

QUIETSCH-EX Spray

Version 3.1

Revision Date 18.09.2017

Print Date 18.09.2017

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : QUIETSCH-EX Spray
Article-No. : 081071

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

Use of the Substance/Mixture : Lubricant spray
Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Klüber Lubrication München
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81379 München
Deutschland
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1.4 Emergency telephone number

+49 89 7876 700 (24 hrs)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1

H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

2.2 Label elements


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Labelling (REGULATION (EC) No 1272/2008)

| | | | |
|--------------------------|---|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard pictograms | : |  | |
| Signal word | : | Danger | |
| Hazard statements | : | H222 H229 | Extremely flammable aerosol. Pressurised container: May burst if heated. |
| Precautionary statements | : | Prevention: P210 P211 P251 Storage: P410 + P412 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. |

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Propellant
Mineral oil.

Hazardous components

| Chemical name | CAS-No. EC-No. Index-No. Registration number | Classification (REGULATION (EC) No 1272/2008) | Concentration [%] |
|----------------------------------------------|-------------------------------------------------------|-----------------------------------------------------|----------------------|
| Substances with a workplace exposure limit : | | | |
| isobutane | 75-28-5 200-857-2 601-004-00-0 | Flam. Gas 1; H220 Press. Gas Compr. Gas; H280 | >= 30 - < 50 |
| propane | 74-98-6 200-827-9 601-003-00-5 | Flam. Gas 1; H220 Press. Gas Compr. Gas; H280 | >= 1 - < 10 |
| butane | 106-97-8 203-448-7 601-004-00-0 | Flam. Gas 1; H220 Press. Gas Compr. Gas; H280 | >= 1 - < 10 |

For the full text of the H-Statements mentioned in this Section, see Section 16.

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4. First aid measures

4.1 Description of first aid measures

- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
Wash off with soap and plenty of water.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
If eye irritation persists, consult a specialist.
- If swallowed : Move the victim to fresh air.
Keep respiratory tract clear.
Do NOT induce vomiting.
Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Inhalation may provoke the following symptoms:
Unconsciousness
Dizziness
Drowsiness
Headache
Nausea
Tiredness

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

5. Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : ABC powder
- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides

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- : Fire Hazard
Do not let product enter drains.
Contains gas under pressure; may explode if heated.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus.
Exposure to decomposition products may be a hazard to health.
- Further information : Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Cool containers/tanks with water spray.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Evacuate personnel to safe areas.
Ensure adequate ventilation.
Remove all sources of ignition.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

- Environmental precautions : Try to prevent the material from entering drains or water courses.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

- Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Keep in suitable, closed containers for disposal.
Non-sparking tools should be used.

6.4 Reference to other sections

- For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Do not use in areas without adequate ventilation.

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Do not breathe vapours or spray mist.
In case of insufficient ventilation, wear suitable respiratory equipment.
Avoid contact with skin and eyes.
For personal protection see section 8.
Keep away from fire, sparks and heated surfaces.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
Do not ingest.
Do not use sparking tools.
These safety instructions also apply to empty packaging which may still contain product residues.
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 areas and containers : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
Store in accordance with the particular national regulations.

German storage class : 2B Aerosol cans and lighters

7.3 Specific end use(s)

: Consult the technical guidelines for the use of this substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

| Components | CAS-No. | Value type | Control parameters | Update | Basis |
|----------------------|-----------------------------------------------------------------------------------------------------------------|------------|--------------------------------------|------------|-------------|
| isobutane | 75-28-5 | AGW | 1.000 ppm 2.400 mg/m ³ | 2006-01-01 | DE TRGS 900 |
| Further information: | DFG: Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). | | | | |
| propane | 74-98-6 | AGW | 1.000 ppm 1.800 mg/m ³ | 2006-01-01 | DE TRGS 900 |
| Further information: | DFG: Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). | | | | |
| butane | 106-97-8 | AGW | 1.000 ppm 2.400 mg/m ³ | 2006-01-01 | DE TRGS 900 |

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Further
information:

DFG: Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).

8.2 Exposure controls

Engineering measures

Use only in an area equipped with explosion proof exhaust ventilation.
Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Short term only
Filter type A-P
- Hand protection : For prolonged or repeated contact use protective gloves.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
In case of contact through splashing:

: Nitrile rubber
Protective index Class 1
- Eye protection : Safety glasses with side-shields conforming to EN166
- Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Environmental exposure controls

- General advice : Try to prevent the material from entering drains or water courses.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.

9. Physical and chemical properties

Values refer to the propellant:

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9.1 Information on basic physical and chemical properties

| | |
|----------------------------------------|-----------------------------------|
| Appearance | : aerosol |
| Colour | : colourless |
| Odour | : characteristic |
| Odour Threshold | : No data available |
| pH | : No data available |
| Melting point/range | : No data available |
| Boiling point/boiling range | : < 34 °C |
| Flash point | : -80 °C, Test Method: closed cup |
| Evaporation rate | : No data available |
| Flammability (solid, gas) | : Extremely flammable aerosol. |
| Lower explosion limit | : 1,8 %(V) |
| Upper explosion limit | : 11,2 %(V) |
| Vapour pressure | : > 1.200 hPa, 20 °C |
| Relative vapour density | : No data available |
| Density | : 0,60 g/cm ³ , 20 °C |
| Water solubility | : insoluble |
| Solubility in other solvents | : No data available |
| Partition coefficient: n-octanol/water | : No data available |
| Auto-ignition temperature | : No data available |
| Ignition temperature | : > 350 °C |
| Thermal decomposition | : No data available |
| Viscosity, dynamic | : No data available |
| Viscosity, kinematic | : No data available |
| Explosive properties | : Not explosive |
| Oxidizing properties | : No data available |

9.2 Other information

| | |
|-------------------|---------------------|
| Sublimation point | : No data available |
| Bulk density | : No data available |

10. Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

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Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored and applied as directed.

11. Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity : This information is not available.
Acute inhalation toxicity : Inhalation may provoke the following symptoms:, Respiratory disorder
Acute dermal toxicity : This information is not available.
Skin corrosion/irritation : This information is not available.
Serious eye damage/eye irritation : Contact with eyes may cause irritation.
Respiratory or skin sensitisation : This information is not available.
Germ cell mutagenicity
Genotoxicity in vitro : No data available
Genotoxicity in vivo : No data available
Carcinogenicity : No data available
Reproductive toxicity : No data available
Teratogenicity : No data available
Repeated dose toxicity : This information is not available.
Aspiration toxicity : This information is not available.

Further information : Information given is based on data on the components and the toxicology of similar products.

Components:

isobutane :

Acute inhalation toxicity : LC50: 658 mg/l, 4 h, Rat, gas

butane :

Acute inhalation toxicity : LC50: 658 mg/l, 4 h, Rat, gas

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12. Ecological information

12.1 Toxicity

Product:

| | | |
|-----------------------------------------------------|---|-------------------|
| Toxicity to fish | : | No data available |
| Toxicity to daphnia and other aquatic invertebrates | : | No data available |
| Toxicity to algae | : | No data available |
| Toxicity to bacteria | : | No data available |

12.2 Persistence and degradability

Product:

| | | |
|-------------------------------|---|-------------------|
| Biodegradability | : | No data available |
| Physico-chemical removability | : | No data available |

12.3 Bioaccumulative potential

Product:

| | | |
|-----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bioaccumulation | : | This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT)., This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB). |
|-----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

12.4 Mobility in soil

Product:

| | | |
|-----------------------------------------------|---|-------------------|
| Mobility | : | No data available |
| Distribution among environmental compartments | : | No data available |

12.5 Results of PBT and vPvB assessment

Product:

| | | |
|------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assessment | : | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |
|------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

12.6 Other adverse effects

Product:

| | | |
|-----------------------------------|---|-----------------------------------------|
| Additional ecological information | : | No information on ecology is available. |
|-----------------------------------|---|-----------------------------------------|

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13. Disposal considerations

13.1 Waste treatment methods

- | | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Product | : In accordance with local and national regulations. |
| | : Waste codes should be assigned by the user based on the application for which the product was used. |
| Contaminated packaging | : Offer empty spray cans to an established disposal company. Pressurized container: Do not pierce or burn, even after use. |
-

14. Transport information

14.1 UN number

- | | |
|------|--------|
| ADR | : 1950 |
| IMDG | : 1950 |
| IATA | : 1950 |

14.2 Proper shipping name

- | | |
|------|-----------------------|
| ADR | : AEROSOLS |
| IMDG | : AEROSOLS |
| IATA | : AEROSOLS, FLAMMABLE |

14.3 Transport hazard class

- | | |
|------|-------|
| ADR | : 2 |
| IMDG | : 2.1 |
| IATA | : 2.1 |

14.4 Packing group

- | | |
|--------------------------------------|------------|
| ADR | : |
| Classification Code | : 5F |
| Labels | : 2.1 |
| Tunnel restriction code | : (D) |
| IMDG | : |
| Labels | : 2.1 |
| EmS Number | : F-D, S-U |
| IATA | : |
| Packing instruction (cargo aircraft) | : 203 |
| Labels | : 2.1 |

14.5 Environmental hazards

- | | |
|---------------------------|------|
| ADR | : |
| Environmentally hazardous | : no |
| IMDG | : |
| Marine pollutant | : no |
| IATA | : |
| Environmentally hazardous | : no |

14.6 Special precautions for user

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No special precautions required.

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

Remarks : Not applicable for product as supplied.

15. Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 2012/18/EU Update:
FLAMMABLE AEROSOLS
P3a
Quantity 1: 150 t
Quantity 2: 500 t

: 96/82/EC Update:
Extremely flammable
8
Quantity 1: 10 t
Quantity 2: 50 t

: 2012/18/EU Update:
Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)
34
Quantity 1: 2.500 t
Quantity 2: 25.000 t

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) : Volatile organic compounds (VOC) content: 43,1 %
VOC content excluding water

Water contaminating class (Germany) : WGK 1: slightly water endangering

TA Luft List (Germany) : Total dust: Portion other substances: 2,49 %
Inorganic substances in powdered form: Not applicable
Inorganic substances in vapour or gaseous form: Not applicable
Organic Substances: Portion other substances: 97,51 %
Carcinogenic substances: Not applicable

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Mutagenic: Not applicable
Toxic to reproduction: Not applicable

15.2 Chemical safety assessment

This information is not available.

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

| | |
|------|-----------------------------------------------------|
| 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

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