

SIERRA INDUSTRIAL TALCS FOR

**RUBBER
RICE COATING
TEXTILE FINISHING
PAPER MAKING
INSECTICIDES
SOAP MANUFACTURING
ROOFING AND
MISCELLANEOUS**

MINED AND SCIENTIFICALLY GRADED BY

PLAINTIFF'S
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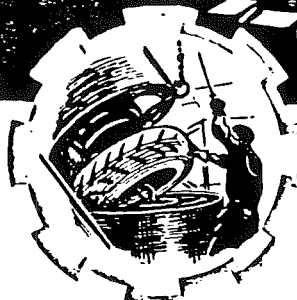
SIERRA TALC & CLAY CO.

5509 RANDOLPH ST.
Los Angeles 22, California
U. S. A.



TALC

is the most versatile of all non-metallic minerals for use as a filler, extender, and coating and dusting agent. It is chemically inert, soft, and non-abrasive. Sierra Talc & Clay Company, through research and study of industrial needs, has developed talcs adaptable to all individual requirements. Careful chemical and physical control assures uniformity and highest quality. Pertinent properties of Sierra industrial talcs are shown in this pamphlet. Complete analyses and specifications can be found in Sierra's Talc Portfolio, available on request.



RUBBER

The principal function of talc in rubber is as a dusting powder. It is an ideal dry lubricant for both dry and wet dusting and for mold coating. Sierra has a talc designed for every rubber need:

SIERRA WHITE "IR" is a low-cost, all around dry dusting agent. Soft and non-abrasive, it adds the required "slip" to rubber both natural and synthetic. It is made from the soft, massive type of talc.

SIERRA WHITE #111 is the same as Sierra White "IR" except it is processed particularly for wet dusting. This talc wets more quickly and easily and remains in suspension better.

"LS" SILVER TALC is a tremolitic talc of greater apparent density and hardness. It flows more freely than the steatite type and will not chalk.

TRINITY SUPERFINE is an extra pure, soft, platy talc of maximum "slip." Trinity Superfine is particularly recommended for dusting of surgeon's gloves and rubber goods that come in contact with the skin.

SILVER TALC "IS" is a fine ground dry lubricant for exterior dusting of rubber gloves and soft rubber goods in the plant. Its "drier" texture assures that the gloves will not stick together and will leave no tell-tale blotches of talc on the surface as will more sticky talcs.

SIERRA SAGGER TALC has extreme "slip." It is the softest of all the Sierra commercial talcs, has a platy particle structure, will go further, and is recommended as our best dry lubricant.

AIREX TALC is produced especially for dusting of the clam-shell mold in the production of balloons, balls, and sponge rubber. Its hard crystalline structure and coarser grind permit the mold to "breathe," thus preventing pin holes caused by entrapment of air in the mold.



RICE COATING

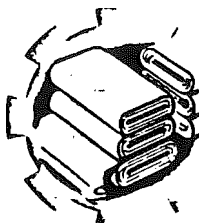
Sierra talcs offer superior covering power as compared to imported talcs long used by the rice mills. They go farther! Their smoothness and freedom from oversize particles and angular particle shapes impart the lustre so necessary to coated rice. When mixed in the rice tumbler to the suggested amount of 1 lb. of Sierra talc to

1-1/4 lbs. of glucose per 500 lbs. of rice, Sierra talcs will reduce the cost of the finished rice.

Two Sierra talcs are recommended for rice coating:

SIERRA SUPREME #200 for maximum whiteness, platy particle structure, and maximum lustre, and

SIERRA CLOUD for greater fineness and economy.



TEXTILE FINISHING

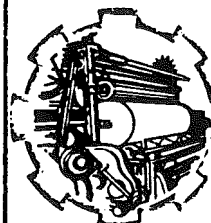
Talc is used in the back-filling of cotton goods at the finishing mills. Principal requirements are whiteness of color, freedom from abrasiveness, and fineness of grind.

SIERRA SPECIAL TEXTILE TALC meets ALL these requirements. It is maintained to a high standard of quality for this industry. **SIERRA SPECIAL TEXTILE TALC** is produced from our softest talcs which accounts for its low grit content and freedom from abrasiveness. It reduces the tendency of filled goods to dull the cutting knives and cause needle heating. It imparts proper viscosity to the starch mixture without thinning. It fills the thread lattices thoroughly leaving no pin-holes. It assures a smooth, velvety finish.

SIERRA FIBRENE TALC is also offered to the Textile trade where still greater whiteness is required.

SIERRA HI-GRADE is suggested when maximum chemical purity is required.

SPECIAL TEXTILE TALC, however, is made especially for the textile industry and is the standard of the leading textile finishing mills of the United States.



PAPER MAKING

Requirements of the paper maker are much the same as those of the textile finisher. The talc must be relatively low in grit content and have good filling and covering characteristics.

Talc has several distinct advantages over other mineral fillers. It imparts from 10% to 25% greater mineral retention than clay,

making it superior for heavily filled papers such as order forms, offset paper, and book stock. It is normally brighter, lightens the pulp, imparts greater moisture resistance, and adds greater strength.

It is superior to clay in the better grades of writing papers because it makes a less absorptive paper. Talc is an excellent extender of titanium dioxide in coated papers and board stock. It is ideal for wax coated stock due to its translucency and smoothness.

The following are Sierra's leading paper makers grades:

TRINITY SUPERFINE is extra white, translucent, platy particle structure, extremely finely ground, free of grit, less than 1% alkalinity — the ideal titanium dioxide extender. The use of as much as 50% of Trinity Superfine will not materially lower the hiding power of titanium. It insures stability of emulsions. It is recommended for waxed paper stock, high quality board stock, and coated papers.

SIERRA CLOUD is slightly less white than Trinity Superfine but equally fine. The rounder particle structure of Sierra Cloud makes it ideal for high grade writing papers. It is of the massive, soft steatite variety.

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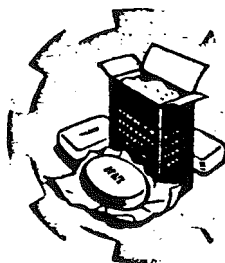
INSECTICIDES

Talc is used principally as a carrier in insecticide dusts. It is compatible with most of the killers and releases the toxic base quickly. Other extenders are volcanic ash, pyrophyllite, diatomaceous earth, and clays. All of these, except clay, are highly abrasive and cause excessive wear to the spray equipment.

Clay has a tendency to "ball up" and the flowing characteristics are therefore poor. Talc is non-abrasive, soft, smooth, and flows readily. Sierra produces two excellent talcs for this use:

SIERRA WHITE TALC "IR" This is a soft talc (magnesium silicate) of the steatite variety. It is the smoother and better flowing of the two talcs and is ideal for sulphur, nicotine, etc.

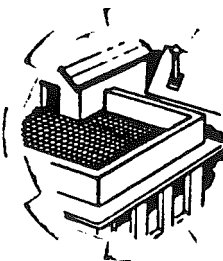
PYROTALC is a unique mineral of the talc family, being a magnesium aluminum silicate. It wets more easily and has greater adhesiveness. It is less alkaline and has met with approval as a carrier particularly for DDT and the newer chemical killers.



SOAP MANUFACTURING

Talc is used in only the filled hand and laundry soaps, cake, flakes, and powder. Its principal function is as a filler and an extender.

SIERRA WHITE #200 and **SIERRA SNOW TALCS** are the two recommended grades. More fully described elsewhere in this pamphlet, their physical smoothness and "slip" recommend them for any soap use.



ROOFING AND MISCELLANEOUS

Talc will prevent roofing paper sheets from sticking together when packed. Being non-hygroscopic, it is the best dusting agent available. **SIERRA WHITE "IR"** is the recommended grade.

Talc has many other industrial uses and Sierra has a talc for each use.

SIERRA SNOW TALC finds application as a dry lubricant for automatic nailing machines, making the nails flow easily and preventing jamming. The same grade is also recommended as a "parting compound" in various types of ceramic and metal molds.

SIERRA FIBRENE due to its fibrous structure, is added to asbestos and plaster of paris in the manufacture of fine plaster molds for metal casting, particularly aluminum alloys.

SIERRA WHITE "IR" is recommended for wet dusting of foundry molds.

SIERRA MISTRON due to its extreme fine particle size, is recommended as a filler for plastics. The same grade is recommended as a dry lubricant for dusting lithograph plates in tin can plants and label printing.

SIERRA WHITE "IR" is recommended for dusting insulated wire and cable.

SIERRA FIBRENE will add smoothness and slip to rope.

WHEREVER A
DUSTING OR FILLING AGENT
IS REQUIRED, USE TALC...AND USE
SIERRA TALC

Our laboratory will assist you in your technical problems with recommendations as to grade and method of use.

THE TABLE OPPOSITE lists the principal properties of interest to the industrial user. For more complete data, consult the **Sierra Talc Portfolio**.

continued from previous page)

SIERRA SNOW is the same as Sierra Cloud except that is coarser ground. It is particularly recommended for ok stock.

SIERRA WHITE #200 is an economy grade produced on the same raw talc as Sierra Cloud and Sierra Snow. Its lower price makes possible its use in bulky order-form and wet printing stock. It is non-abrasive and insures longer cutting knife life.



	Finesness % 325	Percent as Talc	Specific Gravity	Apparent Density lbs/ft ³	Acid Solubles as CaO %	Color % Reflectance	pH Value
Sierra Special Textile Talc	99-99.5	92-94	2.83	26-27	2.5	95-97	9.3
Sierra Fibrene	98-99	88-90	2.79	23-25	7.9	98-99	9.4
Sierra Hi-Grade	95-97	96-97	2.74	26-27	0.6-1.0	94-96	9.3
Trinity Superfine	99.5-99.7	95-97	2.76	23-24	0.9-1.2	98-99	9.1
Sierra Cloud	99.5-99.7	94-96	2.73	27-28	1.9-2.5	96-97	9.4
Sierra Snow	95-97	94-96	2.73	28-29	1.9-2.5	96-97	9.4
Sierra White #200	95-97	88-90	2.72	28-29	6-8	90-92	9.1
Sierra White "IR"	95-97	86-88	2.72	28-29	8-10	88-90	9.1
Sierra White #111	95-97	80-82	2.69	28-29	4-6	90-92	9.3
Sierra Supreme #200	85-88	95-97	2.83	26-27	0.8-1.0	98-99	9.1
LS Silver Talc	95-97	90-92	2.85	32-33	3-4	94-96	9.4
Silver Talc "IS"	99.5-99.7	90-92	2.74	29-31	2.5-3.0	97-98	9.4
Sierra Sagger	95-97	63-65	2.74	25-26	1-2	88-89	9.1
Airex	85-88	91-92	2.85	33-35	2.5-3.0	94-96	9.4
Pyrotalc	98-98.5	76-78	2.80	27-28	1.5-3.0	86-88	9.5
Sierra Mistron	100	96-97	2.75	9.5-10	1.0-3.0	97-98	9.3

NOTES: Talc being a magnesium silicate, "percent talc" above is expressed as the combined percentage of magnesium oxide (MgO), silicon dioxide (SiO₂), and chemically combined water (H₂O). The remaining constituents are those commonly found in talc, principally oxide of alumina, carbonates, small percentages of iron oxide, and alkalis. Complete chemical analyses can be found in Sierra's Talc Portfolio.

S **IERRA Talc & Clay Company**
operates three mills, two in Los Angeles and
one at Keeler, in the Owens Valley of
California, west of Death Valley. Fourteen
mining properties operated by Sierra on
both sides of Death Valley yield all the
known types of talc — steatite, fibrous,
platey, and tremolitic. Control laboratories
are located at each mill, and a large central
laboratory is maintained at headquarters
for research and development.

The availability of necessary
raw talcs, plus expert mining technique,
production know-how and laboratory con-
trol and research make possible a **SPECIFIC**
Sierra Talc for every known use.

CERAMICS	PAPER MAKING
COSMETICS	RUBBER
PHARMACEUTICALS	PRINTING INKS
PAINT MANUFACTURING	ROOFING
TEXTILE FINISHING	RICE COATING
SOAP MANUFACTURING	INSECTICIDES



For the complete story of Sierra talcs, our handy and
complete loose Talc Portfolio will be sent you on request. Full
specifications on **ALL** our talcs for **ALL** uses are contained in
this portfolio together with results of our research projects.
Individual pamphlets similar to this are also available covering
the specific industries listed above.

SIERRA TALC & CLAY CO.

5509 Randolph St. • Los Angeles 22, California

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