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

- · 1.1 Product identifier
- · Trade name: Einrohrdämpfer

 Mono tube shock absorber
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Shock Absorber
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

ThyssenKrupp Bilstein Tuning GmbH

Milsper Straße 214 D-58240 Ennepetal Tel: +49 2333-791- 0 Fax: +49 2333-791-4900

· Informing department:

Tel: +49 173 5687534

Email: anna-catharina.bell@thyssenkrupp.com

· 1.4 Emergency telephone number: Tel: +44 18645 407333 GlobalChem24

SECTION 2: Hazards identification

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



GHS04 gas cylinder

Press. Gas C H280 Contains gas under pressure; may explode if heated.

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

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

Hazard pictograms



GHS04

- · Signal word Warning
- · Hazard statements

H280 Contains gas under pressure; may explode 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.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

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

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Mono tube shock absorber

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SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- Description: The shock absorber contains nitrogen and small amounts of hydraulic oil.
- · Dangerous components:

CAS: 7727-37-9 nitrogen EINECS: 231-783-9

Press. Gas R, H281

≤10%

· Additional information

The mono tube absorbers contain up to 0.3 I compressed gas (nitrogen) at a pressure of 5 to 30 bar.

The maximum product of pressure and volume is 18 bar * I.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information No special measures required.
- · After inhalation

Provide fresh air. Keep victims guiet and warm.

In case of unsteady breathing or breathing arrest induce artificial respiration.

Call a doctor immediately.

- · After skin contact The product is not skin irritating.
- · After eye contact In case of permanent aches and pains please go and see the doctor.
- · After swallowing Swallowing is not considered to be a possible way of exposure.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
 No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

The product itself does not burn.

Use fire fighting measures that suit the environment.

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire:

Carbon monoxide (CO)

Nitrogen oxides (NOx)

- 5.3 Advice for firefighters
- · Protective equipment:

In case of fire wear breathing equipment being independent of ambient air and suit provided full protection against chemicals.

· Additional information

Remove goods in stock from incendiary zone, if possible.

Cool endangered containers with water spray.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

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Mono tube shock absorber

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· 6.2 Environmental precautions:

Inform authorities if gas escapes.

Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, universal binders) and disposal in suitable containers.

· 6.4 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 information on disposal.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Keep empty containers away from heat and ignition sources.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

No special measures required.

- Information about protection against explosions and fires: The product is not flammable
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and containers:

Store containers in a well aired place at a temperature of less than 50 ℃.

Store only undamaged original packaging drums.

· Information about storage in one common storage facility:

Keep away from combustible and/or inflammable materials.

Further information about storage conditions:

Store in a cool place. Heat will increase pressure and may lead to the container exploding.

· Storage class

2A (Compressed, liquidized and under pressure solved gases) according to TRGS 510 (German Regulation).

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: The lists that were valid during the compilation were used as basis.

· 8.2 Exposure controls

- Personal protective equipment
- General protective and hygienic measures Wear suitable protective clothing at work.
- Breathing equipment: Not required.
- Protection of hands:

Not required.

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 (Contd. on page 4)

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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: Not required.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Shock absorber, pneumatic / hydraulic

Condensed gas

Colour: Colourless
Odour: odourless

· Change in condition

Melting point/Melting range: Not determined

Boiling point/Boiling range: n.a. ℃

· Flash point: Not applicable

· Inflammability (solid, gaseous) Not applicable.

· Ignition temperature: Not determined.

· Decomposition temperature: Not assignable.

· Self-inflammability: Product is not selfigniting.

· Danger of explosion: Product is not explosive.

· Vapour pressure: Not determined.

· **Density** Not determined

Vapour density
 Evaporation rate
 Not determined
 Not determined

· Solubility in / Miscibility with

Water: Insoluble

· Partition coefficient (n-octanol/water): Not applicable.

· Viscosity:

dynamic:
kinematic:Not applicable.Solvent separation testNot applicable.

· Solvent content:

Organic solvents: 0.0 % Water: 0.0 %

• 9.2 Other information The bonfire-test resulted in flying away components.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

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· 10.3 Possibility of hazardous reactions

Danger of containers bursting because of high vapour pressure

- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:

None in case of intended use and storage in compliance with instructions.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Additional toxicological information:

When inhaling high concentrations narcotic symptoms are possible.

- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity 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
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

The product contains materials that are harmful to the environment.

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

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · **Recommendation** Contact manufacturer for recycling information.

· European waste catalogue		
16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST	
16 05 00	gases in pressure containers and discarded chemicals	
16 05 05	gases in pressure containers other than those mentioned in 16 05 04	

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· Uncleaned packagings:

· *Recommendation:* Dispose of packaging according to regulations on the disposal of packagings.

SECTION 14: Transport inform	nation
14.1 UN-Number ADR, IMDG, IATA	UN3164
14.2 UN proper shipping name ADR IMDG, IATA	3164 ARTICLES, PRESSURIZED, PNEUMATIC ARTICLES, PRESSURIZED, PNEUMATIC
14.3 Transport hazard class(es)	
ADR	
Class Label	2 6A Gases. 2.2
IMDG, IATA	
2	
Class Label	2 Gases. 2.2
14.4 Packing group ADR, IMDG, IATA	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Kemler Number:	Warning: Gases.
EMS Number:	F-C,S-V
Stowage Category	A
14.7 Transport in bulk according to Ani of Marpol and the IBC Code	nex II Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	120 ml
Excepted quantities (ÉQ)	Code: E0 Not permitted as Excepted Quantity
Transport category	3
Tunnel restriction code Remarks:	E Special Provision: 283, 371, 594,
IMDG	
Limited quantities (LQ)	120 ml
Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity

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Special provision(s): 283, 371

· IATA
· Remarks: Special provision(s): A48, A114, A195

· UN "Model Regulation": UN 3164 ARTICLES, PRESSURIZED,

PNEUMATIC, 2.2

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



· Remarks:

GHS04

- · Signal word Warning
- · Hazard statements

H280 Contains gas under pressure; may explode 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.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Other regulations, limitations and prohibitive regulations

The regulations concerning pressure vessels and gases under pressure have to be observed.

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is contained.

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

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H281 Contains refrigerated gas; may cause cryogenic burns or injury.

· Department issuing data specification sheet:

This Material Safety Data Sheet has been drawn up in cooperation with:

DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,

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· 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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative

Press. Gas C: Gases under pressure – Compressed gas Press. Gas R: Gases under pressure – Refrigerated liquefied gas

* * Data compared to the previous version altered.

CE