

SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY

Product name:	Rail, industrial & crane buffers
Application:	A hydro pneumatic device designed and constructed to absorb impact energy
Manufacturer:	Römer Fördertechnik GmbH Nielandstrasse 53 58300 Wetter (Ruhr) Germany
Contact:	Phone +49 2335 80290 Mail: info@roemer-foerdertechnik.de

2. COMPOSITION/INFORMATION ON INGREDIENTS

Gas:	Preparation – Nitrogen (EINECS No. 231-783-9) + 1% SF ₆ (Sulphur hexafluoride – EINECS No. 219-854-2).
Oil:	This material is not considered hazardous as defined by E.C. legislation.

3. HAZARDS IDENTIFICATION

Gas:	Compressed gas. In high concentrations may cause asphyxiation.
Oil:	This product is not considered hazardous, but should be handled in accordance with good standards of industrial hygiene and safety practices.

4. FIRST AID MEASURES

Gas:	Inhalation. In large concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to an uncontaminated area and keep warm and rested.
Oil:	<u>Eyes.</u> Flush eyes with water for at least 15 minutes. If irritation persists obtain medical attention. <u>Skin.</u> Remove contaminated clothing. Wash affected area with copious amounts of soap and water. If irritation persists obtain medical attention. <u>Ingestion.</u> Rinse mouth out with water and give water to drink. DO NOT INDUCE VOMITING. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Special hazards:	Exposure to fire may cause buffer to lose gas and oil.
Extinguishing media:	Gas is non-flammable. Alcohol resistant foam, Dry Chemical, Carbon Dioxide and Water fog to cool buffer. Do not use water jets.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Gas. Evacuate the area and ensure adequate ventilation.
Oil:	Wear appropriate protective clothing. Presents a significant slip hazard. Prevent from entering drains and watercourses.
Clean up methods:	Contain and cover using absorbent inert material and dispose of in accordance with local byelaws and the Environmental Protection Act 1990. Ventilate the area.

7. HANDLING AND STORAGE

Handling and storage:	Keep buffer upright when filled with oil. Keep at temperatures not exceeding 50°C Handle with care and use appropriate lifting equipment for the designated weight. Wear appropriate protective clothing when filling the buffers with oil. Install and maintain in accordance with the Installation Leaflet. Do not stand over the buffer when removing the transport retainer. Do not attempt to dismantle the buffer.
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8. EXPOSURE CONTROL/PERSONAL PROTECTION

Eyes:	Wear chemical safety glasses if risk of splashing the oil.
Skin:	Wear chemical resistant gloves and protective overalls and gloves
Inhalation:	Ensure adequate ventilation or local exhaust measures
Exposure limits:	Gas: UK SF6 – LTEL:1000 ppm; STEL – 1250 ppm (EH40/2002) Oil: LTEL: (8 hr. TWA) Mineral oil mist = 5 mg/m ³ STEL (15 minute Ref) Mineral oil mist = 10 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

Gas:	Relative Density, gas	Lighter or similar to air	
	Solubility mg/1 water	No reliable data available	
	Appearance/colour	Colourless gas	
	Odour	No odour warning properties	
Oil: 2 varieties may be used	Physical State	Liquid	Liquid
	Specific Gravity @15°C	0.866	0.906
	Kinematic Viscosity @40°C	15 cSt	32 cSt
	Flash Point (PMCC) °C	>140	>190
	Boiling Point Range °C	>200	>250
	Auto-ignition Temperature °C	>320	>270
	Solubility in Water	Insoluble	Insoluble
	PH (3% Deionised)	-	-

10. STABILITY AND REACTIVITY

Gas:	Stability and reactivity	Stable under normal conditions.
Oil:	Stability	Stable under normal conditions.
	Incompatibility	Avoid contact with strong oxidising agents
	Decomposition	Thermal decomposition can lead to formation of a variety of compounds, the precise nature of which will depend on the prevailing conditions. In complete combustion will generate smoke, CO ² and hazardous gases including CO.

11. TOXICOLOGICAL INFORMATION

Gas:	No known toxicological effects from this product	
Oil:	<u>Ingestion</u>	Expected to be of low oral toxicity.
	<u>Eyes</u>	Unlikely to cause more than transient irritation.
	<u>Skin</u>	Unlikely to cause more than transient irritation. Prolonged contact in conditions of poor hygiene can lead to de-fatting of the skin, dermatitis etc.
	<u>Inhalation</u>	Unlikely to be hazardous under normal conditions of use. Inhalation of mists may cause irritation to upper respiratory tracts and lungs.

12. ECOLOGICAL INFORMATION

Gas:	SF6 - When discharged in large quantities may contribute to the greenhouse effect SF6 - Global warming factor – 23900 (CO ₂ = 1)	
Oil:	Mobility	Spillages may penetrate the soil causing ground contamination and eventually water contamination.
	Persistence and De-gradability	Expected to biodegrade slowly.
	Bio-accumulation effect	Contains components that have the potential to bio-accumulate.
	Aquatic toxicity	Will form a floating layer on the surface that will not dissolve to any great extent. Expected to be practically non-toxic to aquatic organisms, but has the potential to physically foul aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Gas:	Avoid discharges to atmosphere Do not discharge the gas
Oil:	Place used and contaminated materials in suitable containers. Dispose of the waste in compliance with the duty of care and Environmental Protection Act 1990 regulations. Always dispose of using a licensed waste disposal contractor.

14. TRANSPORT INFORMATION

Buffer:	Classified under UN ADR & IATA regulations as: UN3164 ARTICLES, PRESSURIZED, PNEUMATIC OR HYDRAULIC, 2.2 Not restricted to IMDG according to Special Provisions 594 & A114.
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15. REGULATORY INFORMATION

Gas:	Number in annex1 of Dir 67/548 EC classification EC Labelling (Symbols, R&S Phases)	Not applicable for preparations Not classified as dangerous preparation No EC labelling required
Oil:	Hazard data label Risk & safety Phases E.C. Directives	No label required None Dangerous Preparations Directive 2001/60/EC 91/156/EEC Framework Waste Directive 87/101/EEC waste Oil Directive

Statutory Waste Directive

Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP4)
EH40/2002 Occupational Exposure Limits
Health and Safety at Work Act 1974
Consumer Protection Act 1987
Control of Substances Hazardous to Health 1988
Environmental Protection Act 1990

Buffer: Labelling – symbols
E.C. Directive

Label 2.2: non-flammable non-toxic gas
Lift Safety Directive 95/16/EC



16. OTHER INFORMATION

The information given applies when this product is sold for its stated application and no other.

If you have purchased this product for supply to a third party it is your duty to take all the necessary steps to ensure that any person handling this product is provided with the appropriate health and safety information.

If you are an employer, it is your duty to warn your employees and others who may be affected of the hazards, that are associated with the use of this product and any precautions that should be taken.

Details given in this document are believed to be correct at the time of going to press. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

The following Approved Codes of Practice are applicable:

Waste Management
The Duty of Care