

MATERIAL SAFETY DATA SHEET



Industrial & Print
Finishing Group

ROUTE(S) OF ENTRY

INHALATION? Dust only

SKIN? No

INGESTION? No

HEALTH HAZARDS (ACUTE and CHRONIC)

No health hazard or toxicity information exists specifically for this material. Data for major health components are given instead. For each component in this material, the percent by weight can be used as a rough guide to the component's likely significance.

The components of this material have a limited potential for release under normal conditions of use, transportation and storage. Increased release may occur when the material is heated or subjected to processes which generate gasses, fumes or dusts. The specific potential for release under user's condition of handling of this material should be evaluated by the user.

Heating ethylenvinylacetate above 250 °C may produce fumes that are irritating to the eyes, nose and throat; resulting in reddening, tearing and itching of the eyes; and soreness in the nose and throat, together with coughing.

INHALATION

Low hazard for usual handling and use. Film material may cause suffocation if placed over the face. Vapors are unlikely due to physical properties. Cutting may produce dusts. Single exposure to dust is not likely to be hazardous.

SKIN

Essentially non-irritating to skin. Mechanical injury only. A singly prolonged skin exposure is not likely to result in material being absorbed through skin in harmful amounts.

EYES

No specific hazard known. However, any material that contacts the eye may cause irritation or corneal injury due to physical properties.

INGESTION/ ORAL TOXICITY (LD50)

8600 mg/kg (rat) for Cellulose diacetate
9000 mg/kg (rat) for the plasticiser
Ingestion of significant amounts of material is unlikely. Ingestion may cause choking if swallowed.

UNUSUAL CHRONIC TOXICITY

None reported.

CARCINOGENICITY

NTP? No

IARC MONOGRAPHS? No

OSHA REGULATED? No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE None Reported

12 ECOLOGICAL INFORMATION

12.1 RAW MATERIAL AND MANUFACTURING PROCESS SUBSTRATE.

Around 60% of the film is cellulose diacetate. This is derived from natural cellulose sources, cotton linters and wood pulp, from managed forests predominately in North America. All of our pulp suppliers have active replanting programmes and report a net increase in tree numbers. We use no hardwoods from endangered rain forests.

Cellulose diacetate and plasticiser are dissolved in acetone solvent before being cast and dried to form a sheet. The solvent is recycled in a high efficiency recovery system and a high percentage of waste product is recycled. The process is low temperature which results in no detectable loss in properties even on 100% recycle.

12.2 MOBILITY AND DEGRADABILITY.

Biodegradation studies indicate around 15% (by wt) of the acetate film is lost over 28 days. This is thought to be largely due to plasticiser biodegradation. The two primary constituents (cellulose diacetate and plasticiser) have long since been recognised as biodegradable.