FerroPhos C

Informazioni Tecniche

Calcium Hypophosphite
Halogen Free Flame retardant

CHARACTERISTICS:

Chemical family	Inorganic phosphorus based compound
CAS Number	7789 – 79 – 9
Molecular Weight	170
Appearance	White cristalline powder
Acidity	NMT 0.5 ml OF 0.1N NaOH
Insoluble	0.1%
Sodium	Max 500 PPM
P Content (%)	35-36
Specific Gravity	1.7 g/cc to 2.0g/cc
Solubility	1gm in 10ml water
Assay (%)	Min 98%
Moisture	Max 0.2% (1hr at 105 C°)
Granulometry	D 50%: 20um D90%: 50um
Thermal Gravimetric Analysis under N2	350 °C to 380 °C

FerroPhos C: tox and ecotox information

Acute oral toxicity (rat, mg/ Kg b. w.)	> 2000
Acute dermal irritation (rabbit)	Not irritating
Eye irritation	irritating
Ames test	Not mutagenic
Toxicity on Daphnia Magna (EC50%; 48 h ;) (mg/lt)	> 100
Flammability	Highly flammable
Transportation regulation (RID/ADR)	UN 3180; Class:4.1
Status	Reported in TSCA and EINECS

Material Safety Data Sheet

Material Safety Data Sheet in 16 points according to EC 1907/2006 is available upon request.

Handling / Safety / Patent Information

1. The product, although being a flame retardant, is highly flammable during processing. In case of fire during the handling of FerroPhos C, the ideal extinguishing media is water than Co2.

2. FerroPhos C has the richest source Phosphorous hence it is combustible in case of friction or impact or static charge.

3. The agglomeration formed in the drum is a typical property of Phosphinates and due to the fact the large commercial shipment are packed in special UN approved bags with nitrogen blanked to keep material free flowing during the self-life. However these agglomerates formed are soft ones and will break off into powder by hand using adequate personal protection gear as mentioned in MSDS.

4. Important information from our supplier: some customers are using FerroPhos C with different ingredients such as melamine, pigments, process aids, etc.. mixed gently with the 0.5% of wetting agents, such as mineral oils or BBSA or silicone oil, creating a fine coating. To this mixture is then added the 0.5% of Calcium stearate to ensure fine lubrication of the extruder during processing and to avoid stress in the cold stage extruder and avoid creation of dust in the production area too.

5. Introducing FerroPhos C material alone would be risky and should be avoided for safety. Also while processing FerroPhos C ensure to avoid any static electrical charge to the material.

6. Our supplier advices that the transformers and/or final users should check whether there are any patent impediment concerning the use of this product in their application/formulation.