical resistant safety gloves, e.g. made out of nitrile.  
Recommendation splash contact: Protection index 2, penetration time >30 min, e.g. butyl rubber 0,4 mm.

Recommendation direct, prolonged contact: Protective index 6, penetration time > 480 min, e.g. nitrile rubber 0.4 mm

**Skin protection**

Wear anti-static footwear and clothing

**Respiratory protection**

Not required if used properly.

**SECTION 9: Physical and chemical properties**

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

Physical state: liquid  
Colour: various  
Odour: characteristic

**Test method**

pH-Value: not applicable

**Changes in the physical state**

Melting point: No data available

Initial boiling point and boiling range: -42 °C

Flash point: -45 °C DIN 53213

**Flammability**

Solid: No data available  
Gas: not applicable

**Explosive properties**

No data available

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Lower explosion limits: 1,4 vol. %  
Upper explosion limits: 19,9 vol. %  
Ignition temperature: 235 °C

**Auto-ignition temperature**

Solid: No data available  
Gas: No data available

Decomposition temperature: No data available

**Oxidizing properties**

No data available

Vapour pressure: 344,3697 hPa  
(at 20 °C)

Density (at 20 °C): 0,80 g/cm<sup>3</sup>

Water solubility: practically insoluble

**Solubility in other solvents**

No data available

Partition coefficient: No data available

Viscosity / dynamic: not applicable

Vapour density: No data available

Evaporation rate: No data available

Solvent content: 93 %

**9.2. Other information**

Solid content: 7,09 %

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No information available.

**10.2. Chemical stability**

The product is stable when stored and handled appropriately.

**10.3. Possibility of hazardous reactions**

Keep away from strong acids, strong bases and strong oxidisers to avoid exothermic reactions.

**10.4. Conditions to avoid**

high temperature (above the decomposition temperature) For further information concerning storage: see section 7.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No information available.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity**

Based on available data, the classification criteria are not met.

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
115-10-6	dimethyl ether				
	inhalative (4 h) vapour	LC50 308 mg/l	Rat		

**Irritation and corrosivity**

Based on available data, the classification criteria are not met.

Prolonged/repetitive product contact may cause mucosa and skin irritation like redness, blistering, dermatitis etc.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

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

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

**12.1. Toxicity**

No data available

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

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

**12.6. Other adverse effects**

No data available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS, flammable  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1



Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Excepted quantity: E0  
Transport category: 2  
Tunnel restriction code: D

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS, flammable  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1



Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS, flammable  
**14.3. Transport hazard class(es):** 2.1  
**14.4. Packing group:** -  
Hazard label: 2.1



Special Provisions: 63, 190, 277, 327, 344, 381, 959  
Limited quantity: 1000 mL  
Excepted quantity: E0  
EmS: F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS, flammable  
**14.3. Transport hazard class(es):** 2.1

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#### 14.4. Packing group:

-

Hazard label:

2.1



Special Provisions:

A145 A167 A802

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y203

Excepted quantity:

E0

IATA-packing instructions - Passenger:

203

IATA-max. quantity - Passenger:

75 kg

IATA-packing instructions - Cargo:

203

IATA-max. quantity - Cargo:

150 kg

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No special precautions known.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

### SECTION 15: Regulatory information

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

##### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 28: butane; isobutane

2004/42/EC (VOC): 743,599 g/l

##### Additional information

Regulation (EC) No. 648/2004 (Detergents regulation): not applicable

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer: not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants: not applicable

Regulation (EC) No 689/2008 of the European Parliament and of the Council concerning the export and import of dangerous chemicals: This mix contains no chemicals that are subject to the export notification procedures (annex 1).

This mixture contains the following substances of very high concern (SVHC) which are included in the

Candidate List according to Article 59 of REACH: none

This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH: none

##### National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D):

1 - slightly water contaminating

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

dimethyl ether

### SECTION 16: Other information

#### Changes



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This data sheet contains changes from the previous version in section(s): 1,2,3,5,7,8,9,10,11,12,14,15,16.

Version 1,00 - Creation - 29.07.2011

Version 1,01 - changes of S-phrases - 02.08.2012

Version 1,02 - revision of the entire SDS due to new information from the presupplier - 12.02.2013

Version 1,03 - Classification/Labeling according Regulation No.1272/2008 (GHS/CLP) and general revision - 09.06.2015

Version 1,04 - General update - 12.09.2017

#### 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)

BImSchV (Fed.Imm.Prot.Act): Directive on the Implementation of the Federal Immission Protection Act

CAS: Chemical Abstracts Service

DIN: Norm of the Deutsche Institut für Normung (German Institute for Standardization)

EC: Effective Concentration

EG: European Community (Europäische Gemeinschaft)

EN: European Norm

IATA: International Air Transport Association

IBC Code: International Code for the Construction and Equipment of ships carrying Dangerous Chemicals in Bulk

ICAO: International Civil Aviation Organization

IMDG: International Maritime Code for Dangerous Goods

ISO: Norm of the International Standards Organization

CLP: Classification, Labeling, Packaging

IUCLID: International Uniform Chemical Information Database

LC: Lethal concentration

LD: Lethal dose

log Kow: Octanol/water partition coefficient

MARPOL: Maritime Pollution Convention = Convention for the Prevention of Maritime Pollution from Ships

OECD: Organisation for Economic Co-operation and Development

PBT: Persistent, bio-cumulative, toxic

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail

TRGS: Technische Regeln für Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

vPvB: very persistent and very bio-cumulative

VwVwS: Administrative Regulation for Water Pollutants

WGK: German Water Hazard Class

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

TLV: Threshold Limiting Value

STOT: Specific Target Organ Toxicity

#### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data

#### Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.

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#### Further Information

The information given in this safety data sheet is to describe the product's safety regulations. It is not for guaranteeing certain characteristics and is based on today's knowledge. The safety data sheet was generated upon information of pre-suppliers by:

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*