

SAFETY DATA SHEET



DF1270 - Flammable Airduster

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued 24.12.2014

Revision date 23.07.2018

1.1. Product identifier

Product name DF1270 - Flammable Airduster 400 ml

Article no. L10000000007

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

Product group Aerosols

Use of the substance / preparation Computer cleaning

Relevant identified uses SU21 Consumer uses: Private households (= general public = consumers)SU22 Professional uses: publicly accessible (administration, education, entertainment, services, craftsmen)PC35 Washing and cleaning products (including solvent based products)PROC11 Non-industrial sprayingERC8A Wide dispersive indoor use of processing aids in open systemsERC8D Wide dispersive outdoor use of processing aids in open systems

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Distributor

Company name Kleinmann GmbH

Postal address Am Trieb 13

Postcode D-72820

City Sonnenbuehl

Country Germany

Telephone number +49(0)7128/9292-15

Fax +49(0)7128/9292-415

Email chemie@kleinmann.net

Website <http://www.kleinmann.net>

Enterprise No. DE 146 487

1.4. Emergency telephone number

Emergency telephone Description: 8-12, Mo.-Fr. +49(0)7128/9292-15

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS] Aerosol 1; H222
Aerosol 1; H229

Substance / mixture hazardous properties

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 a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children. For further information, please refer to section 11.

2.2. Label elements

Hazard pictograms (CLP)



Signal word

Danger

Hazard statements

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

Precautionary statements

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 Pressurized container: Do not pierce or burn, even after use.
P271 Use only outdoors or in a well-ventilated area.
P403 Store in a well-ventilated place.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122°F.

2.3. Other hazards

Hazard description, general

Extremely flammable.

Health effect

May be slightly irritating to skin and eyes. Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. See section 11 for additional information on health hazards.

Environmental effects

This product does not contain any PBT or vPvB substances.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
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Butane (< 0,1% butadiene)	CAS No.: 106-97-8 EC No.: 203-448-7 REACH Reg. No.: 01-2119474691-32	Flam gas 1; H220	50 < 75 %
Propane	CAS No.: 74-98-6 EC No.: 200-827-9 REACH Reg. No.: 01-2119486944-21	Flam gas 1; H220	25 < 50 %
Substance comments	Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents: >30%: alifatic hydrocarbons The full text for all hazard statements is displayed in section 16.		

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Remove victim immediately from source of exposure.
Inhalation	Fresh air. In case of persistent throat irritation or coughing or after inhalation of oil mist: Seek medical attention and bring along these instructions.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.
Ingestion	Rinse mouth with water. Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Do not induce vomiting. Consult a physician for specific advice.

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

Acute symptoms and effects	No specific symptoms noted.
Delayed symptoms and effects	Inhalation of high vapour concentrations may cause symptoms such as mild irritation, headache, dizziness, fatigue, nausea and in serious cases unconsciousness.

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

Other information	If unconscious: Call an ambulance/physician immediately. Show this Safety Data Sheet.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
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5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Aerosol containers can explode when heated, due to excessive pressure build-up. In case of fire, toxic gases may be formed.
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5.3. Advice for firefighters

Personal protective equipment	Wear necessary protective equipment. For personal protection, see section 8.
Fire fighting procedures	Containers close to fire should be removed immediately or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	For personal protection, see section 8. Do not smoke or use open fire, or other sources of ignition.
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6.2. Environmental precautions

Environmental precautionary measures	Do not let washing down water contaminate ponds or waterways. Contact local authorities in case of spillage to drain/aquatic environment.
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6.3. Methods and material for containment and cleaning up

Cleaning method	For waste disposal, see section 13. No specific clean-up procedure noted.
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6.4. Reference to other sections

Other instructions	See section 8 and section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Avoid inhalation of aerosols and contact with skin and eyes. Keep away from heat, sparks and open flame. Provide good ventilation. Mechanical ventilation may be required. When using do not eat, drink or smoke.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Always store proper, out of the reach of children and not together with food, feed, medicine and the like. Store at moderate temperatures in dry, well ventilated area.
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7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
Butane (< 0,1% butadiene)	CAS No.: 106-97-8	TWA (8h) : 1200 mg/m ³	TWA Year: 2008
		TWA (8h) : 500 ppm	
Propane	CAS No.: 74-98-6	TWA (8h) : 1800 mg/m ³	TWA Year: 2008
		TWA (8h) : 1000 ppm	

DNEL / PNEC

Summary of risk management measures, human	Data lacking.
Summary of risk management measures, environment	Data lacking.

8.2. Exposure controls**Safety signs****Precautionary measures to prevent exposure**

Technical measures to prevent exposure	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Mechanical ventilation may be required.
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Eye / face protection

Suitable eye protection	Eye protection is not required under normal conditions.
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Hand protection

Skin- / hand protection, long term contact	Under normal conditions of use gloves are not normally required.
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Skin protection

Additional skin protection measures	No special precautions.
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Respiratory protection

Respiratory protection necessary at	In case of inadequate ventilation wear respiratory protection. Use respiratory equipment with gas filter, type AX.
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Thermal hazards

Thermal hazards	See section 5.
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Appropriate environmental exposure control

Environmental exposure controls	See section 6.
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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	Aerosol.
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Colour	Colourless.
Odour	Almost odourless.
Odour limit	Comments: No data recorded.
pH	Status: In delivery state Comments: Not relevant.
Melting point / melting range	Comments: Not relevant.
Boiling point / boiling range	Value: < -20 °C
Flash point	Value: < -20 °C
Evaporation rate	Comments: No data recorded.
Flammability (solid, gas)	Not relevant.
Lower explosion limit with unit of measurement	Value: 1,5 vol%
Upper explosion limit with units of measurement	Value: 10,9 vol%
Explosion limit	Comments: No data recorded.
Vapour pressure	Value: 8,3 hPa Temperature: 20 °C
Vapour density	Comments: No data recorded.
Bulk density	Value: 0,55 g/cm ³
Solubility	Medium: Water Comments: Not soluble in water.
Partition coefficient: n-octanol/water	Comments: No data recorded.
Spontaneous combustability	Value: 287 °C
Decomposition temperature	Comments: No data recorded.
Viscosity	Comments: Not relevant.
Explosive properties	Not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

9.2. Other information

Other physical and chemical properties

Comments	No information.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No specific reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions See section 10.4 and section 10.5.

10.4. Conditions to avoid

Conditions to avoid Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid No data recorded.

10.6. Hazardous decomposition products

Hazardous decomposition products In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance Butane (< 0,1% butadiene)

Acute toxicity **Type of toxicity:** Acute
Effect tested: LC50
Route of exposure: Inhalation.
Value: > 20 mg/l

Substance Propane

Acute toxicity **Type of toxicity:** Acute
Effect tested: LD50
Route of exposure: Oral
Value: > 20 mg/l

Other toxicological data Toxicological tests on the product has not been performed.

Other information regarding health hazards

Assessment of acute toxicity, classification No evidence for acute toxicity.

Inhalation Solvent vapours are hazardous and may cause nausea, sickness and headaches.

Skin contact No specific symptoms noted.

Eye contact May cause temporary eye irritation.

Ingestion Not likely, due to the form of the product.

Sensitisation No evidence for respiratory nor skin sensitization.

Mutagenicity No evidence for germ cell mutagenicity.

Carcinogenicity, other information No evidence for carcinogenicity.

Reproductive toxicity No evidence for reproductive toxicity.

Assessment of specific target organ SE, classification	No evidence for STOT-single exposure.
Assessment of specific target organ toxicity RE, classification	No evidence for STOT-repeated exposure.
Assessment of aspiration hazard, classification	No evidence for aspiration hazard.

Symptoms of exposure

Symptoms of overexposure	High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.
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SECTION 12: Ecological information

12.1. Toxicity

Substance	Butane (< 0,1% butadiene)
Acute aquatic, fish	Value: 24,11 mg/l Test duration: 96h Species: - Method: LC50
Substance	Butane (< 0,1% butadiene)
Acute aquatic, Daphnia	Value: 14,22 mg/l Test duration: 48h Species: Daphnia Magna Method: EC50
Substance	Propane
Acute aquatic, Daphnia	Value: 27,14 mg/l Test duration: 48h Method: EC50
Aquatic, comments	No data available for the product.

12.2. Persistence and degradability

Persistence and degradability, comments	Evaporated solvents are expected to degrade fotochemically in the atmosphere.
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12.3. Bioaccumulative potential

Bioaccumulative potential	The product is not bioaccumulating.
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12.4. Mobility in soil

Mobility	Product evaporates immediately.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	This product does not contain any PBT or vPvB substances.
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12.6. Other adverse effects

Environmental details, summation

For this product no classification is required for environmental hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal

Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point. Dispose of waste and residues in accordance with local authority requirements.

EWC waste code

EWC waste code: 150110 packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste: Yes

EWL packing

EWC waste code: 150110 packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste: Yes

Other information

Waste code applies to product remnants in pure form. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

SECTION 14: Transport information

14.1. UN number

ADR / RID / ADN

1950

IMDG

1950

ICAO / IATA

1950

14.2. UN proper shipping name

Proper shipping name English ADR / RID / ADN

AEROSOLS

ADR / RID / ADN

AEROSOLS

IMDG

AEROSOLS

ICAO / IATA

AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID / ADN

2.1

Classification code ADR / RID / ADN

5F

IMDG

2.1

ICAO / IATA

2.1

14.4. Packing group

Comments

Not relevant.

14.5. Environmental hazards

IMDG Marine pollutant No

14.6. Special precautions for user

Special safety precautions for user None.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Product name AEROSOLS, FLAMMABLE

Additional information

ADR / RID / ADN hazard label 2.1

IMDG Hazard label 2.1

ICAO / IATA Hazard label 2.1

ADR / RID - Other information

Tunnel restriction code D

Transport category 2

IMDG / ICAO / IATA Other information

EmS F-D, S-U

SECTION 15: Regulatory information

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

Other label information For professional users only. As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

Legislation and regulations The Aerosol Dispensers Regulations 2009 (SI 2824), with amendments.
EH40/2005, Workplace exposure limits 2005, with amendments.
The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
COMMISSION DIRECTIVE 2013/10/EU of 19 March 2013 amending Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.
REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 31 March 2004 on detergents.

15.2. Chemical safety assessment

Chemical safety assessment performed No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)
H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]
Aerosol 1; H222
Aerosol 1; H229

Training advice
No particular training or education is required but the user must be familiar with this SDS. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

Information added, deleted or revised
Change to Sections: 1, 2, 3, 9, 16

Version 4

Prepared by MP