

NYACOL® NYAGRAPH 20

Expandable Graphite Flame Retardant

Nyacol NYAGRAPH 20 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 20 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 20 may be used in polyurethanes, sealants, bitumens, rubbers, adhesives, coatings, and polymers.

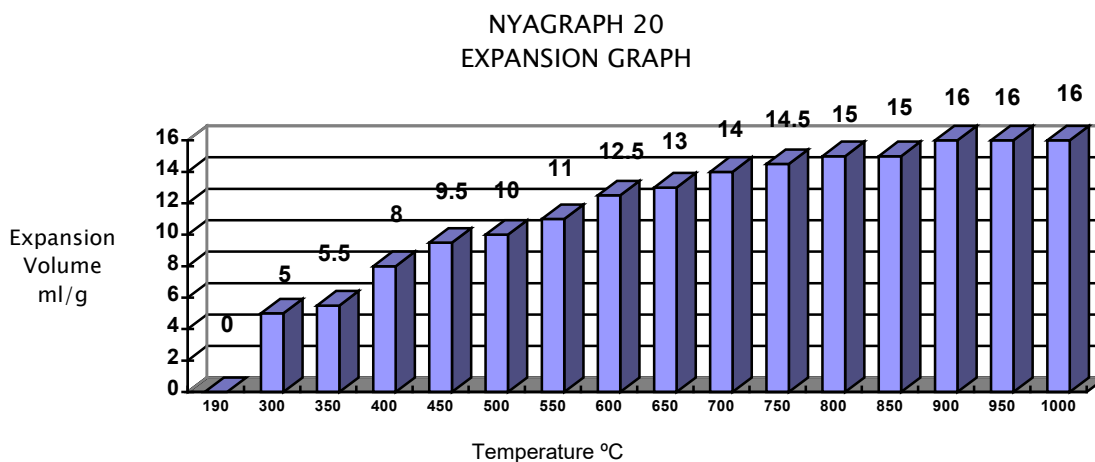
NYAGRAPH 20 may also be used in conjunction with other flame retardants to provide improved flame-retardant and smoke-suppressant properties to a material.

TYPICAL PROPERTIES

Particle Size, % 200 mesh:	Min. 80
Appearance:	Soft black particles
pH:	6 – 8
Onset Temperature, °C:	180 – 200
Expansion Volume, cm ³ /g:	≥ 16
Moisture, %:	0.2 – 1.0
Purity, %:	≥ 94.0
Specific Gravity, g/cm ³ :	1.9 – 2.1
Bulk Density, g/cm ³ :	0.45 – 0.55
Free Acid, mg/g NaOH:	Max. 0.5

TYPICAL PARTICLE SIZE DISTRIBUTION, PERCENT

Over 180µm	0
180µm – 150µm	2
150µm – 75µm	8 – 15
75µm – 45µm	30
<45µm –	33 – 60



FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER

Nyacol Nano Technologies, Inc.
 Megunko Road ~ P.O. Box 349
 Ashland MA 01721-0349 U.S.A.

Telephone: 508-881-2220 Local Area
 800-438-7657 Toll-Free
 Fax: 508-881-1855

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 P.O. Box 349, Ashland, MA 01721-0349 USA Tel.: 508-881-2220