

MICRO POWDERS, INC.

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Natural and Biodegradable Industrial Wax Powders

This overview addresses questions from industrial customers who are interested in learning more about waxes that can be categorized as natural, naturally derived, and/or biodegradable. Most of the common materials used to manufacture industrial wax additives (including polyethylene, polypropylene, and PTFE) are not natural or biodegradable. However, there are some natural materials and wax products that do offer varying degrees of biodegradability. Here are some commercially available industrial products that can be considered, *including our newest NatureFine grades:*

Trade Name:	Chemical Class:	Biodegradability:
NatureFine R331	Rice bran wax (fine)	Freshwater biodegradable (OECD 302)
NatureFine H325	Hydrogenated castor oil (fine)	Freshwater biodegradable (OECD 302)
NatureMatte 31	PHBV (fine)	Natural biofermentation powder (OECD 302/306)
MP Series (MP-22, etc.)	Synthetic wax (fine)	Freshwater biodegradable (OECD 302)
MicroKlear 418	Carnauba wax (fine)	Natural biodegradable wax
MicroKlear 418OR	Organic carnauba wax (fine)	Natural organic biodegradable wax
MicroKlear 418AL	Carnauba/alumina (fine)	Natural biodegradable wax
AquaKlean 418	Carnauba wax (emulsion)	Natural biodegradable wax
AquaBead 425E	Carnauba wax (emulsion)	Natural biodegradable wax

There are also products that are primarily or partially based on naturally derived materials, including:

Trade Name:	Chemical Class:	Derivation:
Micromide 520	Ethylene bis(stearamide)	Derived from natural vegetable materials (90%)

We also offer a wider portfolio of natural/biodegradable products through our Personal Care Division that could be considered for industrial applications (including seed coatings and agricultural products):

Trade Name:	Chemical Class:	Biodegradability:
Synscrub	Synthetic wax (coarse)	Freshwater biodegradable (OECD 302)
Naturescrub M	Glycol Montanate (coarse)	Naturally derived wax
Naturescrub C	Carnauba wax (coarse)	Natural biodegradable wax (OECD 302)
Naturescrub H	Hydrogenated castor oil (coarse)	Naturally derived biodegradable wax (OECD 302)
Naturesoft 800	Cellulose (fine)	Natural biodegradable powder (OECD 302)
Naturesoft 810	Hydrogenated castor oil & Jojoba (fine)	Natural biodegradable powder (OECD 302)
Microcare 730	Glycol Montanate (fine)	Naturally derived wax
Naturebead	Multiple classes (coarse)	Natural biodegradable waxes and mixtures
Bioscrub	Polyhydroxybutyrate (coarse)	Natural bio-fermentation powder (OECD 302/306)
Ecoscrub	Polylactic acid (coarse)	Compostable (ASTM D6400)
Ecosoft	Polylactic acid (fine)	Compostable (ASTM D6400)

Please contact your Micro Powders sales contact for further information and discussion.