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"Dutch Boy"
NORMASAL

Normal lead salt of
salicylic acid—a new
product for the
improvement of paint,
plastics and rubber.



A Product Development of
NATIONAL LEAD COMPANY

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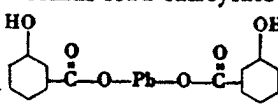
"Dutch Boy" **NORMASAL**

NORMASAL, the normal lead salt of salicylic acid, is a soft, creamy white, crystalline powder which is of interest in the improvement of light, heat, and moisture resistant characteristics of a variety of organic products.

NORMASAL combines the stabilizing characteristics of both lead oxide and salicylic acid from which it is made. It has a high degree of ultra-violet light absorption in combination with some organic media. It imparts exceptional light fastness to organic films, and hence, NORMASAL is particularly well adapted as a stabilizer in the plastic and protective coating industries.

NORMASAL is insoluble in the common hydrocarbon solvents and just slightly soluble in water. Its solubility in glycols and their derivatives will aid in the dispersion of this material in paints and vinyl plastics.

Table of Properties

Composition	Normal lead salicylate
Formula	
Molecular Weight	481
Form	Soft crystalline powder
Color	Creamy white
Refractive Index (average)	1.78
Specific Gravity	2.36
Weight per Gallon	19.7 lb.
Lead Oxide Content (% PbO)	46.0-46.5
Moisture (loss at 105°C)	0.5% max.
Oil Absorption	35 g oil per 100 g
Fineness (Retained on No. 325 sieve)	0.3% max.
Solubility	0.5% soluble in water at 25°C Soluble in glycols and glycol ethers. Slightly soluble in methyl and ethyl alcohol. Insoluble in common aromatic and aliphatic hydrocarbons.

Uses

Paint—NORMASAL has the unique property of increasing the durability of drying oil films exposed to moisture, light, and heat—without impairing the drying of the films. Tests have shown that NORMASAL increases the gloss retention and retards the chalking rate of oil base paints. It markedly prolongs the color fastness of these paints. NORMASAL improves the performance of red lead primers in corrosion inhibitive paints, particularly on salt water exposure.

Vinyl Plastics—NORMASAL imparts exceptional light fastness to many vinyl plastic formulations. NORMASAL should be used with a basic stabilizer, such as, "Dutch Boy" PLUMB-O-SIL, "Dutch Boy" TRIBASE, or "Dutch Boy" DS-207. Such combinations enable the formulator to stabilize his compound against both light and heat degradation. The basic material, which is an acid acceptor, and hence, a heat stabilizer, also serves to prevent degradation of the normal lead salicylate. The compatibility of NORMASAL with ethylene glycol, the glycol ethers, and other common vinyl plasticizers gives even dispersion and light protection throughout the vinyl compound. Its light color and low tinting strength permits NORMASAL to be used without increase in the amount of coloring pigment in vinyl formulations.

Rubber—NORMASAL may be used as a combined activator and anti-scorching agent in rubber compounds. At processing and storage temperatures, it retards vulcanization, and at normal vulcanizing temperatures, it acts as an activator. Unlike other anti-scorching agents, NORMASAL has no harmful effects on the physical properties of the vulcanizates in which it is used. NORMASAL is of particular interest in natural rubber formulations.

NATIONAL LEAD COMPANY

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