

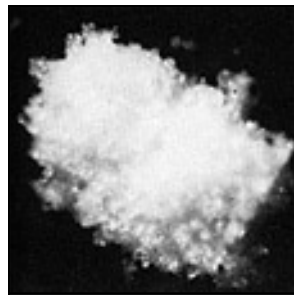


MICROCRYSTALLINE ARKANSAS NOVACULITE
 PO Box 1238, HOT SPRINGS, AR 71902-1238 USA
 501-623-8893 / FAX 501-623-5113

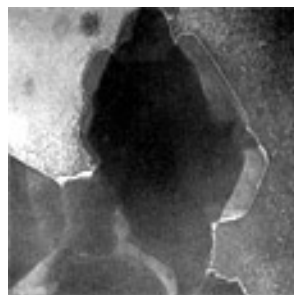
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200 Novacite®

Properties	(Typical)	
Specific Gravity		2.65
Index of Refraction		1.550
Color (Dry)		White
Color (Wet)		Gray-Tan
Oil Adsorption (Spatula)	Rub Out Method	17-20%
Particle Shape	1-7 microns	Platey
Particle Shape	Over 7 microns	Clusters
pH		6.0-7.8
Acid Number		0(-0-18)
Thermal Stability (in its phase)	Absolute Zero to 573° C	
Specific Heat (Mean between 0-200° C)		.192 Cal/g/C°
Surface Modification		Very Receptive
Hardness		7 Mohs Scale
Moisture (Finished Product) 110° C 3 Hours		0.0%
Loss on Ignition (Typical) 1000° C 30 Mins		0.20%
Loose Packed		50 lbs/Ft ³
Dense Packed		80 lbs/Ft ³



Cluster 70X



Platelets

Micro Diame-ter	U.S. Series Number	Percent Finer Than*	Fineness of Dispersion
74μ	200	98	
44μ	325	64-80	
10μ	1250	20	
Average Particle Size (Range) Fisher 11μ to 19μ			
*These values are averages			

General Information

200 Novacite® is a product not considered to be very fine in particle size. Normally, 200 Novacite® would be preferred where more grittiness, more abrasivity, and lower binder demand are desirable. Can be packaged in 50# cartons, 50# bags or 2,500# bulk bags.

Chemical Analysis	(Typical)
SiO ₂	99.49%
Fe ₂ O ₃	.039%
Al ₂ O ₃	.102%
TiO ₂	.015%
CaO	.014%
MgO	.021%

Typical Applications

- Casting resins
- Potting compounds
- Coarser textured coatings
- Chemicals
- Fluid loss additives (Oil wells)
- Abrasive medium (Wet blasting)
- Ceramics

Novacite® is a naturally occurring product. The chart above indicates typical particle size distributions. Generally the top size can be controlled through classification machinery; however, sub-sieve distribution and relation above are impossible to predict with accuracy. The nature of fineness or coarseness varies with the character of the crude ore.

Information contained herein is intended only for evaluation by technically skilled persons, and is to be used by such persons at their own risk. Such information is believed to be reliable, but Malvern Minerals Co assumes no responsibility for results obtained or damages resulting from such use. Typical properties and chemical analyses are intended as examples and are not to be considered as substitutes for actual analyses in those situations where properties and chemical compositions are critical factors. Sales of Malvern Minerals Co products shall be independent and subject exclusively to the terms and conditions set forth in Malvern's order acknowledgement.

Other Novacite® grades include: 325, 1250, Daper, L-207A, L-337, and 5μ Novacite®.

Other services include: Toll Treatment, Toll Grinding, and Toll Blending. Please visit us at our website: www.malvernminerals.com



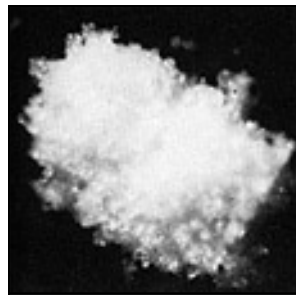
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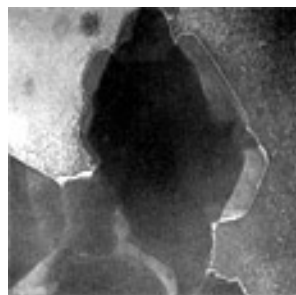
Data Sheet

325 Novacite®

Properties	(Typical)	
Specific Gravity		2.65
Index of Refraction		1.550
Color (Dry)		White
Color (Wet)		Gray-Tan
Oil Adsorption (Spatula)	Rub Out Method	17-20%
Particle Shape	1-7 microns	Platey
Particle Shape	Over 7 microns	Clusters
pH		6.0-7.8
Acid Number		0(-0-18)
Thermal Stability (in its phase)	Absolute Zero to 573° C	
Specific Heat (Mean between 0-200° C)		.192 Cal/g/C°
Surface Modification		Very Receptive
Hardness		7 Mohs Scale
Moisture (Finished Product) 110° C 3 Hours		0.0%
Loss on Ignition (Typical) 1000° C 30 Mins		0.20%
Loose Packed		50 lbs/Ft ³
Dense Packed		80 lbs/Ft ³



Cluster 70X



Platelets

Micro Diameter	U.S. Series Number	Percent Finer Than*	Fineness of Dispersion
74μ	200	99	Hegman Grind 0-2
53μ	270	98	
44μ	325	93-98	
10μ	1250	36	
Average Particle Size (Range) Fisher 7μ to 15μ			
*These values are averages			

General Information

325 Novacite® is a typical 325 mesh product although its specifications vary rather widely. You will note the percentage passing 325 mesh can be as low as 88% and as high as 99%. 325 Novacite® is a good product where lower binder demand in the 44μ range is preferred.

Chemical Analysis	(Typical)
SiO ₂	99.49%
Fe ₂ O ₃	.039%
Al ₂ O ₃	.102%
TiO ₂	.015%
CaO	.014%
MgO	.021%

Typical Applications

Casting resins
 Potting compounds
 Molding compounds
 Abrasive medium (Wet blasting)
 Interior and Exterior latex paints

Novacite® is a naturally occurring product. The chart above indicates typical particle size distributions. Generally the top size can be controlled through classification machinery; however, sub-sieve distribution and relation above are impossible to predict with accuracy. The nature of fineness or coarseness varies with the character of the crude ore.

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Other Novacite® grades include: 200, 1250, Daper, L-207A, L-337, and 5μ Novacite®.

Other services include: Toll Treatment, Toll Grinding, and Toll Blending. Please visit us at our website: www.malvernminerals.com



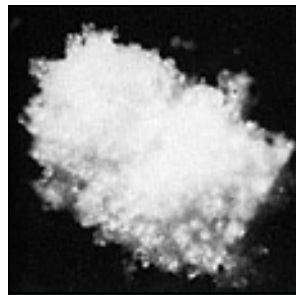
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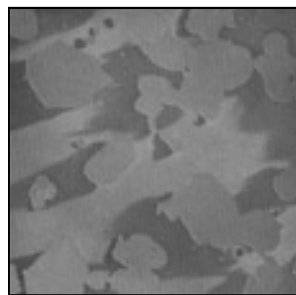
Data Sheet

1250 Novacite®

Properties	(Typical)	
Specific Gravity		2.65
Index of Refraction		1.550
Color (Dry)		White
Color (Wet)		Gray-Tan
Oil Adsorption (Spatula)	Rub Out Method	17-20%
Particle Shape	1-7 microns	Plately
Particle Shape	Over 7 microns	Clusters
pH		6.0-7.8
Acid Number		0(-0-18)
Thermal Stability (in its phase)	Absolute Zero to 573° C	
Specific Heat (Mean between 0-200° C)		.192 Cal/g/C°
Surface Modification		Very Receptive
Hardness		7 Mohs Scale
Moisture (Finished Product) 110° C 3 Hours		0.0%
Loss on Ignition (Typical) 1000° C 30 Mins		0.20%
Loose Packed		50 lbs/Ft ³
Dense Packed		80 lbs/Ft ³



Cluster 70X



Platelets

Micro Diame-ter	U.S. Series Number	Percent Finer Than*	Fineness of Dispersion
44μ	325	99-100	Hegman Fineness 3-4
30μ	475	99	
20μ	625	94	
15μ	950	92	
10μ	1250	69	
Average Particle Size (Range) Fisher 7μ to 14μ			
*These values are averages			

General Information

1250 Novacite® is a premium 325 mesh product. Normally, it is 100% finer than 44μ. This outstanding product has been preferred for over 35 years in thermoset molding compounds. We would not hesitate to recommend 1250 Novacite® for almost any application in the polymer field in its range of fineness.

Chemical Analysis	(Typical)
SiO ₂	99.49%
Fe ₂ O ₃	.039%
Al ₂ O ₃	.102%
TiO ₂	.015%
CaO	.014%
MgO	.021%

Typical Applications

Fluidized bed coatings
 Casting & potting resins
 Polyurethane grouts
 Molding compounds
 Polycarbonate
 Electrostatic coatings
 Pipe linings
 Industrial coatings
 Abrasive medium (Wet blasting)

Novacite® is a naturally occurring product. The chart above indicates typical particle size distributions. Generally the top size can be controlled through classification machinery; however, sub-sieve distribution and relation above are impossible to predict with accuracy. The nature of fineness or coarseness varies with the character of the crude ore.

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Other Novacite® grades include: 200, 325, Daper, L-207A, L-337, and 5μ Novacite®.

Other services include: Toll Treatment, Toll Grinding, and Toll Blending. Please visit us at our website: www.malvernminerals.com



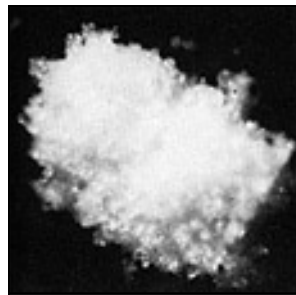
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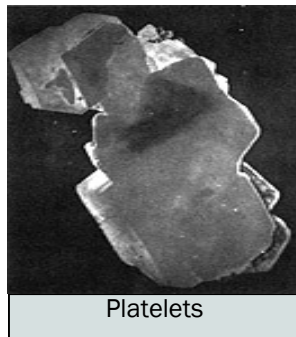
Data Sheet

Daper Novacite®

Properties	(Typical)	
Specific Gravity		2.65
Index of Refraction		1.550
Color (Dry)		White
Color (Wet)		Gray-Tan
Oil Adsorption (Spatula)	Rub Out Method	17-20%
Particle Shape	1-7 microns	Platey
Particle Shape	Over 7 microns	Clusters
pH		6.0-7.8
Acid Number		0(-0-18)
Thermal Stability (in its phase)	Absolute Zero to 573° C	
Specific Heat (Mean between 0-200° C)		.192 Cal/g/C°
Surface Modification		Very Receptive
Hardness		7 Mohs Scale
Moisture (Finished Product) 110° C 3 Hours		0.0%
Loss on Ignition (Typical) 1000° C 30 Mins		0.20%
Loose Packed		50 lbs/Ft³
Dense Packed		80 lbs/Ft³



Cluster 70X



Platelets

Micro Diame-ter	U.S. Series Number	Percent Finer Than*	Fineness of Dispersion
30µ	475	100	Hegman Fineness 5-7
20µ	625	99	
15µ	950	97	
10µ	1250	78	
Average Particle Size (Range) Fisher 4.5µ to 7.5µ			
*These values are averages			

General Information

Daper Novacite® lies between 1250 and L-207A in fineness. It is the coarsest of our finer grades. Daper is a candidate as requirements become stricter with regard to fineness, gloss control and abrasivity. Even though it is quite fine, Daper still has the uniqueness of low binder demand with superior rheological flow properties.

Chemical Analysis	(Typical)
SiO ₂	99.49%
Fe ₂ O ₃	.039%
Al ₂ O ₃	.102%
TiO ₂	.015%
CaO	.014%
MgO	.021%

Typical Applications

Silicone rubber extender
 Silicone rubber dusting powder
 Electrostatic coating
 Molding compounds
 Fluidized bed coatings
 Casting and potting compounds
 Most all coatings and paints

Novacite® is a naturally occurring product. The chart above indicates typical particle size distributions. Generally the top size can be controlled through classification machinery; however, sub-sieve distribution and relation above are impossible to predict with accuracy. The nature of fineness or coarseness varies with the character of the crude ore.

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Other Novacite® grades include: 200, 325, 1250, L-207A, L-337, and 5µ Novacite®.

Other services include: Toll Treatment, Toll Grinding, and Toll Blending. Please visit us at our website: www.malvernminerals.com



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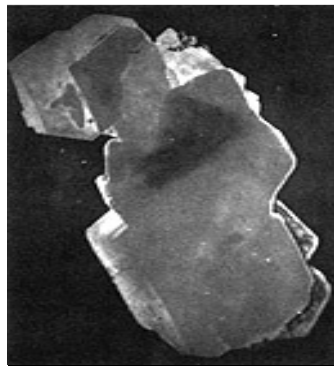
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Data Sheet

L-207A Novacite®

The Premier Product of Malvern Minerals Co

Properties	(Typical)	
Specific Gravity		2.65
Index of Refraction		1.550
Color (Dry)		White
Color (Wet)		Gray-Tan
Oil Adsorption (Spatula)	Rub Out Method	17-20%
Particle Shape	1-7 microns	Platey
Particle Shape	Over 7 microns	Clusters
pH		6.0-7.8
Acid Number		0(-0.18)
Thermal Stability (in its phase)	Absolute Zero to 573° C	
Specific Heat (Mean between 0-200° C)		.192 Cal/g/C°
Surface Modification		Very Receptive
Hardness		7 Mohs Scale
Moisture (Finished Product) 110° C 3 Hours		0.0%
Loss on Ignition (Typical) 1000° C 30 Mins		0.20%
Loose Packed		50 lbs/Ft³
Dense Packed		80 lbs/Ft³



Platelet

Micro Diame-ter	U.S. Series Number	Percent Finer Than*	Fineness of Dispersion
30µ	475	100	Hegman Fineness 6-7
20µ	625	100	
15µ	950	100	
10µ	1250	95-100	
5µ	2500	50	
1µ	12500	2	
Average Particle Size (Range) Fisher 3µ to 5µ			
*These values are averages			

General Information

L-207A Novacite® is the "star" of the Line. Normally the product will disperse to a 7 Hegman Grind. All particles are individually platey with few clusters. 98% of the particles will fall between one and ten microns. L-207A as fine as it is still has the uniqueness of low binder demand with superior flow properties.

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Chemical Analysis	(Typical)
SiO ₂	99.49%
Fe ₂ O ₃	.039%
Al ₂ O ₃	.102%
TiO ₂	.015%
CaO	.014%
MgO	.021%

Typical Applications

- Silicone rubber extender
- Silicone rubber dusting powder
- Electrostatic coating
- Molding compounds
- Fluidized bed coatings
- Casting and potting compounds
- Most all coatings and paints
- Light diffusing characteristic control

Other Novacite® grades include: 200, 325, 1250, Daper, L-337, and 5µ Novacite®.

Other services include: Toll Treatment, Toll Grinding, and Toll Blending. Please visit us at our website: www.malvernminerals.com



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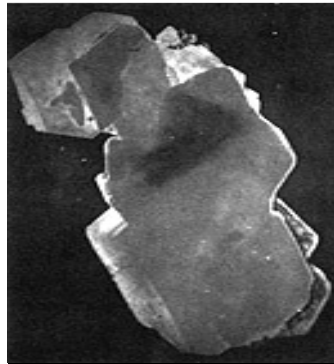
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Data Sheet

L-337 Novacite®

The Premier Product of Malvern Minerals Co

Properties	(Typical)	
Specific Gravity		2.65
Index of Refraction		1.550
Color (Dry)		White
Color (Wet)		Gray-Tan
Oil Adsorption (Spatula)	Rub Out Method	17-20%
Particle Shape	1-7 microns	Platey
Particle Shape	Over 7 microns	Clusters
pH		6.0-7.8
Acid Number		0(-0.18)
Thermal Stability (in its phase)	Absolute Zero to 573° C	
Specific Heat (Mean between 0-200° C)		.192 Cal/g/C°
Surface Modification		Very Receptive
Hardness		7 Mohs Scale
Moisture (Finished Product) 110° C 3 Hours		0.0%
Loss on Ignition (Typical) 1000° C 30 Mins		0.20%
Loose Packed		50 lbs/Ft³
Dense Packed		80 lbs/Ft³



Platelet

Micro Diame-ter	U.S. Series Number	Percent Finer Than*	Fineness of Dispersion
30µ	475	100	Hegman Fineness 7
20µ	625	100	
15µ	950	100	
10µ	1250	100	
5µ	2500	79	
1µ	12500	13	
Average Particle Size (Range) Fisher 2µ to 3.5µ			
*These values are averages			

General Information

L-337 Novacite® is finer than L-207A Novacite®. Normally the product will disperse to a 7 Hegman Grind. All particles are individually platey with few clusters. 98% of the particles will fall between one and ten microns. L-337 as fine as it is still has the uniqueness of low binder demand with superior flow properties.

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Chemical Analysis	(Typical)
SiO ₂	99.49%
Fe ₂ O ₃	.039%
Al ₂ O ₃	.102%
TiO ₂	.015%
CaO	.014%
MgO	.021%

Typical Applications

- Silicone rubber extender
- Silicone rubber dusting powder
- Electrostatic coating
- Molding compounds
- Fluidized bed coatings
- Casting and potting compounds
- Most all coatings and paints
- Light diffusing characteristic control

Other Novacite® grades include: 200, 325, 1250, Daper, L-207A, and 5µ Novacite®.
 Other services include: Toll Treatment, Toll Grinding, and Toll Blending.
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