

# SUPERSEN SAFETY DATA SHEET

Version 1.0

Effective Date 21.08.2012

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## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : GAS SRPING/GAS STRUTS  
Recommended of Use : Motion control/ assist.  
Supplier : Super sheng enterprise co., LTD.  
Address : No.6, Lane 151, Minsheng St., Sanhsia Dist.,  
New Taipei City, Taiwan, 23741  
Telephone : 886-2-26743021  
Fax : 886-2-26722009  
Emergency Telephone : 886-2-26721023

## 2. HAZARDS IDENTIFICATION

Hydraulic Oil	Shell Tellus S2 M46
Compress Gas	Nitrogen
Elastomers	Nitrile O-Ring

### 2.1 Physical Data

#### 2.1.1 Oil

Appearance : Amber. Liquid at room temperature.  
Odor : Slight hydrocarbon.

#### 2.1.2 Gas

Appearance : Compressed gas. Colorless gas.  
Odor : No odor warning properties.

#### 2.1.3 Elastomers

Appearance : Black rubber.  
Odor : Mild aromatic odor.

# SUPERSEN SAFETY DATA SHEET

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## 2.2 Possible dangers

### 2.2.1 Oil

- General Information : Not classified as toxic chemical substance according to Taiwan Toxic Chemical Substances (TCS).
- Inhalation : No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
- Skin contact : remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
- Eye contact : Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
- Injection : In general no treatment is necessary unless large quantities are swallowed, however, get medical attention.

### 2.2.2 Gas

- General information : Contains gas under pressure; may explode if heated.
- Inhalation : Remove to fresh air. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. In case of shortness of breath, give oxygen.
- Skin contact : Not applicable.
- Eye contact : Not applicable.
- Ingestion : Ingestion is considered a potential route of exposure.

# SUPERSEN SAFETY DATA SHEET

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---

## 2.2.3 Elastomers

- General information : No known effects of overexposure. Degradation by chemicals, ageing, heat or fire may produce a toxic and/or corrosive residue.
- Inhalation : None under normal condition of use. Inhalation of fumes released at high temperature can be irritating to the lungs and fatal.
- Skin contact : No known effects under normal conditions of use.
- Eye contact : No known effects under normal conditions of use.
- Ingestion : No known effects under normal conditions of use.

NFPA Hazard codes		HMIS Hazard codes		Rating System
Health	1	Health	0	0=Minimum Hazard 1=Slight Hazard 2=Moderate Hazard 3=Serious Hazard 4=Severe Hazard
Flammability	0	Flammability	0	
Instability	0	Reactivity	0	

## 3. Hazards

Contents under high pressure! Do not open or heat up!

## 4. First Aid

No necessary under normal condition of use.

Additional, the nitrogen is an inert gas, does not burn or explode.

In case of accidental release of product contents see section 2.2.

## 5. Fire and Explosion

All known extinguishing media can be used.

Exposure to hazardous combustion products may cause rupture of container and rapid release of contents which may include some oil.

Product will not self-ignite under normal condition of use.

# SUPERSEN SAFETY DATA SHEET

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## 6. Accidental Release

### 6.1 Oil

Avoid contact with skin and eyes.

Uses appropriate containment to avoid environmental contamination.

Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Slippery when spilt. Soak up residue and dispose of properly.

### 6.2 Gas

Ventilate the area.

Do not discharge into any place where its accumulation could be dangerous.

Prevent further leakage or spillage if safe to do so.

### 6.3 Elastomers

No material specific actions are required.

Collect the spilled and reuse or dispose of in accordance with local authority and national regulations.

## 7. Handling and Storage

The gas spring should not be exposed to rain and store in cool, dry area.

It is recommended to keep the piston rod downwards.

No foreign material such as paint or adhesive tapes should be attached to the piston rod, and the piston rod should be protected against shocks, scratches and dirt.

Do not grease or oil the piston rod.

## 8. Exposure

No known effects of overexposure.

# SUPERSEN SAFETY DATA SHEET

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## 9. Physical & Chemical Properties

Details refer to section 2.

Hydraulic Oil	Shell Tellus S2 M46	Flash point °C >230	Auto Ignition °C >320
Compress Gas	Nitrogen	Not applicable	Not applicable
Elastomers	Nitrile O-Ring	>200	>200

## 10. Stability and Reactivity

Chemical Stability : Stable under normal conditions.

Conditions to Avoid : Strong acid and oxidizing agents.  
Temperatures higher than 200°C.

## 11. Toxicology Information

No known toxicology issues beyond those contained ingredients.  
But in high leaking concentrations nitrogen may cause asphyxiation.  
Asphyxiation may bring about unconsciousness without warning. In this case take the action as section 2.2.2.

## 12. Ecological Information

The ecological effects of the product have not been established in the short term.

Long time exposure to corrosive and oxidizing environment may result in spillage of contained.

## 13. Disposal

Recover or recycle if possible.

When gas springs are no longer needed, they should be disposed of in an environmentally correct manner. To accomplish this, they should be drilled open, the compressed nitrogen gas released and the oil drained. For more specific details, please refer to

<http://www.supersen.com.tw/ej03xu3/update/20120827094336730.pdf>

# SUPERSEN SAFETY DATA SHEET

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## 14. TRANSPORTATION INFORMATION

Not restricted for transport.

## 15. REGULATORY INFORMATION

According to local regulations.

## 16. OTHER INFORMATION

MSDS Version Number : 1.0

MSDS Effective Date : 21.08.2012.

MSDS Prepared By : QC DEPT (Helen Lin)

This Safety Data Sheet is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirement only. It should not therefore be construed as guaranteeing any specific property of the product.

Confirmed by: Peter Liu

Title: General Manager

Date: 2012/08/21