

# DATA SHEET NYACOL NYAGRAPH 251

### NYACOL® NYAGRAPH 251

## Expandable Graphite Flame Retardant

Nyacol NYAGRAPH 251 is an intumescent flame retardant that offers the following advantages:

- · Halogen-free
- · Low smoke
- · Non-dripping
- · Reduced heat release
- · Lower in toxic gases
- Insulating

NYAGRAPH 251 is a natural material based on processed graphite ore.

The ore is treated with sulfuric acid in what is called an intercalation process.

The material is washed and neutralized to prevent corrosion of metal parts when processed by the user.

Excessive shear should be avoided.

NYAGRAPH 251 may be used in polyurethanes, sealants, bitumens, rubbers, adhesives, coatings, and polymers.

NYAGRAPH 251 may also be used in conjunction with other flame retardants to provide improved flame-retardant and smoke-suppressant properties to a material.

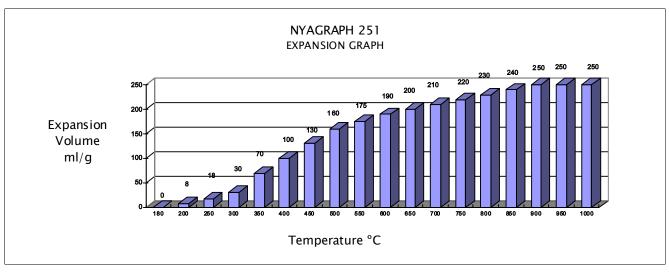
#### TYPICAL PROPERTIES

Particle Size, mm Min. 80 >0.03 Appearance: Soft black particles

pH: 6 - 8 Onset Temperature, °C:  $180 \pm 10$ Expansion Volume, ml/g: Min. 250 Moisture, %: Max. 1.0 Purity, %: Min. 99 14 - 18 Volatile, % Bulk Density, g/cm3: 0.45 - 0.65Free Acid, mg/g NaOH: Max. 0.5 Max. 1.0 Ash Content, %

#### TYPICAL PARTICLE SIZE DISTRIBUTION, %

Over 710 μm 1 – 5 710 μm – 300 μm 79 – 85 300 μm – 150 μm 9 – 15 Below 150 μm 1 – 5



#### FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER

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