

Storage recommendations



1. GENERAL :

Storage conditions are crucial for long-term functionality of seals.

If the recommendations are not scrupulously observed, the seals may see their physical properties change causing their deterioration prematurely, the latter no longer meeting the initial technical requirements.

Deformation, softening, swelling, hardening, visible cracks are the reasons for not using seals and to scrap them. Storage has a major impact to avoid such degradations.

The main causes of destruction of seals are:

- ❖ Wear (the most common cause).
- ❖ The presence of contaminants or air in hydraulic oil
- ❖ External pollution (dust, sand, ozone ...),
- ❖ Too much extrusion gap
- ❖ A poor surface condition
- ❖ Design, mounting, temperature and composition errors.

2. PLACE OF STORAGE

Atmosphere:

HPS recommends that you avoid storing all elastomeric seals in humid places conducive to condensation. On average, relative humidity should be maintained between 45% and 70%, and it should not exceed 65% for polyurethane products.

Aggressive agents (solvents, chemicals, acids, fuels, etc.) must not be stored in the same place as the seals.

Ionizing radiation and ozone are particularly harmful, so it is important to keep the storage place away from devices such as fluorescent lights, equipment that can produce electric shocks.

Lighting:

Elastomer seals should not be in contact with the sun's rays or artificial light highly charged with ultraviolet (UV) light. We recommend using normal incandescent lighting.

Storage area windows should be painted over with a special paint, preventing the rays from acting more or less on all the joints and avoiding the blue color.

Temperature:

The recommended storage temperature should be between 5 ° C and 25 ° C. If the temperature exceeds 25 ° C, the elastomer seals may experience physical variations, no longer bring the same technical characteristics and even their lifespan decrease considerably.

Furthermore, if the temperature exceeds the thresholds at low temperatures (-10 ° C), the elastomer seals will tend to be more rigid, their technical characteristics not being altered.

We recommend heating the elastomer seals to bring them to a temperature of 20 ° C for a long period of time before use.

All heat sources (radiators, lamps, etc.) must be checked to avoid an overshoot of + 25 ° C.

We recommend avoiding packing the joints of different compositions together (color, material ...). The packaging incorporating the seals must not be folded or be brought into contact with other materials such as metals, aggressive powders, or other in order to prevent any possible degradation of the seals.

3. STORAGE AND CLEANING CONDITIONS

Marking processes:

- ❖ Direct printing on the packaging
- ❖ Provision of a self-adhesive label on the packaging
- ❖ Introduction of a label in a pocket, part of the packaging
- ❖ Label inserted in the packaging if it is transparent

Elements of the marking:

- ❖ Name of supplier
- ❖ Supplier's article code
- ❖ Nature of the rubber according to standardized abbreviations
- ❖ Dimensions and quality accuracy class
- ❖ Quantity

Packaging:

To pack the seals, we use UV sachets.

Conditioning:

The conditioning of our seals is simply done in closed cartons, while respecting the recommendations of the storage location listed above.

Period of validity of storage:

The table below specifies the periods of validity of the seals (classified by group) and follows the ISO 2230 standard.

	Subjects	Limit of storage	Extension period storage
Group 1	BR; NR; SBR; IR; AU; EU	5 years	2 years
Group 2	NBR; NBR/PVC; XNBR; HNBR; CO/ECO; ACM; CR; IIR; BIIR; CIIR	7 years	3 years
Group 3	CM; CSM; EPM; EPDM; FKM; Q; FMQ; PMQ; PVMQ; MQ; VMQ	10 years	5 years

Control before use:

Controls must be carried out before any use of seals that have been stored for a long period. After selecting a representative sample, the visual inspection must focus on:

Mechanical aspects: abrasion, cracks, cuts...

Surface aspects: coloring, dust, hardening, softening, etc.

Other aspects: dimensional control...

Cleaning:

After several months or years of storage, the seals may be dusty. The seals should be cleaned with warm water and soap, and should not be in contact with sharp objects or wire brushes.

Do not use solvents such as trichloroethylene, carbon tetrachloride and hydrocarbons.