PYROTEK FUSAL 1956 FUSED REFINING AGENT

INJECTION-GRADE TREATMENT SALT FOR ALUMINIUM FOUNDRIES

Pyrotek Fusal 1956 Fused Refining Agent is a eutectic salt composed of anhydrous magnesium chloride ($MgCl_2$) and sodium chloride (NaCl).

This product removes alkali metals (sodium, calcium and lithium) and nonmetallic inclusions (such as oxides, borides and carbides) from liquid aluminium and aluminium alloys. Pyrotek Fusal 1956 Fused Refining Agent also improves extrusion speed, die life, edge quality and continuous casting efficiency.

Pyrotek Fusal 1956 Fused Refining Agent can reduce sodium levels during treatment to less than one part per million, even in high-magnesium aluminium alloys. This product also enhances degassing, reduces non-metallic inclusions, cleans furnaces and reduces wall buildup.

BENEFITS

- Replaces chlorine gas injection for in-line and furnace metal treatment systems
- Nominal injection grain sizes
- Fluoride free and non-hazardous
- Low melting point for rapid dispersion
- Less hygroscopic than magnesium chloride powders
- Low application rates
- Reduces dross buildup on furnaces, launders and tools

AVAILABILITY

- Standard 5 kg (11 lb) polyethylene bags
- 1000 kg (2205 lb) per pallet
- Other bag sizes are available upon request

STORAGE

- Pyrotek Fusal 1956 should be stored in a cool, dry place away from any moisture
- Packaging should be kept in good condition without tears, rips, or other mechanical damage
- Pyrotek Fusal 1956 should be inspected before use to ensure there are no signs of moisture, which can include clumping or sticking together of Pyrotek Fusal 1956 inside the bag or a wet/mushy appearance
- Even with proper storage, it is recommended that Pyrotek Fusal 1956 is used within 2 years of its production date
- If there is any doubt about the condition of Pyrotek Fusal 1956, please contact a Pyrotek sales engineer for instructions on how to properly inspect the product before use

Note: Pyrotek holds no liability for products used without proper inspection.

PHYSICAL PROPERTIES

Property	Value
Appearance	White and light grey granules
Grain Size–mm (in)*	0.85–3.00 (0.03–0.12)
Chemical Composition	$NaMgCl_3$, Na_2MgCl_4
Magnesium Chrloride ($MgCl_2$)	Minimum 55%
Potassium Chrloride (KCl)	0%
Sodium Chloride (NaCl)	Maximum 45%
Magnesium Oxide (MgO)	Maximum 1.0%
Moisture Content	Maximum 1.0%
Melting Temperature	439°C (822°F)
*Maximum 2% retained in 0.85 mm (0.03 in) sieve, maximum 1% retained in 2.8 mm (0.11 in) sieve	

USE INSTRUCTIONS

The exact addition requirements per application depend on the initial and targeted levels of inclusions, hydrogen, sodium, lithium and calcium. Specific application rates and techniques are on a case-by-case basis.

It is recommended to add between 0.25 and 1.00 kilograms of Pyrotek Fusal 1956 per tonne (0.50 to 2.00 pounds per ton) of metal.

Using SNIF PHD-50, HD-2000 rotor injectors or circulation pumps to add or stir the agent into molten aluminium provides the highest refining efficiency. Pyrotek FIM 5, FIM-S5 or FIM-G5 lance injectors are the next most efficient group, and bag addition has the lowest efficiency.

HEALTH AND SAFETY

Prior to use, refer to the product safety datasheet for proper handling and required personal protective equipment.

WARNING: Pyrotek Fusal 1956 Fused Refining Agent is hygroscopic! Never leave this product in an open bag or in an injection machine hopper for an extended time. Explosions can result from absorbed moisture.

PATENT

www.pyrotek.com/patents

Note: The physical and chemical properties listed represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice.

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