VERSATILE CHARACTER: THE PRODUCT CHARACTERISTICS

Duropal high pressure laminates (HPL) are hard-wearing, versatile, and available in many attractive designs. In order to get the best use from the product and ensure that its attractive appearance is retained, please observe the chemical, mechanical and physical properties of our Duropal high pressure laminates (HPL).
In terms of reaction to fire, protection against formaldehyde emission and surface processing are concerned, there are some minor differences between Duropal-HPL and Duropal-HPL-Solid. All other points apply to both high pressure laminates.

1. CHEMICAL CHARACTERISTICS

The surfaces of Duropal-HPL and Duropal-HPL-Solid are resistant to contact with most normal chemicals and substances. Cleaning products such as acetone and substances such as vinegar, coffee and blood will not stain the surface.
Nor will spillages of any of the following (listed here as examples) affect the surface provided they are wiped up promptly (e.g. within 10-15 minutes). This means the tops must be wiped with a wet cloth and rubbed dry within 10-15 minutes.

SUBSTANCE	CHEMICAL FORMULA	SUBSTANCE	CHEMICAL FORMULA
Antacid (more than 10%)	HCOOH	Lacquers/paints and adhesives (chemically hardening)	
Aminosulphonic acid (to 10%)	NH_2SO_3H	Methylene blue	$C_{16}H_{18}N_3ClS$
Aniline dyes		Millon´s reagent	OHg_2NH_2Cl
Inorganic acids (to 10%)		Sodium hydrosulphate	$NaHSO_4$
Arsenic acid (to 10%)	H_3AsO_4	Sodium hypochlorite	NaOCl
Boric acid	H_3BO_3	Sodium thiosulphate	$Na_2S_2O_3$
Iron (II) chloride solution	$FeCl_2$	Sodium hydroxide (more than 10%)	NaOH
Iron (III) chloride solution	$FeCl_3$	Nylanders reagent	
Esbachs reagent		Oxalic acid	COOH x COOH
Fuchsin solution	$C_{19}H_{19}N_3O$	Phosphoric acid (to 10%)	H_3PO_4
Hair dyes and bleaches		Picric acid	$C_6H_2OH(NO_2)_3$
Iodine solution	J	Mercury dichromate	$HgCr_2O_7$
Limescale remover		Nitric acid (to 10%)	HNO_3
Potassium hydroxide (more than 10%)	KOH	Hydrochloric acid (to 10%)	HCl
Potassium chromate	K_2CrO_4	Sulphuric acid (to 10%)	H_2SO_4
Potassium dichromate	$K_2Cr_2O_7$	Sulphurous acid (to 10%)	H_2SO_3
Potassium hydrogen sulphate	$KHSO_4$	Silver nitrate	$AgNO_3$
Potassium iodide	KJ	Mercury bichloride solution	$HgCl_2$
Potassium permanganate	$KMnO_4$	Hydrochloric peroxide (3-30% perhydrol)	H_2O_2
Methyl violet	$C_{24}H_{28}N_3Cl$		

The following chemicals are examples of substances that will destroy a Duropal-HPL surface and must be removed immediately. The surface will very quickly become dull and rough.

CHEMICAL; EACH IN CONCENTRATION OVER APPROX. 10%	CHEMICAL FORMULA	CHEMICAL; EACH IN CONCENTRATION OVER APPROX. 10%	CHEMICAL FORMULA
Aminosulphic acid	NH_2SO_3H	Phosphoric acid	H_3PO_4
Arsenic acid	H_3AsO_4	Hydrochloric acid	HCl
Chromic sulphuric acid	$K_2Cr_2O_7 + H_2SO_4$	Sulphuric acid	H_2SO_4
Hydrofluoric acid	HF	Hydrogen bromide	HBr
Nitrohydrochloric acid	$HNO_3 + HCl = 1 : 3$		

Frequent exposure to the following aggressive gases will cause changes to the Duropal-HPL surface.

CHEMICAL	CHEMICAL FORMULA	CHEMICAL	CHEMICAL FORMULA
Bromine	Br_2	Sulphur dioxide	SO_2
Chlorine	Cl_2	Acid vapours	
Nitrous gases	N_xO_y		