

'abil-meld' SPECIFICATION. Page 1 of 2

REFER TO 'abil-meld' PRODUCT DATA FOR FURTHER INFORMATION

abil-meld POWDER

AN EFFECTIVE, SAFE-TO-USE MULTI-PURPOSE DISPERSING AGENT, GLOSS ENHANCER, RHEOLOGY MODIFIER, AND EMULSIFIER FOR VIRTUALLY UNIVERSAL USE IN THE MANUFACTURE OF FINE COMPOSITE MATERIALS.

DESCRIPTION:

'abil-meld' is an efficient dispersant for essentially universal industrial application. It helps to achieve perfect dispersion of ultra-fine particulates in liquids such as is required in the manufacture of paint, printing inks, artists' colours, cosmetics, adhesives, other composite products/materials and processed foods. The product is suitable for use in both water based (aqueous) and solvent based (non-aqueous) formulae. 'abil-meld' is therefore also an efficient emulsifier for emulsifying liquids that don't dissolve in other liquids.

'abil-meld' is an oil free, light tan/yellow lecithin based hygroscopic dissolvable powder to which nano particle amorphous silicon dioxide has been added, in very small amounts to promote the powder's flowability and prevent it 'caking'.

'abil-meld' powder's fine coated granules represent a highly concentrated form of phospholipids – one of the most efficient types of materials for de-agglomerating ultrafine particulate materials in liquids.

During the manufacture of paint 'abil-meld' powder assists with the achievement of ultrafine solid particle de-agglomeration. This applies to both the colouring and extender pigments in the binding liquids in a given mixing time/mixer type to effect their perfect de-agglomeration/dispersion. If this is achieved to the degree that each tiny particle is separated from the others and is surrounded by the liquid, the true colour and its intensity intended to be given by the colouring pigment and perfect performance of any extender or filler mineral particles present will be achieved.

In a similar way 'abil-meld' also assists the full degree of gloss development in high gloss paints and inks and other glossy matrix bound composite materials manufactured at a temperature below 100°C.

'abil-meld' contains primary phospholipids such as phosphatidylcholine (23% typical), phosphatidylethanolamine (20% typical), and phosphatidylinositol (14% typical) plus other phospholipids. Other lipids and carbohydrates (38% typical) and natural lipids (Triglycerides, Tocopherols, Sterols - 3.5% typical) are also contained in 'abil-meld'.

SPECIFICATION AND TYPICAL PROPERTIES:

| | |
|-------------------------|-------------------------------|
| Form: | Powder |
| Colour: | Light tan/yellow ochre shade. |
| Acid Value: | 36 Maximum. |
| Acetone Insolubles (%): | 95% Minimum. |
| Moisture (%): | 1.5% Maximum. |
| Physical State: | Free flowing powder. |
| Hexane Insolubles (%): | 0.3% Maximum. |

Relative Fatty Acid Composition:

| | |
|----------------|-----|
| Palmitic (%): | 20% |
| Stearic (%): | 4% |
| Oleic (%): | 10% |
| Linoleic (%): | 59% |
| Linolenic (%): | 7% |

SAFE-TO-USE STATUS IN FOODS:

'abil-meld' is generally regarded as safe (GRAS) as a multiple purpose food substance under 21 CFR 184.1400 and is Kosher approved.

PACKAGING:

'abil-meld' is packed in 25kg net multi-ply, kraft paper bags, or cardboard cartons.

STORAGE AND HANDLING:

Due to its hygroscopic nature, the recommended storage of 'abil-meld' should be in DRY areas with **low** humidity at preferably a constant temperature of approximately 20°C to 23°C.

Opened inner plastic sacks/bags should be rolled down and tape sealed to dispel air and to keep them airtight.

The shelf life of 'abil-meld' is typically six (6) months in unopened bags stored under these stated conditions.

Refer to 'abil-meld' COMPREHENSIVE TECHNICAL DATA for further information, which will be forwarded to you with a free, no charge, sample of the product upon request.

ENDS