

Material Safety Data Sheet

1. IDENTIFICATION OF THE PRODUCT AND SUPPLIER

Product name : Gas Spring / Gas Strut

Company : Lesjofors Gas Springs, LSEZ SIA

Address : Kapsedes street 2b, Liepaja, LV-3414, LATVIA

Phone numbers: + 371 634 018 33
+ 371 634 018 52

Recommended use: Gas spring

Restrictions in use: No data available

2. HAZARDS IDENTIFICATION

GHS classification of the product :

GHS classification - Gas under pressure : Compressed gas
IMDG Code Not applicable

GHS label elements including precautionary

Symbol



Signal word : Warning

Hazard elements : Contains gas under pressure; may explode if heated

Prevention : No data available

Response: No data available

Storage: P410+P403; Protect from sunlight
Store in a well ventilated place

Disposal: No data available

3. COMPOSITION / INFORMATION OF INGREDIENTS

Part	Component	Classification No	Concentration (Mass %)
Cylinder	STKM12B		52,02
Piston rod	S45C		36,82
Hinge	PA66+GF30		2,55
Washer B	SPC		1,41
Oil	General hydraulic fluid		1,08
Nitrogen	N/A	EC 231-783-9	1,08
Protect cap	PE	CAS No 9002-88-4	1,02
Rod Guide	Phenol	EC 203-632-7	0,98
Guide Stopper	PA66		0,82
Washer A	SPC		0,76
Oil seal	NBR		0,71
Piston	PA66+GF/MF37		0,59
Teflon Ring	Teflon	CAS No 9002-84-0	0,12
Grease	For bearing		0,04

4. FIRST AID ACTIONS

In case of eye contact :

Rinse cautiously with water for several minutes. Remove contact lenses if any.
If eye irritation persists get medical service.

In case of skin contact:

Get medical service if you feel unwell.
Take off the contaminated clothing and wash it before reuse.

If inhaled:

Get the fresh air.
If breathing stays difficult, get oxygen and continue to monitor.
Keep resting in a warm place in comfortable position for breathing.
Get medical service if still feel unwell.

If swallowed:

Get medical service if still feel unwell.

Indication of necessity of immediate medical attention and special treatment:

Notify to medical team or managers and do appropriate actions.

5. FIRE FIGHTING MEASURES

Extinguishing media:

Recommended alcohol-resistant foam, dry chemical, carbon dioxide, water or dry sand.

In case of large fire water spray is useful, also fire fighting foam.

Extinguishment by smothering: dry sand or soil.

Prohibited extinguishing media: no data available.

Specific hazard from the chemical:

Contains gas under pressure; may explode if heated.

Non-flammable. But corrosive or toxic gases may occur in case of fire emergency.

Can not be ignited easily.

Cause dizziness or suffocation without realization.

Special measures for fire-fighters:

Rescuers need to note the personal protective equipment.

Leave the area and extinguish fire in a safe range.

Be careful of fragments of cylinder.

If not danger, remove containers with items.

Extinguish fire as much as possible; use automatic fire equipment.

Cool the containers exposed to fire with water.

Protective Equipment and precautions for fire fighters:

General equipment for fire fighting can be used.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

- Cleaning up immediately.
- Do not touch and walk on exposure material.
- Ventilate the area.
- If not in danger prevent the leakage.
- Do not breathe dust / fume / gas / mist / vapours / spray.

Environmental precautions:

- Do not let products flow in a waterway, drain basement and sealed room.

Methods and materials for purification and cleaning up:

- Absorb the exposed materials with inactive material (dry sand and soil);
place in a container for a proper disposal.
- After absorbed exposed materials clean up with cleaner and water.

7. HANDLING AND STORAGE

Precautions for safe handling:

- Remove all ignition sources.
- Use only outdoors or in a well ventilated area.
- Notice the conditions and materials to be avoided.
- Notice the engineering management and personal protection.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke while using this product.

Conditions for safe storage:

- Keep away from heat / sparks / open flame / hot surfaces / static electricity.
- Do not eat, drink or smoke while using this product.
- Notice the conditions and materials to be avoided.
- Protect from sunlight. Store in a well ventilated place.
- Low storage temperatures are preferable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering management:

- Keep air pollution under exposure standard when fume or mist occurs in handle.

Personal protective equipment

Respiratory protection: General respiratory protection

Hand protection: No data available

Eye protection: No data available

Skin and body protection: No data available

Standard of exposure

Chemical: No data available

Biological: No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

State	Gas (nitrogen) at 20C
Odor	Odorless
Odor treshold value	No data available
pH	No data available
Freezeng point	- 210 C
Initial boiling point or boiling range	- 196 C
Flash point	No data available
Evaporating rate	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor pressure	1 atm (77.375 deg K)
Water solubility	(1.18E+004) mg/L at 25 C
Vapor density	0.97 (Air = 1)
Specific gravity	0.808 at boiling point of liquid
N-octan/water pertitation coefficient	0.67
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight	28.0

10. STABILITY AND REACTIVITY

Chemical stability :

Contains gas under pressure. May explode if heated
Can not be ignited easily
Cause dizziness or suffocation without realization

Conditions to avoid:

Heat

Materials to avoid:

No data available

Hazardous decomposition products unders fire conditions:

Toxic or irritating gasses may occur in case of fire emergency

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure	No data available
Acute toxicity	No data available
Skin corrosion / irritation	No data available
Respiratory / skin sensitization	No data available
Eye damage / eye irritation	No data available
Germ cell mutageny	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration hazard	No data available

12. ECOLOGICAL INFORMATION

Toxicity	No data available
Persistence and degradability	No data available

Bio-accumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No data available

13. DISPOSABLE CONSIDERATIONS

Contaminated packing:

Follow federal, state and local regulations.

Consideration in dispose:

Consider the notice in regulations.

14. TRANSPORT INFORMATION

IMDG Code	No data available
DRG	No data available
RID	No data available
ADR	No data available
AND	No data available

15. REGULATORY INFORMATION

There is no data available related to any issue of regulations regarding the application of gas springs

16 OTHER INFORMATION

Date	21.02.2014.
Revision	0
Revision date	N/A
Reference	The all issues relates to gas springs production and the issues not covered here to be reffered to Technical Licence Agreement between "Lesjofors Gas Springs", LSEZ SIA and "Hanil Precision & Co" Ltd dated 02.02.2008.