

# Expandable Graphite SYZR Series

ADT Expandable Graphite flame retardant additives can be formulated to provide a flame retarded system with following advantages:

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

ADT Expandable Graphite is a material based on natural 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.

ADT Expandable Graphite additives may be used in polyurethanes, sealants, coatings, and polymers.

ADT Expandable Graphite additives may also be used in conjunction with other flame retardant additives to provide improved flame retardant Properties to a material.

## TYPICAL PROPERTIES

BULK DENSITY: 0.45-0.65g/cm<sup>3</sup>

PH: 5~8

WATER SOLUBILITY: <0.1%

SPECIFIC GRAVITY: 2.2—2.3 g/cm<sup>3</sup>

FREE WATER: <1%

COLOR: Black with metallic sheen

PARTICLE SIZE: +50— 325 mesh

FREE ACID: 0.8 mg/g NaOH

IMPURITY: Trace of silica and/or mica

## PRODUCT SELECTION

Type	Mesh	Purity %	Expansion Temperature ±10 °C	Expansion Volume ml/g	DESCRIPTION
SYZR 501	+50	≥99	150	≥230	Low SET , Super-low sulfur
SYZR 501H	+50	≥99	150	≥280	Super-low sulfur, High exp.volume
SYZR 801	+80	≥99	150	≥200	Low SET, Super-low sulfur
SYZR 502	+50	≥92	180	≥250	Used in fire retardant circle
SYZR 502S	+50	≥92	180	≥170	Contain little metal ion
SYZR 502FP	+50	≥92	180	≥230	For PU foam
SYZR502H	+50	≥98	170	≥350	High expansion volume
SYZR502P	+50	≥99	180	≥250	High purity and soft impurity
SYZR502V	+50	≥92	180	≥250	High expansion at low temperature section
SYZR 802	+80	≥92	180	≥230	Used in standard application
SYZR 802B	+80	≥90	180	≥230	Used in finer fire retardant products
SYZR 802FP	+80	≥92	180	≥230	For PU foam
SYZR 503	+50	≥92	300	≥170	High SET
SYZR 803	+80	≥92	300	≥80	High SET
SYZR 503L	+50	≥92	250	≥180	SET:250°C
SYZR 1002	+100	≥92	180	≥150	Used in fire retardant coating
SYZR 1002N	-100	≥92	180	≥35	Super-finer particle size
SYZR 2002N	-200	≥92	190	≥20	Fine particle size
SYZR 3252	325	≥92	190	≥15	Finest particle size, with 75% below 325mesh
SYZR 1003	+100	≥92	300	≥70	High SET
SYZR803L	+80	≥92	250	≥90	SET at 250°C, with Mesh
SYZR 350	+50	≥93	170	≥350	Mid carbon, high expansion volume

More Information

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