Revision: 11.04.2014



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 11.04.2014

Version number 1

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

- · Product identifier
- · Trade name: TWIN AIR LIQUID POWER SPRAY GRÜN
- · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture
 Only for proper handling.
 Air filter oil
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

BUCHER AG LANGENTHAL MOTOREX-Schmiertechnik Bern-Zürich-Strasse 31 CH-4901 Langenthal Telefon +41 (0)62 919 75 75

· Only representative in EU:

MOTOREX Deutschland AG, Bismarckstrasse 28, D-69198 Schriesheim

- · Further information obtainable from: msds @motorex.com
- · Emergency telephone number:

Toxicological Information Centre, CH-8028 Zurich, info@toxi.ch,

T. +41 (0) 44 251 51 51

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



F+; Extremely flammable

R12: Extremely flammable.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. Warning! Pressurized container.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms



- · Signal word Danger
- · Hazard statements

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

- · 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/sparks/open flames/hot surfaces. No smoking.
- P251 Pressurized container: Do not pierce or burn, even after use.
- P211 Do not spray on an open flame or other ignition source.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous compoi	nents:	
CAS: 106-97-8 EINECS: 203-448-7	butane ► F+ R12 ◆ Flam. Gas 1, H220; Press. Gas, H280	25-50%
CAS: 74-98-6 EINECS: 200-827-9	propane	10-25%
CAS: 75-28-5 EINECS: 200-857-2	isobutane F+ R12 Flam. Gas 1, H220; Flam. Liq. 1, H224; Press. Gas, H280	1-2.5%
CAS: 78-78-4 EINECS: 201-142-8	isopentane Xn R65; F+ R12; N R51/53 R66-67 Flam. Liq. 1, H224; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	0.25-1%

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.

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- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling Open and handle receptacle with care.
- · Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized 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.

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

- · 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 pressurized containers.

- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep container tightly sealed.

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

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Protect from heat and direct sunlight.

- · Storage class: 2 B
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

106-97-8 butane

WEL Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Wash hands before breaks and at the end of work.

- · Respiratory protection: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Colour: Liquefied gas Green

· Odour: · Odour threshold: Solvent-like

Not determined.

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pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Not applicable, as aerosol.
Flash point:	-80 °C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	365 °C (DIN 51794)
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation
	explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1.5 Vol %
Upper:	10.9 Vol %
Vapour pressure at 20 °C:	8300 hPa
Density at 20 °C:	0.664 g/cm³ (ASTM D 4052)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wat	ter): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
VOC (EC)	60.00 %
Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.

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· Sensitization: No sensitizing effects known.

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12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability

Biodegradability according to OECD 301 B: >60 % in 28 days

- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-classification according VwVwS, 17.05.1999): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

16 05 04* gases in pressure containers (including halons) containing dangerous substances

- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

Discharged containers can contain flammable or explosive vapours.

14 Transport information

· UN-Number · ADR, IMDG, IATA UN1950

· UN proper shipping name

· ADR 1950 AEROSOLS AEROSOLS

· IATA AEROSOLS, non-flammable

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Transport hazard class(es)	
ADR	
2	
Class	2 5A Gases.
Label	2.1
IMDG	
A	
Olasa	0.0
Class Label	2.2 2.1
	۷.1
IATA	
Class	2.1
Label	2.1
Packing group	
ADR, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Gases.
Danger code (Kemler):	-
EMS Number:	F-D,S-U
Transport in bulk according to Ann	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	1L
Transport category Tunnel restriction code	3 <i>E</i>
UN "Model Regulation":	UN1950, AEROSOLS, 2.1

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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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.
- H224 Extremely flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.
- R12 Extremely flammable.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.
- · Department issuing MSDS: Abteilung Produktsicherheit
- · Abbreviations and acronyms:
- Flam. Gas 1: Flammable gases, Hazard Category 1 Flam. Aerosol 1: Flammable aerosols, Hazard Category 1 Press. Gas: Gases under pressure: Compressed gas
- Press. Gas: Gases under pressure: Compressed gas Flam. Liq. 1: Flammable liquids, Hazard Category 1
- STOT SE 3: Specific target organ toxicity Single exposure, Hazard Category 3
- Asp. Tox. 1: Aspiration hazard, Hazard Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment Chronic Hazard, Category 2

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