



Southern Clay Products, Inc.  
1212 Church Street  
Gonzales, TX 78629  
Phone: 800-324-2891  
Fax: 830-672-1903  
www.scprod.com

**Cloisite® 93A****Typical Physical Properties Bulletin****Description:**

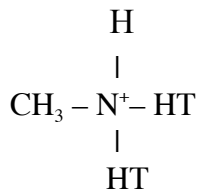
Cloisite® 93A is a natural montmorillonite modified with a quaternary ammonium salt.

**Designed Used:**

Cloisite® 93A is an additive for plastics to improve various plastic physical properties, such as reinforcement, HDT, CLTE and barrier.

**Typical Properties:**

<u>Treatment/Properties:</u>	Organic Modifier (1)	Modifier Concentration	% Moisture	% Weight Loss on Ignition
Cloisite® 93A	M2HT	90 meq/100g clay	< 2%	37.5%



Where HT is Hydrogenated Tallow (~65% C18; ~30% C16; ~5% C14)

**Anion: HSO<sub>4</sub>**

(1) M2HT: methyl, dehydrogenated tallow ammonium

Typical Dry Particle Sizes: (microns, by volume)

10% less than:	50% less than:	90% less than:
2µm	6µm	13µm

Color: Off White

Density:

Loose Bulk, lbs/ft <sup>3</sup>	Packed Bulk, lbs/ft <sup>3</sup>	Density, g/cc
10.56	18.03	1.88

X Ray Results:  $d_{001} = 23.6 \text{ \AA}$

For additional information or technical assistance contact Southern Clay Products, Inc. toll free at 800-324-2891.

Disclaimer of Warranty: The information presented herein is believed to be accurate but is not to be taken as a warranty, guarantee, or representation for which we assume legal responsibility. This information does not grant permission, license, or any rights or recommendations to practice any form of proprietary intellectual property without obtaining the appropriate license or grant from the property owner. The information is offered solely for your consideration, investigation and verification, but you must determine the suitability of the product for your specific application. The purchaser assumes all risk of use of handling the material, including but not limited to transferring the material within purchaser's facilities, using the material in applications specified by the purchaser and handling any product which includes the material, whether or not in accordance with any statements made herein.