

# The risks of Silica Gel



Silica gel desiccants are often found in shoe boxes and with the packing of footwear, leather bags and purses, medicine bottles, electronics and more consumer products. The purpose of the silica gel is to absorb moisture and keep humidity from affecting products.

## **WARNING - THROW AWAY "DO NOT EAT"**

Silica gel is non-toxic; but silica gel sachets have warnings like "throw away, do not eat". What are the main risks that justify these warnings?

### Ingestion

When you swallow silica gel the dehydration will cause irritation of throat and nose. Dependent on the quantity, it may result in an upset stomach, vomiting, constipation and nausea.

### Eye & skin contact

Silica gel causes irritation and redness when contact with the eyes or skin occurs. It becomes painful when the silica gel absorbs fluids around the eye.

### Inhaling

Inhalation of silica gel is another risk; breathing-in may cause lung irritation, coughing and dyspnoea (short of breath).

### Choking

The small bags can cause choking and the packet may lacerate and release the contents into the mouth, throat, gullet or lungs.



## Cobalt dichloride is carcinogenic and toxic-for-reproduction



A much more severe risk comes from the blue coloured “indicator” silica gels that contain cobalt dichloride, or other toxic additions such as methyl violet. Cobalt dichloride is deep blue when dry and pink when wet, making it useful as an indicator of saturated (moist) silica gel.

**But cobalt dichloride is known to cause cancer** (carcinogenic) and it is toxic for reproduction. It is a Substance of Very High Concern (SVHC) in REACH terminology; cobalt dichloride has been mentioned as a SVHC since the first issue of the REACH Candidate List back in October 2008. Cobalt dichloride has been proposed for inclusion in Annex XIV of REACH, meaning that in the future the substance might be banned or subject to authorisation.

If you are exposed to silica gel with cobalt dichloride, immediately call for medical assistance. Details on first aid and medical assistance can be found in section 4 “First Aid Measures” of the material safety data sheet (MSDS).

Typically, the indicator type of silica gel is not used for consumer products, but to avoid any risks always ask for the MSDS of the silica gel to assess the chemical properties, hazards of the desiccant material and first aid measures.

Moist indicators that are not or less harmful are available as an alternative.

**As a consumer, always search the contents of packaging for silica gel and dispose the sachets properly.**

**As an importer, distributor or retailer always ask for the material safety data sheet.**