Hyonic® PFM-15

Zero VOC Foaming Agent for Gypsum Wallboard

Hyonic® PFM-15	Product Bulletin

Hyonic® PFM-15 anionic surfactant functions as a powerful, cost effective foaming agent for gypsum wallboard manufacture. It has efficient wetting and emulsifying properties and works effectively in cold and hard water as well as being fully biodegradable and free of Volatile Organic Compounds.

When employed with our Diloflo® GS-30/GS-20 or Diloflo® CA-30 water reducers, Hyonic® PFM-15 gives a unique bubble structure in gypsum wallboard through synergistic interaction. This allows significant savings through kiln efficiencies and lower board weights while increasing nail pull strength.

340 Mathers Road
Ambler, PA 19002-3420
USA
Tel: +1 215 773 9280
Toll Free 888 519 3883
Fax:+1 215 773 9424

Please send email enquiries to:
scsales@geosc.com

Website: www.geosc.com

Technical Data	Typical Properties
Appearance	Clear, pale yellow liquid
Density, lb/gal	8.75
kg/m^3	1,069
Activity, %	30 - 34
pH 10% soln	8 - 10
Na_2SO_4 dry basis, %	1 max
Freeze Point, °C / °F	0 / 32
Cloud Point, °C / °F	13 / 55

Viscosity Profile

Temperature		Viscosity, cps
°C	°F	
2	35	120
4	40	110
7	45	90
9	48	75
10	50	60
15	59	25
20	68	23
25	77	22
30	86	20
Kraft Point:	8	46

Hyonic PFM-15 Temperature Viscosity Profile
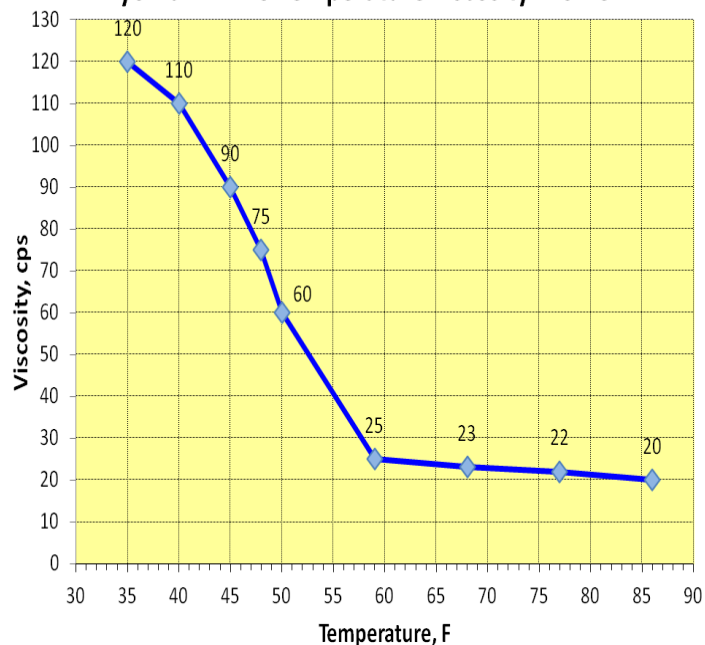
Foam Height Decay vs. Temperature

40° F   50° F   60° F   70° F   80° F   90° F   100° F
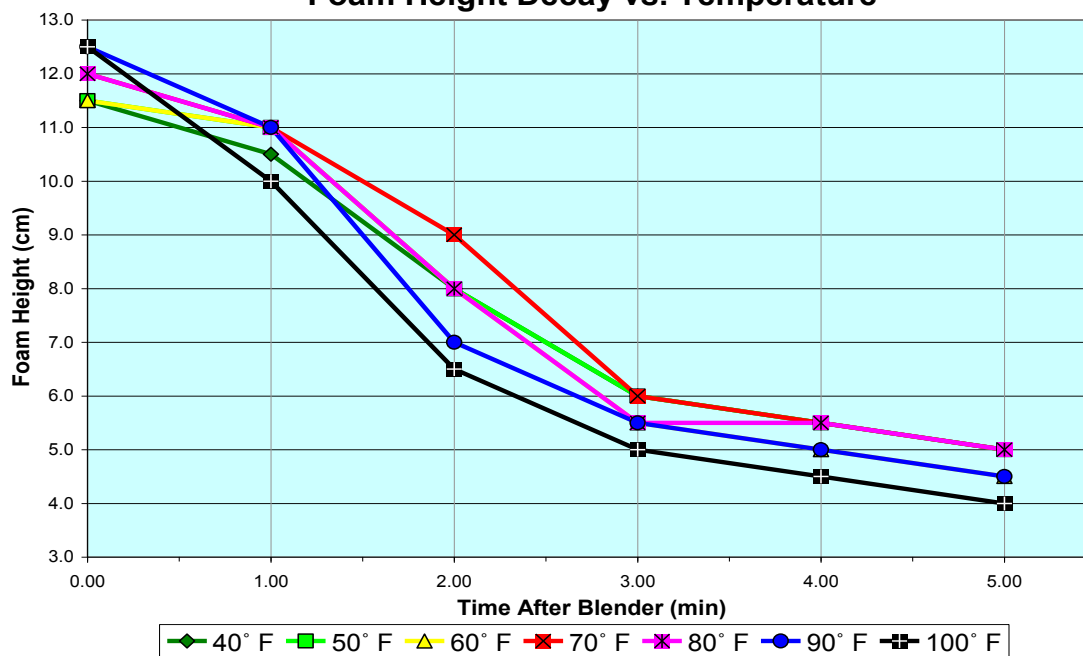
This information is true and accurate to the best of our knowledge, but without any guarantee unless explicitly given. Typical properties should not be construed as specifications. Since the conditions of use are beyond our control we disclaim any liability, including for patent infringement, resulting from the use of these product, data or suggestions.

GEO®
SPECIALTY CHEMICALS

August 15, 2013

Dosage & Application

Each board plant has its own unique set of conditions that differentiate it from all others. Foaming agent usage can vary over a wide range of application, from 0.3 – 1.5 lb/MSF (1.5 – 7.3 g/m^2).

Our technical service and sales personnel are available upon request to assist you in the use of **Hyonic® PFM-15** in your particular application.

Packaging, Storage & Handling

Hyonic® PFM-15 is shipped in bulk, 275 gal (1040 L) returnable totes or 55 gallon (200 L) plastic drums.

Protect **Hyonic® PFM-15** from freezing in storage and transit. Product may congeal or stratify if cold. Maintain storage at 10°C (50°F) minimum. If congealed, allow to warm to 50°C (122°F) and mix well to restore clarity before using. If it is kept above 50°F there should not be any issues, and viscosity will not be high and no agitation should be required.

If using a heating element, agitation or circulation by a pump will be needed to prevent localized heating.

Store in closed containers above 7°C / 45°F. **Hyonic® PFM-15** is considered a non-flammable liquid for storage and transportation purposes. It contains no flammable agents. Shelf life is >6 months, although it is recommended that inventories be managed to consume it within 6 months.

The recommended material of construction for storage tanks, piping, pumps, wetted parts is 316 or 316L stainless steel, FRP or Polypropylene. Compatible elastomers are Buna N, Viton®, and Teflon® for seals and gaskets.

This product should be transferred and unloaded using a pump. Care should be taken to avoid free fall of product. Using air pressure to unload or transfer this product is not recommended because of its tendency to foam.

Additional handling information is contained in a Material Safety Data Sheet, which is available upon request. **Hyonic® PFM-15** is classified for freight as: Cleaning, Scouring or Washing Compounds, NOI, Liquid.

GEO®
SPECIALTY CHEMICALS

August 15, 2013