

# RESISTANCE TO CHEMICALS

An overview of the general chemical resistance of Polyflor Vinyl Flooring.

## 13.1 POLYFLOR VINYL FLOORING

Polyflor and Polysafe vinyl floor coverings features include:

- ▶ An above average resistance to mild and dilute acids, alkalis, soaps and detergents.
- ▶ Unharmed by petrol and strong acids, provided any spillage is cleaned off immediately.
- ▶ Should not be allowed to come into contact with Ketones, chlorinated solvents, acetone and similar solvents; however, should this happen, the effect can be minimised. Remove the spillage immediately, then leave any solvent residue to evaporate, prior to allowing any footfall.
- ▶ Are suitable for use in all areas where most chemicals are used and there is only risk of accidental spillage; however some chemicals contain very strong dyes that, even after a short period of contact, will stain the vinyl flooring. In areas where such chemicals are used selecting an appropriate dark colour can minimise the staining effect.

### IMPORTANT NOTE

Polyflor test for resistance to chemicals is evaluated over a 24 hour contact period at a room temperature of 21°C, followed by rinsing with cold water. Polyflor believes this simulates the worst situation where spillages are not removed immediately and are only cleaned by normal maintenance. Some stains can be removed by abrading with a nylon pad during maintenance. A emulsion floor polish can be used as a sacrificial layer for protecting the floor against staining.

Where specific chemicals are used – for instance in a photographic laboratory – a set of chemical resistance charts is available on request. These charts show the resistance to a range of specific chemicals by shade for each Polyflor product, and will prove helpful in selecting colours which are least affected by specific chemicals.

## 13.2 GENERAL CHEMICAL RESISTANCE OF POLYFLOR VINYL FLOORING

ORGANIC LIQUIDS	EFFECT	ACTION
Aldehydes Esters Halogenated hydrocarbons Ketones	Flooring attack occurs after several minutes.	Wipe up immediately.
Alcohols Ethers Glycols Hydrocarbons (aromatic & aliphatic) Petroleum spirit Vegetable oil	After several days, plasticiser extraction occurs, with associated problems of shrinkage and embrittlement.	Wipe up immediately.
AQUEOUS SOLUTIONS	EFFECT	ACTION
Mild acids and alkalis	No effect.	
Strong alkalis	Will strip polish and may cause discolouration in some shades.	Dilute and remove.
Strong acids	Prolonged contact can cause discolouration.	Dilute and remove immediately.
Dyes (indicators)	Contact can cause discolouration.	Dilute and remove immediately.

## 13.3 POLYFLOR RUBBER FLOOR COVERINGS

Polyflor Rubber floor coverings have average resistance to mild and dilute acids, alkalis, soaps and detergents. Prolonged exposure to petrol, oils, greases and fats will cause softening and swelling. Polyflor Rubber floor coverings are **unsuitable** for garage workshops or food preparation areas, but are suitable for areas where spillage is infrequent. Occasional, accidental spillages, which are removed immediately, do not normally damage the flooring. A comprehensive guide to chemical effects and staining by product shade is available on request.

## 13.4 REACTION TO RUBBER

Antioxidants used in the manufacture of rubber can cause staining. Non-rubber traffic mats are recommended, as are tyre trays for car showrooms, etc. Using black or dark brown floor coverings will not prevent staining but will disguise it. Lighter coloured rubber can also be specified for appliance feet, trolley wheels etc.

## 13.5 ALCO-BASED HAND GELS

Polyflor homogeneous PUR, heterogeneous PUR and Polysafe safety flooring ranges are compatible for use with the most commonly used alco-based hand gels. Some alco-based hand gels contain a high concentration of ethanol and to discuss their compatibility with other Polyflor floor coverings, contact Polyflor Customer Technical Services Department (CTSD) on +44 (0) 161 767 1912.