



ELASTOMER SOLUTIONS

optibelt **ELASTOMIT** X-RAY PROTECTION MATERIALS

GUIDELINES FOR THE STORING AND HANDLING



1. APPLICATION RANGE

The following requirements and recommendations apply to vulcanised natural rubber products and/or synthetic rubber composites with high amounts of X-ray absorbing materials (**optibelt ELASTOMIT** X-ray protection materials).

2. GENERAL

Vulcanised rubber products are notable for their excellent material properties. This pertains to exceptional elastic properties, good kink resistance and good resistance against many chemicals and environmental influences. As with all polymer products, compliance with certain regulations is necessary with vulcanised rubber products, to ensure maintenance of these good properties.

Vulcanised rubber products change under unfavourable storage conditions or with incorrect handling their physical properties. These unfavourable storage conditions can mean that concretion or softening can appear, or the permanent strain from a kink or elongation is increased considerably. Further after-effects, for example fissures, can mean that the incorrectly stored material is rendered useless. The changes listed below can be caused by improper exposure to oxygen, ozone, light, heat, moisture, solvents or storage under high mechanical tension.

3. STORAGE

Fundamentally, storage conditions in DIN 7716 and ISO/FDIS 2230 apply. It is important to stress that the storage room must be cool, dry and weather-proof. A temperature range of minus 10 °C to plus 25 °C is in effect. Humidity cannot exceed 65% relative humidity. Above all, oxygen, ozone, high humidity and high temperatures should be avoided (see standards listed below).

4. HANDLING OF **optibelt ELASTOMIT** MATERIALS

optibelt ELASTOMIT radiation protection materials are normally delivered as rolls of material. Each roll is protected with a protective foil. For shipment, these rolls are either packed on pallets or in wooden cases. It is important to make sure that the protective foil is not damaged. It is also important to make sure in further processing of the roll material that the manufactured cut is stored correctly and is protected from environmental influences. Every roll, or part thereof, must be protected with the protective foil and stored in accordance with aforementioned DIN/ISO.

Cuts should not be folded or broken in any case.

5. FURTHER PROCESSING

In further processing of **optibelt ELASTOMIT** materials, it is important to make sure that packaging is so equipped as to prevent penetration of ozone and high humidity, for example, X-ray aprons are only made from certain tissue materials. At present, best results are achieved by concealing with synthetic foil, e.g. PVC-foil. Furthermore, wrapping tissue with a plastic coating is rated highest, e.g. made of PUR, PVC or PTFE.

6. CLEANING

Contaminated cuts of **optibelt ELASTOMIT** materials can only be cleansed with soap and warm water. Manufacturer-recommended methods can only be used for ready-made materials (e.g. protective X-ray aprons). Drying is principally carried out at room temperature.

7. DISINFECTION AND STERILISATION

The disinfecting agent may not be used in conjunction with the cleaning agent. It is important to be sure of the compatibility of the choice of disinfectant with the **optibelt ELASTOMIT** material.

In particular, oxygen-releasing or halogen-releasing agents are to be avoided, e.g. potassium permanganate or bleaching powder. Superheated steam sterilisation of materials containing **optibelt ELASTOMIT** material is also not allowed.

8. DISPOSAL INSTRUCTIONS

All **optibelt ELASTOMIT** qualities are recyclable by thermal reconditioning (recycling of used metals).

9. SAFETY INSTRUCTIONS

- Information in these guidelines is the result of many years' experience.
They are to be treated as obligatory instructions.
- We reserve the right to make changes based on technical innovations.
- Regarding liability, we refer to our general conditions of sale.
- No lead-free **optibelt ELASTOMIT** qualities are suitable for protection against radioactive emissions.

Version 16.4.2010

The document can also be found on www.optibelt.com

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