Chromat: Technical datasheet

Chromat is polyester based decorative chips used in a variety of applications including the casting of solid surface products. The chips are made from NPG Isophthalic resin, a blend of Aluminum Trihydrate and pigments free from heavy metals. The mixture is then fully cured at temperatures above 160°C to provide a highly resilient and stable product.

These carefully chosen ingredients and the techniques in which they are processed, make Chromat a suitable decorative filler to produce kitchen worktops, wash basins and other surfaces where superior properties are required. Chromat is optimized for lower viscosity, better particle suspension, mold flow and air release. Chromat has been tested with the following materials with no lasting effect: -

Group 1:

The following chemicals can be left in contact with Chromat for prolonged periods (tested for a minimum of 16 hours) with no effect other than a possible slight surface mark which can be removed with detergent solution and scouring pad	
Acetic Acid	Acetone
Ethyl acetate	Formic acid (< 10%)
Petrol	Ammonia (35%)
Formaldehyde	Paraffin
Alcohol	Hydrochloric acid (<10%)
Benzene	Lactic acid
Bleach	Sulphuric acid (< 10%)
Uric acid	Citric acid
White spirit	Xylene
Phosphoric acid (< 10%)	Zinc sulphate

Group 2:

Prolonged contact with the following chemicals may produce a moderate to heavy stain which can, however, be removed with a scouring pad and abrasive cleaner, or with wet and dry sandpaper	
Formic acid (> 10%)	Phenol
Glacial acetic acid	Phosphoric acid (> 10%)
Hydrochloric acid (10%)	Silver nitrate
Hydrofluoric acid	Sulphuric acid (> 10%)
Iodine	Sodium acid (> 10%)
Mercurochrome	

Foodstuffs Legislation

Under the assumption of appropriate processing there are no objections against the use of Chromat for commodity goods in contact with food as defined by the German Health Authorities in the “Lebensmittel-und-Bedargsgegständegesetz” Section 5, part 1. Suitability for a specific application should in any case be confirmed by the manufacturer prior to use.

Characteristics of Chromat	Applications of Chromat
Stain resistant	Cast polymer products
Fire resistant	Compression moulded products (BMC, DMC)
UV Stabilised	Epoxy flooring
Suitable for food contact applications	

Property	Value/Unit	Test Method
Specific Gravity of Unfilled Resin	1.06g/ml	DIN53217
Specific Gravity of Chromat chips	1.8g/cc	DIN53217
Bulk density	1.05g/ml	DIN53217
Tensile Strength	50MPa	DIN5345
Impact Strength	25kj/m	DIN53453
Thermal Coefficient of Linear Expansion	9-10-5/K	DIN53752
Heat Distortion Temperature	190°C	DIN EN ISO 75
Hardness	72-77 Barcol	ASTM D2583
Elongation at Maximum Stress	4.4%	DIN53455
Elongation at Break	5.6%	DIN53455
Water Absorption at 23°C After 24 Hours After 4 days	 0.02% 0.07%	DIN53495

The information submitted in this data sheet is based on our current knowledge and experience. Due to the many factors that may affect processing and application, this data does not relieve producers from the responsibility of carrying out their own tests and experiments, neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply this product to ensure that proprietary rights and existing laws and legislation are observed.

Macie Industries Limited
6 Metnor Business Park
Hadrian Road
Wallsend
Tyne & Wear
NE28 6HH, United Kingdom

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Telephone: +44 (0) 845 002 0027
Facsimile: +44 (0) 845 111 6116
Web site : www.chromat.com
Email: info@chromat.com