

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Air Duster / Air Duster Power

Revision date: 09.10.2018

Product code: GD-034

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

### 1.1. Product identifier

Air Duster / Air Duster Power

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

#### Use of the substance/mixture

compressed air spray

#### 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:	D-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.  
P501 Dispose of this material and its container to hazardous or special waste collection point.

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**2.3. Other hazards**

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. 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]			
75-28-5	Isobutane			50 - 100 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1, Compressed gas; H220 H280			
74-98-6	Propane			25 - 50 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1, Compressed gas; H220 H280			
106-97-8	Butane			2,5 - 10 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1, Liquefied gas; H220 H280			

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**

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

**After contact with skin**

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

**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**

Not hazardous to health when used as intended.

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

Treat symptomatically.

**SECTION 5: Firefighting measures**

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**5.1. Extinguishing media**

**Suitable extinguishing media**

Foam. Extinguishing powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media**

High power water jet.

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

In case of fire may be liberated: Carbon monoxide. Carbon dioxide.

Vapours are heavier than air, spread along floors and form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

**5.3. Advice for firefighters**

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

**Additional information**

Co-ordinate fire-fighting measures to the fire surroundings. Suppress gases/vapours/mists with water spray jet.

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**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

Keep away from sources of ignition - No smoking. Take action to prevent static discharges.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. 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**

Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

**6.4. Reference to other sections**

Personal protection equipment: see section 8

Handling and storage: see section 7

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. Ensure adequate ventilation. Avoid contact with skin, eyes and clothes.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take action to prevent static discharges.

**Further information on handling**

When using do not eat, drink or smoke.

**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.

**Hints on joint storage**

Keep away from food, drink and animal feedingstuffs.

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**Further information on storage conditions**

Protect from sunlight and heat sources. Avoid ignition sources.

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

compressed air spray

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

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		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**

Tested protective gloves are to be worn. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.  
Suitable material: NBR (Nitrile rubber).  
Thickness of glove material: >0,45mm  
penetration time (maximum wearing period): >60 minutes  
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

**Skin protection**

protection suit

**Respiratory protection**

Not required if used properly.

**SECTION 9: Physical and chemical properties**

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

Physical state: Aerosol  
Colour: colourless  
Odour: characteristic  
pH-Value: not applicable

**Changes in the physical state**

Melting point: No data available  
Initial boiling point and boiling range: No data available  
Flash point: No data available

**Flammability**

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Solid: No data available

Gas: No data available

#### Explosive properties

No data available

Lower explosion limits: 1,4 vol. %

Upper explosion limits: 10,9 vol. %

Ignition temperature: >200 °C

#### Auto-ignition temperature

Solid: No data available

Gas: No data available

Decomposition temperature: No data available

#### Oxidizing properties

No data available

Vapour pressure: No data available

Density: 0,55 g/cm<sup>3</sup>

Water solubility: Immiscible

#### Solubility in other solvents

No data available

Partition coefficient: No data available

Viscosity / dynamic: not applicable

Vapour density: 2

Evaporation rate: No data available

#### 9.2. Other information

No data available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactivity under regular conditions.

#### 10.2. Chemical stability

The product is stable when stored and handled appropriately.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions to be expected if used properly.

#### 10.4. Conditions to avoid

high temperatures

#### 10.5. Incompatible materials

No data available

#### 10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide. Carbon dioxide.

### 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
106-97-8	Butane				
	inhalation (4 h) gas	LC50 ppm	273000	Rat	GESTIS

**Irritation and corrosivity**

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

**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.

**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**

Do not allow to enter into surface water or drains.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
75-28-5	Isobutane					
	Acute fish toxicity	LC50 mg/l	27,98	96 h fish		
	Acute algae toxicity	ErC50 mg/l	7,71	96 h algae		

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
75-28-5	Isobutane	2,8
74-98-6	Propane	2,36
106-97-8	Butane	2,89

**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**

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**Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. According to the European Waste Catalogue (EWC), allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

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

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

**Waste disposal number of contaminated packaging**

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

**Contaminated packaging**

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

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**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  
**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

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**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

**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: Isobutane; Butane

2004/42/EC (VOC): 100 % (550 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 649/2012 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



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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):

- - not water contaminating

#### 15.2. Chemical safety assessment

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

Isobutane  
Propane  
Butane

### SECTION 16: Other information

#### Changes

Version 1,00 - Creation - 09.10.2018

#### 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

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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.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.

#### 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:

asses AG, Frohsinnstraße 28, 63739 Aschaffenburg, Germany

Phone: +49 (0)6021 - 1 50 86-0, Fax: +49 (0)6021 - 1 50 86-77, E-Mail: eu-sds@asses.eu, www.asses.eu

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