

## NYACOL® NYAGRAPH 249C

### Expandable Graphite Flame Retardant

Nyacol NYAGRAPH 249C 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 249C 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 249C may be used in polyurethanes, sealants, bitumens, rubbers, adhesives, coatings, and polymers.

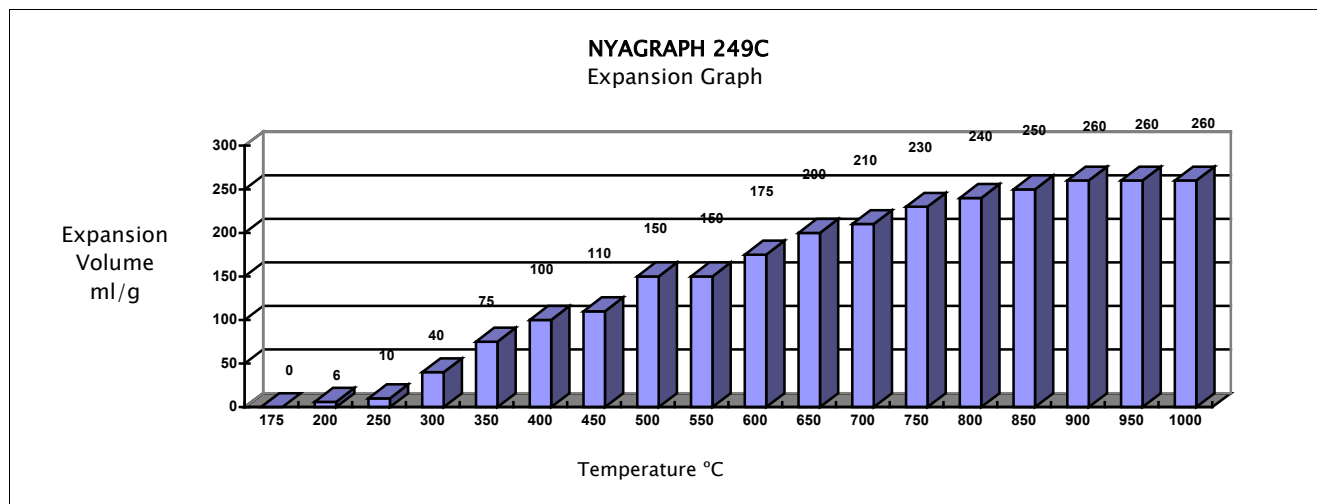
NYAGRAPH 249C may also be used in conjunction with other flame retardants to provide improved flame-retardant and smoke-suppressant properties to a material.

#### TYPICAL PROPERTIES

Particle Size, mm:	Min. 80 >0.03
Appearance:	Soft black particles
pH:	6 – 8
Onset Temperature, °C:	170 ± 10
Expansion Volume, ml/g:	Min. 250
Moisture, %:	Max. 1.0
Purity, %:	Min. 92
Specific Gravity, g/cm <sup>3</sup> :	2.1 – 2.3
Bulk Density, g/cm <sup>3</sup> :	0.4 – 0.6
Ash Content, %:	Max. 8.0
Volatile, %:	12 – 15

#### TYPICAL PARTICLE SIZE DISTRIBUTION, %

Over 840 µm	< 1.0
840 µm – 710 µm	1 – 3
710 µm – 500 µm	12 – 15
500 µm – 300 µm	66 – 73
300 µm – 180 µm	6 – 12
180 µm – 150 µm	1 – 5
< 150 µm	1 – 3



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

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