



MATERIAL SAFETY DATA SHEET

REFERENCE SD01

FORMICA LAMINATE

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Formica Standard Grade High Pressure Decorative Laminate
Formica Compact Grade High Pressure Decorative Laminate
Formica Flame Retardant Grade High Pressure Decorative Laminate
Formica Thin Continuous Grade High Pressure Decorative Laminate

APPLICATION: Formica laminate is a hard wearing decorative surfacing material which can be bonded to most substrates for the manufacture of furniture, walls, floors doors and worktops.
Formica laminates can be manufactured with two decorative surfaces for use as partition walls for cubicles and other applications.
Compact grade laminates can be used for external purposes.
Flame Retardant grade laminates are suitable for marine applications.

COMPANY IDENTIFICATION: Formica Limited
Coast Road, North Shields
Tyne & Wear NE29 8RE
United Kingdom

EMERGENCY CONTACT: Telephone (44) 0191 259 3000
Facsimile (44) 0191 258 2719

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2 COMPOSITION INFORMATION ON INGREDIENTS

Formica Standard, Compact and Flame Retardant laminates consist of sheets of paper impregnated with thermo hardening resins and bonded together under heat and pressure.
The chemical bonds formed by this process are irreversible producing a stable non-reactive product classified as non-hazardous.

Two types of resin are used, melamine formaldehyde and phenol formaldehyde resins which may be modified by the inclusion of additives to impart or enhance particular properties.

The laminate surface consists of either a melamine impregnated, printed or dyed paper which may have an extra top layer of cellulose papers to increase the laminates resistance to abrasion.
Special effects may require the inclusion of metal foils or woven cloths.

The core/filler papers are unbleached natural krafts.

RAW MATERIALS OF LAMINATE	CAS No	% (w/w)	
		0.7mm Thick Laminate	20.0mm Thick Laminate
Surface papers	-	9.9	0.36
Melamine formaldehyde resin	9003-08-1	9.9	0.36
Kraft papers	-	57.7	71.5
Phenol formaldehyde resin	9003-35-4	22.5	27.8
Ammonium Phosphate (FR ONLY)	7722-76-1	<0.1	<0.1

Melamine resins used in the impregnation processes typically contain <0.2%w/w formaldehyde. Phenol resins typically contain <1.0% w/w formaldehyde and <5.0% w/w phenol.

During the paper impregnation and laminating processes free formaldehyde and phenol are removed from the resin by the heat and pressure applied during these processes. The finished product will contain only trace amounts of free formaldehyde and phenol. The processed resin is stable and non-reactive.

3 HAZARDS IDENTIFICATION

Formica laminate is a stable non-reactive product classified as non-hazardous in accordance with Waste Acceptance Criteria testing.

Trace amounts of free formaldehyde

EC Risk Phrases of formaldehyde:

- R23/24/25 Toxic by inhalation, in contact with skin and if swallowed
- R34 Causes Burns
- R40 Limited evidence of a carcinogenic effect
- Carcinogen Category 3
- R43 May cause sensitization by skin contact

Trace amounts of free phenol

EC Risk Phrases of phenol:

- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed
- R23/24/25 Toxic by inhalation, in contact with skin and if swallowed
- R34 Causes Burns
- R48 Danger of serious damage to health by prolonged exposure
- R68 Possible risk of irreversible effects
- Mutagen Category 3

DUST produced during machining and cutting processes can be an irritant.

EC Risk Phrases of laminate DUST:

- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed
- R36/37/38 Irritating to eyes, to respiratory system and to skin

4 FIRST AID MEASURES

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|---------------|--|
| Eye contact: | Laminate chippings and dust may cause irritation or injury <ul style="list-style-type: none">➤ Wash eye with copious amounts of water➤ If irritation continues seek medical attention. |
| Skin contact: | Sharp edges of laminate may cause cuts and lacerations <ul style="list-style-type: none">➤ Clean and dress wounds Dust or small particles may cause irritation <ul style="list-style-type: none">➤ Wash affected areas with soap and water➤ If irritation continues seek medical attention. |
| Ingestion: | Dust is non-toxic but may cause irritation if ingested <ul style="list-style-type: none">➤ Drink water to relieve irritation. |
| Inhalation: | Avoid dust created during machining and cutting <ul style="list-style-type: none">➤ Wear face mask during these processes Avoid inhaling products of combustion <ul style="list-style-type: none">➤ Evacuate the area of the fire➤ Seek medical attention if overcome by fumes. |

5 FIRE FIGHTING MEASURES

- Specific hazards:** Laminates are combustible when ignited and will release carbon monoxide, carbon dioxide and other trace amounts of toxic gases.
Accumulations of dust will pose a risk of explosions.
- Extinguishing media:** Use water spray, carbon dioxide, foam or dry powder extinguishers to control fires involving laminate.
- Protective equipment:** Contact the Emergency Services for all serious fires.
When dealing with large fires wear self-contained positive pressure breathing apparatus and full fire fighting protective clothing.

6 ACCIDENTAL RELEASE MEASURES

- Spills of dust:** Clean up spills of dust immediately and dispose of appropriately.
Avoid inhalation and protect surface water drains from pollution.

7 HANDLING AND STORAGE

- Handling:** Wear heavy duty cut resistant gloves when handling laminate.
Protect eyes with safety glasses.
Ensure good ventilation and extraction systems to control dust levels when machining laminate.
Care should be taken in high winds as laminates have sharp razor edges which can cause injury when propelled by the wind.
- Storage:** Store laminates in a dry place away from sources of excessive heat.
Store laminates on flat surfaces such as wooden pallets and cover the top laminate to protect from accidental damage.
Stacked laminates are liable to slip and split if hit with any force.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Engineering controls:** In the workplace where laminates are machined and cut adequate exhaust ventilation should be provided to remove dust and fumes. Workplace exposure limits of inhalable dust are required to be below 10mg/Nm³ in accordance with COSHH Regulations 2002.
Ensure good housekeeping is practiced to prevent accumulations of fugitive emissions and spills of dust which can contribute to the risk of explosions.

Personal protection:



- Wear heavy duty cut resistant gloves when handling laminate
Protect eyes with safety glasses with side panels when machining laminate
Wear safety shoes to avoid cuts to the feet from sharp edges of laminate
If local exhaust ventilation and extraction is not adequate wear an approved respirator.

9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance:** Formica laminates are manufacture in sheet form ranging in size up to 3660x1525mm and from 0.5 to 20.0mm thick.
Formica laminates may have one or two decorative surfaces.
- Physical properties:** State Formica laminates are manufactured as solid state panels
Density 1.4g/cm³
- Chemical properties:** Solubility Formica laminates do not dissolve in water

10 CHEMICAL STABILITY AND REACTIVITY INFORMATION

Formica laminates are stable and nonreactive under normal conditions.

11 TOXICOLOGICAL INFORMATION

Formica laminates are physiologically safe and are safe for use in contact with foodstuffs.

DUST particles can cause irritation if inhaled and to the eyes and skin.

EC Risk Phrases of laminate DUST:

R20 Harmful by inhalation
R21 Harmful in contact with skin
R22 Harmful if swallowed
R36 Irritating to eyes
R37 Irritating to respiratory system
R38 Irritating to the skin

EC Safety Phrases of laminate DUST:

S20 When using do not eat or drink
S22 Do not breath dust
S24 Avoid contact with the skin
S25 Avoid contact with the eyes
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 After contact with the skin, wash immediately with plenty of soap suds
S39 Wear suitable eye protection

12 ECOLOGICAL INFORMATION

Formica laminates will not cause an adverse effect on the local ecology when disposed of and will not harm aquatic organisms.

Formica laminates will not decompose biologically.

Formica laminates disposed of illegally will cause a detrimental visual impact on the environment.

13 DISPOSAL CONSIDERATIONS

At the life end of products manufactured using Formica laminates consideration should be given to its reuse or recycle value.

Formica laminates can be safely disposed of via authorized waste contractors to landfill sites. Care should be taken in high winds as laminates have sharp razor edges which can cause injury when propelled by the wind.

EC Waste Code category is 20-03- other municipal wastes

14 TRANSPORTATION INFORMATION

Formica laminates are not subject to transport legislation.

Batches of Formica laminates should be securely strapped together to avoid slipping during transit which could cause damage to individual sheets of laminate.

Edge protectors should be used to protect the laminate edges from strapping damage.

15 REGULATORY INFORMATION

Formica laminates are not subject to any regulatory control that affects its use as a decorative surfacing material for furniture, walls, floors or doors.

16 OTHER INFORMATION

Formica laminates are manufactured under conditions controlled by management systems accredited to BS ISO 9000:2001 and BS ISO 14001.

A local authority permit to operate paper coating processes, NT28 has been issued by North Tyneside Council to conform to The Environment Protection Act 1990.

To the best of our knowledge the information contained in this MSDS is accurate. However Formica Limited, North Shields does not accept liability for any omission or inaccuracy it may contain.