

EXOLIT IFR 36

Edition 2014-06-25

Ammonium Polyphosphate

Chem. Group: Ammonium Polyphosphate **Supply Form:** white, free-flowing powder **CAS-No.:**

Product-No.: 155901 **Chemical Formula:**

PRODUCT DESCRIPTION

Exolit IFR 36 is a non-halogenated flame retardant based on ammonium polyphosphate, which develops its effectiveness through phosphorus/nitrogen synergism. Exolit IFR 36 differs in its mode of action from chlorine- or bromine-containing flame retardants by achieving its effect through intumescence. The flame retarded material foams on exposure to flame. The carbon foam layer so formed protects the polymer through its heatinsulating effect and reduces further oxygen access.

DELIVERY SPECIFICATION AND TECHNICAL DATA

CHARACTERISTICS	UNIT	TARGET VALUE	DS ¹⁾	TD ²⁾	TEST METHOD
Phosphorus	% (w/w)	approx. 20	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Nitrogen	% (w/w)	approx. 15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Density	g/cm ³	approx. 1.8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Solubility in Water	% (w/w)	< 10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	at 25 °C in 10 % aqueous suspension
Decomposition Temperature	°C	> 230	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Average Particle Size (D50)	µm	approx. 12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Particle Size Distribution	% (w/w)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	< 275 µm	> 98.5			
	-	-			
	-	-			
	-	-			
Weight Loss			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	1% (w/w)	> 230			
	5% (w/w)	approx. 298			
	10% (w/w)	approx. 334			
	50% (w/w)	approx. 580			

¹⁾ Delivery specification: The product is constantly monitored to ensure that it adheres to the specified values.

³) Technical data: The technical data are used solely to describe the product and are not subject to regular monitoring.

APPLICATIONS

Exolit IFR 36 may be used in a range of thermosets, especially epoxy resins. It is suitable both for coating and reinforced materials. In composites Exolit IFR 36 may be used alone or in combination with aluminium trihydrate (ATH).

SAFETY AND HANDLING

For regulatory details such as the classification and labelling as dangerous substances or goods please refer to our corresponding material safety data sheet.

DISPATCH AND STORAGE

PACKAGING

GGVE/RID

GGVS/ADR

ADNR

IMDG-Code

UN Number

IATA-DGR

see Material Safety Data Sheet

Exolit IFR 36 is supplied in PE bags with 20 kg net weight.
The bags are delivered on pallets with 800 kg net weight.

For all specifications, deliveries and services the following applies:

[Contact Flame Retardants](#)

Clariant Web Site: <http://www.clariant.com>

[Contact Us](#)

Clariant Additives Web Site: <http://additives.clariant.com>