

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 21.02.2019

Revision: 19.02.2019

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

#### 1.1 Product identifier

**Trade name:** Spraymarker grün

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

No further relevant information available.

**Application of the substance / the preparation:** Auxiliary for dental technology

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

**Manufacturer/Supplier:**

Firmenbezeichnung  
Amann Girrbach AG  
Herrschaftswiesen 1  
A-6842 Koblach  
Telefon: 0043 5523 623330  
Fax: 0043 5523 55990  
Email: austria@amanngirrbach.com  
Internet: www.amanngirrbach.com

Inverkehrbringer  
Amann Girrbach GmbH  
Duerrenweg 40  
D-75177 Pforzheim  
Telefon: 0049 7231 957100  
Fax: 0049 7231 957129  
Email: germany@amanngirrbach.com  
Internet: www.amanngirrbach.com

**Further information obtainable from:** Amann Girrbach GmbH

#### 1.4 Emergency telephone number:

Giftinformationszentrum-Nord / GIZ-Nord Poisons Centre  
Telefon / Phone +49 (0) 551/19240  
24h / 7d

### 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.

#### 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

**Signal word:** Danger**Hazard statements:**

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

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**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.  
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.

**Additional information:** Buildup of explosive mixtures possible without sufficient ventilation.**2.3 Other hazards:****Results of PBT and vPvB assessment:****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Chemical characterisation: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 75-28-5	isobutane	50-100%
EINECS: 200-857-2	 Flam. Gas 1, H220; Press. Gas (Comp.), H280	
Reg.nr.: 01-2119485395-27		

**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:**

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:** In cases of frost bites, rinse with plenty of water. Do not remove clothing.**After eye contact:**

Rinse opened eye for several minutes under running water.

Call a doctor immediately.

**After swallowing:** Call a doctor immediately.**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:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**5.2 Special hazards arising from the substance or mixture:** Can form explosive gas-air mixtures.**5.3 Advice for firefighters:****Protective equipment:**

Mouth respiratory protective device.

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Do not inhale explosion gases or combustion gases.

### SECTION 6: Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

**6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.**6.3 Methods and material for containment and cleaning up:** 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:**

Open and handle receptacle with care.

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

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

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

Fumes can combine with air to form an explosive mixture.

**7.2 Conditions for safe storage, including any incompatibilities:****Storage:****Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Observe official regulations on storing packagings with pressurised containers.

Store only in the original receptacle.

**Information about storage in one common storage facility:** Store away from foodstuffs.**Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

**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:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**8.2 Exposure controls:****Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Keep away from foodstuffs, beverages and feed.

Do not inhale gases / fumes / aerosols.

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Avoid contact with the eyes and skin.

**Respiratory protection:** Not necessary if room is well-ventilated.

**Protection of hands:**

Check the permeability prior to each renewed use of the glove.

Protective gloves

**Material of gloves:**

Nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.2$  mm

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.

**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.

**As protection from splashes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Butyl rubber, BR

Natural rubber, NR

**Eye protection:** Tightly sealed goggles

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties:****General Information:****Appearance:**

<b>Form:</b>	Aerosol
<b>Colour:</b>	Green
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.

**Change in condition:**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	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:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

**Explosion limits:**

<b>Lower:</b>	1.8 Vol %
<b>Upper:</b>	8.5 Vol %

**Vapour pressure at 20 °C:** 3000 hPa

**Density at 20 °C:** 0.6 g/cm<sup>3</sup>

**Relative density:** Not determined.

**Vapour density:** Not determined.

**Evaporation rate:** Not applicable.

**Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

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**Partition coefficient: n-octanol/water:** Not determined.**Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.**Solvent content:****VOC (EC)** 95 %**9.2 Other information:** No further relevant information available.

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**SECTION 10: Stability and reactivity**

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**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:** Forms explosive gas mixture with air.**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 and carbon dioxide

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**SECTION 11: Toxicological information**

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**11.1 Information on toxicological effects:****Acute toxicity** Based on available data, the classification criteria are not met.**Primary irritant effect:****Skin corrosion/irritation** Based on available data, the classification criteria are not met.**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** Based on available data, the classification criteria are not met.**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.

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**SECTION 12: Ecological information**

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**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:** Not hazardous for water.**12.5 Results of PBT and vPvB assessment:****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects:** No further relevant information available.(Contd. on page 6)

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SECTION 13: Disposal considerations

13.1 Waste treatment methods:

European waste catalogue:

Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Label:

2.1

14.4 Packing group:

-

ADR, IMDG, IATA

Void

14.5 Environmental hazards:

Marine pollutant:

No

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.

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**Transport/Additional information:****ADR**

Limited quantities (LQ):	1L
Transport category:	2
Tunnel restriction code:	D
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**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.

H280 Contains gas under pressure; may explode if heated.

**Department issuing SDS:**

ADEEGO GmbH

Wildsteig 4A

D-42113 Wuppertal

Tel. +49 (0) 202 2575700

Fax. +49 (0) 202 2575701

Email: mail@adeego.de

www.adeego.de

**Contact:** Dr. Axel Deeg**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)

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