

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 09/05/2016

Version number 2

Reviewed on 09/05/2016

### 1 Identification

- **Product identifier**
- **Trade name: Zweirohrdämpfer**  
**Twin tube shock absorber**
- **Application of the substance / the mixture** Shock Absorber
- **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
- **Information department:**  
Tel: +49 173 5687534  
Email: anna-catharina.bell@thyssenkrupp.com
- **Emergency telephone number:** Tel: +44 18645 407333 GlobalChem24

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS04 Gas cylinder

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

- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS04

- **Signal word** Warning
- **Hazard statements**  
H280 Contains gas under pressure; may explode if heated.
- **Precautionary statements**  
P410+P403 Protect from sunlight. Store in a well-ventilated place.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

- **HMS-ratings (scale 0 - 4)**



HEALTH 0 Health = 0  
FIRE 0 Fire = 0  
REACTIVITY 0 Reactivity = 0

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

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· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** The shock absorber contains hydraulic oil and small amounts of nitrogen.

· **Dangerous components:**

CAS: 7727-37-9	nitrogen	≤10%
RTECS: QW 9700000		

· **Additional information:**

The twin tube shock absorbers contain 0.01 to 0.3 l compressed gas (nitrogen) at a pressure of 0 to 10 bar. The maximum product of pressure and volume is 3 bar \* l.

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:**  
Provide fresh air. Keep victims quiet and warm.  
In case of unsteady breathing or breathing arrest induce artificial respiration.  
Call a doctor immediately.
- **After skin contact:** Generally the product does not irritate the skin.
- **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.
- **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 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
The product itself does not burn.  
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Nitrogen oxides (NOx)
- **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 receptacles with water spray.

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### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
 Ensure adequate ventilation  
 Keep away from ignition sources
- **Environmental precautions:**  
 Inform authorities in case of gas release.  
 Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
 Absorb with liquid-binding material (sand, diatomite, universal binders) and disposal in suitable containers.
- **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**  
 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.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
 Store containers in a well aired place at a temperature of less than 50 °C.  
 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 receptacle bursting.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
- |  |
|--|
| <b>7727-37-9 nitrogen</b>                          |
| TLV   withdrawn TLV, see App. F; simple asphyxiant |
- **Additional information:** The lists that were valid during the creation were used as basis.
  - **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.

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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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Not required.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Shock absorber, pneumatic / hydraulic  
 Condensed gas

**Color:** Colorless

- **Odor:** Odorless

- **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** n.a. °C

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** Not determined.

- **Decomposition temperature:** Not assignable.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Vapor pressure:** Not determined.

- **Density:** Not determined.

- **Vapor density:** Not applicable.

- **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with**

**Water:** Insoluble.

- **Segregation coefficient (n-octanol/water):** Not applicable.

- **Viscosity:**

**Dynamic:** Not applicable.

**Kinematic:** Not applicable.

- **Solvent separation test** Not applicable.

- **Solvent content:**

**Organic solvents:** 0.0 %

**Water:** 0.0 %

**VOC content:** 0.0 %

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- **Other information** The bonfire-test resulted in no flying away components.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**  
Danger of receptacles bursting because of high vapor pressure if heated.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**  
None in case of intended use and storage in compliance with instructions.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
When inhaling high concentrations narcotic symptoms are possible.  
The product is not subject to classification according to internally approved calculation methods for preparations.
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior 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 (Self-assessment): slightly hazardous for water (Germany)  
The product contains materials that are harmful to the environment.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- **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:** Contact manufacturer for recycling information.
- **Uncleaned packagings:**
- **Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.

### 14 Transport information

· <b>UN-Number</b> · <b>DOT, ADR, IMDG, IATA</b>	UN3164
· <b>UN proper shipping name</b> · <b>DOT</b> · <b>ADR</b> · <b>IMDG, IATA</b>	Articles, pressurized hydraulic 3164 Articles, pressurized hydraulic ARTICLES, PRESSURIZED, HYDRAULIC
· <b>Transport hazard class(es)</b> · <b>DOT</b>	
	
· <b>Class</b> · <b>Label</b>	2 Gases 2.2
· <b>ADR</b>	
	
· <b>Class</b> · <b>Label</b>	2 6A Gases 2.2
· <b>IMDG, IATA</b>	
	
· <b>Class</b> · <b>Label</b>	2.2 2.2
· <b>Packing group</b> · <b>DOT, ADR, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b> · <b>Danger code (Kemler):</b>	Warning: Gases -

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· <b>EMS Number:</b>	F-C,S-V
· <b>Stowage Category</b>	A
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity
· <b>Remarks:</b>	Special Provision: 283, 371, 594
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	120 ml
· <b>Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity
· <b>Remarks:</b>	Special Provision: 283, 371
· <b>IATA</b>	
· <b>Remarks:</b>	Special Provisions: A48, A114, A195
· <b>UN "Model Regulation":</b>	UN 3164 ARTICLES, PRESSURIZED HYDRAULIC, 2.2

### 15 Regulatory information

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

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS04

- **Signal word** Warning

- **Hazard statements**

H280 Contains gas under pressure; may explode if heated.

- **Precautionary statements**

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

- **National regulations:**

- **Other regulations, limitations and prohibitive regulations**

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

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

## 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.

- **Department issuing SDS:**

This Material Safety Data Sheet has been drawn up in cooperation with:  
 DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,  
 phone: (+49) 511 42079 - 0, reach@dekra.com.

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- **Date of preparation / last revision** 09/05/2016 / 1

- **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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Press. Gas: Gases under pressure – Compressed gas

- **\* Data compared to the previous version altered.**