

This information sheet describes the composition and the properties of Pral sheets and gives advice for their safely handling, processing, use and disposal.

1. Description / Composition

Pral is trade name for solid composite material basically composed of inorganic component (aluminium hydroxide) bonded with acrylic polymer (methylmethacrylate resin). Pral is supplied in sheet form in a variety of sizes, thicknesses and range of colours.

Crosslinked chemical bonds are formed during the curing process resulting in a non-reactive stable material with homogeneous structure and characteristics. Pral is highly resistant to impact and other mechanical damages, chemical and micro-organisms attacks. Its high strength, durability and compactness make Pral resistant to cracking, and being non-porous, it does not absorb water. Pral has high thermal resistance and it is self-extinguishing.

2. Storage and Transportation

Storage and transportation should be carried out in accordance with ABET LAMINATI general recommendations; no special precautions need to be taken. For storage and transportation, Pral sheets are classified as non-hazardous products.

3. Handling and Machining

Pral can be fabricated like wood with existing wood-working machinery. Fabrication should be carried out in accordance with ABET LAMINATI general recommendations. The usual safety requirements should be observed with regard to:

- dust extraction
- dust collection
- using of protective means for workers.

For gluing (jointing) together two Pral elements a two-component acrylic glue is applied. During gluing procedure, ABET LAMINATI instructions for glue application and Safety Data Sheet for Pral glue have to be respected.

4. Environmental and Health Aspects

Pral sheets are chemically inert materials. There is no migration affecting foodstuffs and the release of gases.

Pral sheets are approved for contact with foodstuffs.

Pral is extremely hygienic material and its use is extended to health dispensaries, hospitals, dental clinics, scientific laboratories and institutions, etc.

Pral solid surfaces are resistant to most of household chemicals (except strong organic solvents, such as acetone, and high concentrated acid and hydroxides) and therefore have been used for many years in applications where cleanness and hygiene are important.

The non-porous Pral surface is easy to clean and disinfect with hot water and other common disinfectants used in hospitals and other commercial applications.

5. Cleaning and Maintenance

As Pral is very resistant it does not suffer from corrosion and oxidation. Cleaning and maintenance is simple and easy. The hardest stains can be easily removed with water or common detergents. Abrasive cleaning agents are recommended when they have to restore the surface to fine, silky shine. With grinding and polishing the surfaces can be completely recovered.

6. Fire – Fighting measures

Pral mainly consists of aluminium hydroxide (mineral filler), which has fire retardant properties, therefore it is classified as self-extinguishing material. Thus it prolongs evacuating time in case of fire. In dealing with fire in which Pral sheets are involved, the same fire-fighting measures should be employed as with organic polymer materials.

Recommended extinguishing media: water spray, foam, dry powder or CO₂. Fire-fighting protective equipment, a self-contained breathing apparatus and suitable protective clothing should be worn in fire condition.

7. Waste Disposal and Recycling

Pral is environmentally completely inert material. Waste disposal of Pral should be carried out according to current national and / or regional regulations.

Thermal recycling with energy recovery is possible. When burned completely Pral produces water, carbondioxide and aluminiumoxide.

8. Typical Safety Precautions Technical Data

- Form	solid
- Odour	no odour
- Solubility in water	none
- Specific gravity	1710 - 1750 Kg/m ³
- Calorific value	10 - 12 MJ/Kg
- Flash point	non-ignitable
- Thermal decomposition	Above 240° C Toxic gases may be emitted upon the burning conditions (temperature, amount of oxygen, etc...)
- Hazardous reactions	none
- Health hazard data	none
- Heavy metals and other toxic compounds amount	none
- Reactivity	stable
- Protective equipment (means) during fabrication	gloves, anti-dust mask, ear plugs
- Protection against fire	none required
- Waste disposal method	standard for non-hazardous waste burning is allowed in approved industrial incinerators
- Toxic effects in use	none
- Dust protection limit during machining	dust below 5 mg/m ³
- Explosion limits	NA
- Action in case of fire	all common extinguishers are suitable

All above information are based on the current state of technical knowledge, but does not constitute any form of guarantee.

It is personal responsibility of users of the product described in this data sheet to comply with the appropriate laws and regulations.