

Duster flammable

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

1.1 - Product identifier

Tradename/designation Duster flammable

Chemical name

Product-type Mixture

Product code 732.400, 732.200

UFI: AY00-R0CP-X00V-33NX

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

Relevant identified uses - Aerosols

1.3 - Details of the supplier of the safety data sheet

ECS Cleaning Solutions GmbH

Wolfener Str. 32-34

D-12681 Berlin Germany

Telephone : +49 (0)30 / 36 46 40 36

gunnar.kleinmann@ecsag.com

1.4 - Emergency telephone number

Germany: Intoxications Information Center; +49 761 19240

Switzerland: Swiss Toxicological Information Centre; +41 44 251 51 51

Austria: Intoxication information center; +43 1 406 43 43

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

| | |
|-----------|----------------------|
| Aerosol 1 | Aerosol - Category 1 |
|-----------|----------------------|

2.2 - Label elements

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

Signal word : Danger

Hazard pictograms



Hazard statements

| | |
|------|-----------------------------|
| H222 | Extremely flammable aerosol |
|------|-----------------------------|

| | |
|------|--|
| H229 | Pressurised container: May burst if heated |
|------|--|

Precautionary statements

| | |
|------|--------------------------------|
| P102 | Keep out of reach of children. |
|------|--------------------------------|

| | |
|------|---|
| P103 | Read carefully and follow all instructions. |
|------|---|

| | |
|------|---|
| 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. |
|------|---|

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| | |
|-------------|--|
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| P251 | Do not pierce or burn, even after use. |
| EUH-phrases | : None |

2.3 - Other hazards

| | |
|------------------------|--|
| <u>PBT-substance.</u> | - This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. |
| <u>vPvB-substance.</u> | - This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. |

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

| Chemical name | No | % | Class(es) | Specific concentration limit |
|---------------|--|----|----------------------------------|------------------------------|
| butane | CAS No. : 106-97-8 Index No. : 601-004-00-0 EC No. : 203-448-7 | 65 | Flam. Gas 1 - H220 Press. Gas | Not applicable |
| propane | CAS No. : 74-98-6 Index No. : 601-003-00-5 EC No. : 200-827-9 | 35 | Flam. Gas 1 - H220 Press. Gas | Not applicable |

SECTION 4: First aid measures

4.1 - Description of first aid measures

| | |
|-------------------------------|---|
| <u>Following inhalation</u> | - Provide fresh air. |
| <u>Following skin contact</u> | - When in doubt or if symptoms are observed, get medical advice. |
| <u>After eye contact</u> | - Rinse immediately carefully and thoroughly with eye-bath or water. - In case of eye irritation consult an ophthalmologist. |

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

| | |
|--|-----------------------------|
| <u>Symptoms and effects - Following inhalation</u> | - No information available. |
| <u>Symptoms and effects - Following skin contact</u> | - No information available. |
| <u>Symptoms and effects - After eye contact</u> | - No information available. |

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

- In case an intoxication is suspected, National Poisons Information Centre should be addressed immediately, number of Emergency telephone see in section 1.4.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

| | |
|-------------------------------------|---|
| <u>Suitable extinguishing media</u> | - ABC-powder - Carbon dioxide (CO ₂) |
|-------------------------------------|---|

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- Foam
- Extinguishing powder

Unsuitable extinguishing media - Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture - No information available.

Hazardous decomposition products - No information available.

5.3 - Advice for firefighters

- Wear a self-contained breathing apparatus and chemical protective clothing.
- Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel - Provide adequate ventilation.
- Remove all sources of ignition.

For emergency responders - No information available.

6.2 - Environmental precautions

- No information available.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment - No information available.

Methods and material for cleaning up - Ventilate affected area.

Inappropriate techniques - No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation

- It is recommended to design all work processes always so that the following is excluded: Generation/formation of dust
- It is recommended to design all work processes always so that the following is excluded: generation/formation of aerosols
- Vapours can form explosive mixtures with air.
- When using do not smoke.
- Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
- Use only in well-ventilated areas.

Advices on general occupational hygiene - No information available.

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7.2 - Conditions for safe storage, including any incompatibilities

- Keep container tightly closed and in a well-ventilated place.
- Do not store together with: Combustible substance
- Protect against: Heat

7.3 - Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

| butane (106-97-8) | |
|----------------------------------|------------------------|
| IOELV TWA mg/m ³ (UE) | 1450 mg/m ³ |
| IOELV TWA ppm (UE) | 600 ppm |
| TWA EH40 ppm (UK) | 600 ppm |
| TWA EH40 mg/m ³ (UK) | 1450 mg/m ³ |
| STEL EH40 ppm (UK) | 750 ppm |
| STEL EH40 mg/m ³ (UK) | 1810 mg/m ³ |

8.2 - Exposure controls

Appropriate engineering controls - No information available.

Individual protection measures, such as personal protective equipment - Suitable protective clothing: lab coat



SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

| <u>Physical state</u> | <u>gaseous</u> | <u>Appearance</u> | <u>Aerosol</u> |
|-----------------------|-------------------|-------------------|-----------------------|
| <u>Colour</u> | <u>colourless</u> | <u>Odour</u> | <u>characteristic</u> |
| Odour threshold | | No data available | |
| pH | | No data available | |
| Melting point | | No data available | |
| Freezing point | | No data available | |
| Boiling point | | < -20 °C | |
| Flash point | | < -20 °C | |
| Evaporation rate | | No data available | |
| flammability | | No data available | |
| Lower explosion limit | | 1.8 % Vol. | |
| Upper explosion limit | | 8.4 % Vol. | |
| Vapour pressure | | No data available | |
| Vapour density | | No data available | |
| Relative density | | No data available | |
| Density | | 0.56 kg/l | |
| Solubility (Water) | | No data available | |
| Solubility (Ethanol) | | No data available | |
| Solubility (Acetone) | | No data available | |

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| | |
|-------------------------------|-------------------|
| Solubility (Organic solvents) | No data available |
| Log KOC | No data available |
| Auto-ignition temperature | 365 °C |
| Decomposition temperature | No data available |
| Kinematic viscosity | No data available |
| Dynamic viscosity | No data available |

Particle characteristics

| | |
|---------------|-------------------|
| Particle size | No data available |
|---------------|-------------------|

9.2 - Other information

| | |
|-------------------------|-------------------|
| VOC content | 100 % |
| Minimum ignition energy | No data available |
| Conductivity | No data available |

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- In case of warming: Ignition hazard

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

- No information available.

SECTION 11: Toxicological information

11.1 - Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - Not classified

Toxicity : Mixture

| | |
|---------------------------------------|-------------------|
| LD50 oral (rat) | No data available |
| LD50 dermal (rat) | No data available |
| LD50 dermal (rabbit) | No data available |
| LC50 inhalation (rat) | No data available |
| LC50 inhalation dusts and mists (rat) | No data available |
| LC50 inhalation vapours (rat) | No data available |

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

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Toxicity : Substances

| | |
|-------------------------------|---------------|
| propane (74-98-6) | |
| LC50 inhalation (rat) | > 800000 ppmV |
| LC50 inhalation vapours (rat) | 20 mg/l |
| butane (106-97-8) | |
| LC50 inhalation (rat) | > 800000 ppmV |
| LC50 inhalation vapours (rat) | 658 mg/l |

Skin corrosion/irritation - Not classified

Serious eye damage/eye irritation - Not classified

Respiratory or skin sensitisation - Not classified

Germ cell mutagenicity - Not classified

Carcinogenicity - Not classified

Reproductive toxicity - Not classified

STOT-single exposure - Not classified

STOT-repeated exposure - Not classified

Aspiration hazard - Not classified

11.2 - Information on other hazards

- This substance does not have endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

| | |
|-----------------------------------|-------------------|
| EC50 48 hr crustacea | No data available |
| LC50 96 hr fish | No data available |
| ErC50 algae | No data available |
| ErC50 other aquatic plants | No data available |
| NOEC chronic fish | No data available |
| NOEC chronic crustacea | No data available |
| NOEC chronic algae | No data available |
| NOEC chronic other aquatic plants | No data available |

Toxicity : Substances

| | |
|----------------------------|------------------------------|
| propane (74-98-6) | |
| LC50 96 hr fish | 24.11 mg/l < V < 147.54 mg/l |
| ErC50 algae | 7.71 mg/l < V < 16.5 mg/l |
| ErC50 other aquatic plants | 7.02 mg/l < V < 69.43 mg/l |
| butane (106-97-8) | |
| LC50 96 hr fish | 24.11 mg/l < V < 147.54 mg/l |
| ErC50 algae | 7.71 mg/l < V < 16.5 mg/l |

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| | |
|----------------------------|----------------------------|
| ErC50 other aquatic plants | 7.02 mg/l < V < 69.43 mg/l |
|----------------------------|----------------------------|

- The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

12.2 - Persistence and degradability

| | |
|---------------------------------|-------------------|
| Biochemical oxygen demand (BOD) | No data available |
| Chemical oxygen demand (COD) | No data available |
| % of biodegradation in 28 days | No data available |

- No information available.

12.3 - Bioaccumulative potential

| | |
|-------------------------------|-------------------|
| Bioconcentration factor (BCF) | No data available |
| Log KOC | No data available |

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 - Endocrine disrupting properties

12.7 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods - Dispose of waste according to applicable legislation.

Sewage disposal - No information available.

Special precautions for waste treatment - No information available.

Community or national or regional provisions - No information available.

SECTION 14: Transport information

14.1 - UN number or ID number

UN number (ADR) : UN1950

UN number (RID) : UN1950

UN number (ADN) : UN1950

UN number (IMDG) : UN1950

UN number (IATA) : UN1950

14.2 - UN proper shipping name

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UN proper shipping name (ADR) : AEROSOLS
UN proper shipping name (RID) : AEROSOLS
UN proper shipping name (ADN) : AEROSOLS
UN proper shipping name (IMDG) : AEROSOLS
UN proper shipping name (IATA) : AEROSOLS, FLAMMABLE

14.3 - Transport hazard class(es)

ADR Transport hazard class(es) : 2
ADR Classification code: : 5F
Pictograms



Transport hazard class(es) (RID) : 2
Pictograms



Transport hazard class(es) (ADN) : 2
Pictograms



Transport hazard class(es) (IMDG) : 2
Pictograms



Transport hazard class(es) (IATA) : 2
Pictograms



14.4 - Packing group

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Packing group :
Packing group (RID) :
Packing group (ADN) :
Packing group (IMDG) :
Packing group (IATA) :

14.5 - Environmental hazards

Environmental hazards : No
Marine pollutant : No

14.6 - Special precautions for user

ADR

ADR Classification code : 5F
ADR Special provisions : 190+327+344+625
ADR Limited quantity (LQ) : 1L
ADR Excepted quantities : E0
ADR Packing instructions : P207 LP200
ADR Special packing provisions : PP87 RR6 L2
ADR Mixed packing provisions : MP9
Instructions for portable tanks and bulk containers :
Special provisions for portable tanks and bulk containers :
ADR tank code :
ADR tanks special provisions :
Vehicle for tank carriage :
ADR Transport category : 2
ADR Tunnel restriction code : D
ADR Special provisions loading, unloading and handling : CV9 CV12
Special provisions - Packages : V14
Special provisions - Bulk :
Special provisions - Operation : S2
ADR Hazard identification number (Kemler No.) :

RID

Special provisions :
Limited quantity (LQ) :
Excepted quantities :

ADN

Special provisions :
Limited quantity (LQ) :
Excepted quantities :

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IMDG

| | | |
|--|---|----------------------------|
| <u>Special provisions</u> | : | 63 190 277 327 344 381 959 |
| <u>Limited quantity (LQ)</u> | : | |
| <u>Excepted quantities</u> | : | E0 |
| <u>Packing instructions</u> | : | P207 LP200 |
| <u>Special packing provisions</u> | : | PP87 L2 |
| <u>IBC instruction(s)</u> | : | |
| <u>IBC provisions</u> | : | |
| <u>Instructions for portable tanks and bulk containers</u> | : | |
| <u>Special provisions for portable tanks and bulk containers</u> | : | |
| <u>EmS codes</u> | : | F-D, S-U |
| <u>Stowage and handling</u> | : | Category None SW1 SW22 |
| <u>Segregation</u> | : | SG69 |
| <u>Properties and observations</u> | : | |

IATA

| | | |
|--|---|----------------|
| <u>PCA - Excepted quantities</u> | : | E0 |
| <u>PCA - Limited Quantity - Packing Instructions</u> | : | Y203 |
| <u>PCA - Limited Quantity - Maximum Net Quantity per Package</u> | : | 30kg |
| <u>PCA - Packing Instructions</u> | : | 203 |
| <u>PCA - Maximum Net Quantity per Package</u> | : | 75kg |
| <u>CAO - Packing Instructions</u> | : | 203 |
| <u>CAO - Maximum Net Quantity per Package</u> | : | 150kg |
| <u>Special Provisions</u> | : | A145 A167 A802 |
| <u>ERG Code</u> | : | 10L |

14.7 - Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

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

| | |
|------------------------------------|-------|
| <u>Substances REACH candidates</u> | None |
| <u>Substances Annex XIV</u> | None |
| <u>Substances Annex XVII</u> | None |
| <u>VOC content</u> | 100 % |

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

SECTION 16: Other information

SDS versions

| Version | Issue date | Author | Description of the amendments |
|---------|------------|--------|-------------------------------|
| 1 | 2/1/2023 | | |

Texts of the regulatory sentences

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| | |
|-------------|--|
| Aerosol 1 | Aerosol - Category 1 |
| Flam. Gas 1 | Flammable gas. - Category 1 |
| H220 | Extremely flammable gas |
| H222 | Extremely flammable aerosol |
| H229 | Pressurised container: May burst if heated |
| Press. Gas | Gases under pressure |

*** **