



# Precautions to ensure safe usage

The precautions given below are intended to ensure safe and correct use of the products.  
Note that certain restrictions apply to use of these products. Failure to observe these could result in injury or property damage.

 <b>Warning</b>	A potentially hazardous situation which could result in death or serious injury.
 <b>Caution</b>	A dangerous situation which could result in minor or medium injury and/or in which only property damage is foreseen.

 **Warning** TOYOX products have been developed and manufactured for general industrial applications.

For applications that require safety, confirm in advance.



Never use for implant or injection application or other applications where there is a possibility of the product partially remaining in the body.

Toyox makes no guarantee of the adaptability or safeness related to such applications.

Please read the Handling Precautions carefully before use.

Note: See the terminology glosses on our website for words marked with a ※.

## TOYOTOP-E100°C HOSE

1. The fluid used is plastic powder such as resin pellets. Do not use for other fluids.
2. **Do not use for foods, drinks or medical applications ( such as medical treatment and medicinal administration ).**
3. Always use a hose within a range of temperature, **-5 to 100 °C**.
4. Always use a hose within its recommended pressure range. The working pressure of the hose is **-0.1 to 0.2MPa ( 50°C ) , -0.03 to 0.1MPa ( 100°C )**  
※ Please note that -0.1 MPa is an approximate value. Refer to the " Use condition reference values for TOYOX vacuum hoses " ( Terms explained, Fig. 1 ) regarding guidelines for negative pressure use ranges.
5. Never use a hose at less than its ※<sub>3</sub> minimum bend radius.  
If you use a hose at less than its minimum bend radius, it may break or the withstanding pressure may decrease.
6. Friction can be more of an issue when transferring powders and particles, so it is important to avoid small vending radii as far as possible.
7. Do not use or store the product outdoors, in direct sunlight, in hot or humid places.  
Such conditions can affect exterior hose surface, particularly with respect to stickiness and cracking.
8. Keep hose away from exposed light fixtures. Do not use the hose near a flammable object ( gasoline, solvent, etc. ).
9.  **Warning** To prevent static electricity of the hose, be sure to connect the antistatic lines to dedicated earth clips or grounded equipment or buildings and check the conductivity with a tester or the like before use.
10. The antistatic performance of the hose varies depending on the operating conditions, so be sure to check before using.
11.  **Warning** The antistatic lines are only for preventing static electricity of hoses; be sure never to run current through them for any other reason.
12. The life of the hose can vary substantially depending on factors such as the physical properties of the fluid, the temperature and flow rate, and frequency of compression and decompression.  
If any of the following abnormalities a sign is found at the every-day's check up or the regular inspection, stop using the hose immediately, and repair it or replace it with a new one :
  - Problem with a hose around fitting ... Localized stretch, curvature, leakage or expansion, or less deep insertion into nipple.
  - Damage ... Large scratch, crack, or an inundated reinforcement layer.
  - Internal damage ... Bulging or ※<sub>5</sub> separation of the inner surface, or wear that leads to exposure of the hose reinforcement material.  
( Note ) If the interior damage occurs, foreign objects peeled off the hose or fragments of the reinforcing material may mix with the fluid.
  - Other damage such as hardening, ※<sub>6</sub> swelling, cracks, expansion, etc.
13. Always use the correct size nipple according to the hose. Ensure that nipples are free of surface damage and rust.
14. If it is necessary to attach a hose band, use a spiral-wire-type one. Refasten bands when they become loose.  
Because the torsion of the resin at the band-tightening section may cause fluid to leak out or the hose to be removed.  
Take care not to over-tighten the wires, which cut into the inner hose wall and even cause rupture.
15. Take full care when cutting the hose, because cutting it makes the ends of reinforcing materials on the exterior sharp which may cause injury to you.
16. Do not incinerate the hose. Used hose should be disposed of as industrial waste.  
Note that incineration of the product may cause damage to incineration facilities or generate toxic gases.
17. The hose should be disposed of in accordance with the requirements of the local region.