

Zhuoan® IFR201-B

Intumescent flame retardant containing N-P cage macromolecule

PRODUCT DESCRIPTION A single component, borate and chlorine free, water borne intumescent coating designed for on-site application to structural steel, cable and, decorative material requiring protection from cellulosic fire.

Zhuoan® IFR201-A is a low VOC acrylic intumescent material independently fire tested in accordance with BS 476 parts 20-22.

MAINLY FEATURES

- Containing NP cage-type macromolecule;
- Uniform foam, good carbon layer strength;
- Short ball milling time, fineness customized;
- With single component, integrated with acid, carbon, gas source;
- With the same expansion factor, can greatly reduce the amount of flame retardant to reduce costs;
- Stable fire-proof performance;

INTENDED USES To provide up to two hours cellulosic fire protection on beams, columns and hollow sections exposed in interior and exterior environments, included but not limited in:

- Oil-based(solvent type) outdoor thin steel structure fire retardant coating;
 - Oil-based(solvent type) outdoor ultra-thin steel structure fire retardant coating;
 - Water-based thin steel structure fire retardant coating;
 - Water-based ultra-thin steel structure fire retardant coating;
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PRACTICAL INFORMATION

Brand	ZOAN	Classification	Chemical Auxiliary Agent	Model number	IFR201B
Purity	99.9%	Place of origin	Sichuan,China	Usage	Coating auxiliary agent,Electrical,PP,PE
Appearance	White powder	Features	Eco-friendly,low cost	Samples time	Free 3-5 days

REGULATORY DATA

No.	Inspection item	Technical requirements
1	moisture	<0.7
2	fineness	≥95%
3	bulk density	<11.0ml
4	nitrogen (N)	>16.0
5	phosphorus (P)	>11.0

COMPARASIONS: Comparing between IFR201B with Classic System

NO.	catalogue	classic system	IFR 101A
1	Material	three raw materials,such as,ammonium polyphosphate, pentaerythritol and melamine	A single component.So it can effectively save time and manpower.
2	Balling mill time	Because of three different fineness of raw materials,it needs 60-100 minutes to achieve uniform mixing.It is higher power consumption	About 400 mesh in all,which can greatly reduce the milling time (only needs 25-40 minutes), saving energy and reducing resource costs.
3	Adding amount	40-50%	26-35%
4	Product Performance	Many types materials,so it is not stable enough, and will migrate the durability.	Single component, high molecular weight, good compatibility with the substrate, good durability, excellent flame retardant effect, stable performance, which can ensure the fireproof performance is less affected by the flame retardant.
5	The product cost	The price is slightly lower, but the additive amount is large, so the cost of coating increased, more milling time , more power consumption.	Slight higher for price , but the amount far less, so the entire coating can be flat or lower; Milling time is short,energy savings is slight.

APPLICATIONS As an raw of material,it is added to painting industry by related ratio,such as,(steel structure, cable and,PP,PEO flame retardant coating ,decorative flame retardant coating.

REFERENCE Zhuoan® IFR201-Bintumescent flame retardant is a macromolecular compound with good stability, good compatibility with organic emulsion, insoluble in oi, difficult to precipitate

and good water resistance. Often with the polyvinyl acetate emulsion, water-based acrylic emulsion, silicon-acrylic emulsion, polyvinylidene chloride emulsion with the use of emulsion. The reference formula as follows:

Raw material name	Quality Score%	Raw material name	Quality Score%
Water	27.0	Titanium Dioxide	5.0
70 chlorinated	5.0	wollastonite	4.5
Polyvinyl acetate emulsion	18.0	Sodium hexametaphosphate	0.3
IFR201-B expansion Flame Retardant	40.0	Sodium carboxymethyl cellulose	0.2

The formula foaming up to 10-15 times, has good water resistance and weather ability. Fire retardant paint manufacturers according to the actual expansion ratio requirements increase or decrease the amount of flame retardant added.

SYSTEMS 列出可以兼容的油漆涂料的牌号等信息

COMPATIBILITY

SAFETY This product is intended for use only by professional applicators in industrial situations in

PRECAUTIONS accordance with the advice given on this sheet, the Material Safety Data Sheet and the

container(s), and should not be used without reference to the Material Safety Data Sheet(MSDS) which International Protective Coatings has provided to its customers.

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety&Environmental standards and regulations.

In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation.

If in doubt regarding the suitability of use of this product, consult International Protective Coatings for further advice.

PACKAGE& woven PE bag,

SHIPPING 25kg / bag,
18bags/pallet,

STORAGE 12 months minimum at 25°C(77°F). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

