PEI-Genesis, Inc.
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Customer Safe Use Information (REACH)

Substance Name: Cadmium

CAS Number: 7440-43-9

SVHC Decision Number: ED/69/2013

Risk Assessment

The use of cadmium as a plating finish has been much reduced over the years, but it still has an important role in safety critical applications.

As a plated surface on a component, cadmium does not represent a risk to health - cadmium is not easily absorbed through the skin, so handling cadmium plated items poses no risk to the user.

The main risk to health is cadmium dust or vapor, which can be generated by, for example machining cadmium, or welding it. The main route of entry into the body is via inhalation, followed by ingestion. If it corrodes, cadmium forms a white crystalline cadmium salt deposit on the surface of the plating, and this can represent a health risk if not handled properly. The deposit may enter the body through inhalation if it becomes airborne (i.e. when packaging around the part is opened) or ingestion (if a person eats or smokes without washing their hands after touching the deposit).

Cadmium, and the compounds formed when it corrodes, are toxic by ingestion, acutely toxic if inhaled, may cause cancer, and are suspected of being able to cause genetic defects, damage fertility and be harmful to the unborn child.

Handling Instructions

No precautions are required for handling cadmium plated items in the as-supplied condition.
It is recommended that cadmium plated articles should not be heated (i.e. welded) or machined by the end user.

If it is necessary to handle products with corroded cadmium plating then suitable gloves and respiratory protection should be worn and care taken to minimize the corrosion products becoming airborne.

Disposal Instructions

The article should be disposed of in accordance with all applicable governmental regulations relevant to the geographical location.

September 2013