

IDEALUBE®

Boron Nitride Platelet Powders

NSF Certified Platelet Powders for Greases, Process Oils, Seals and Gaskets

Idealube® boron nitride lubricant additives are hexagonal boron nitride powders (BN) with lamellar structures similar to graphite. Idealube powders are not only thermally conductive, but are also electrically insulating, inert, non-toxic and naturally white. With a unique combination of properties compared to other solid lubricants, such as lower coefficients of friction and oxidation resistance at high temperatures (up to 900°C), Idealube is the perfect solution for the most challenging applications.

In applications involving moving parts, heat dissipation, wear resistance and oxidation resistance can mean success or failure of a design. Idealube BN lubricant additives offer a solution where conditions exceed the useful operating range of other solid lubricants such as graphite, MoS₂ or PTFE, ultimately leading to less frequency of lubrication, lower lubricant usage and less downtime.

Available in a broad range of particle sizes from sub-micron to 30 microns, Idealube platelet powder grades are NSF Certified and registered in the category code HX-1. Idealube platelet grades are acceptable as an ingredient up to 40% by weight for use in lubricants with incidental food contact (HX-1) for use in and around food processing areas.

Idealube platelet powders may be used in food processing equipment as chain and gear lubricants, a release agent on gaskets or seals of tank closures, as a lubricant for machine parts and equipment in locations where there is potential exposure of the lubricated part to food.



PRODUCT DATA SHEET



Features/Benefits

- NSF certified HX-1 lubricant additives
- High thermal conductivity for efficient heat dissipation from moving parts
- Chemically inert and corrosion resistant
- Lubricious at temperatures up to 1800°C
- Excellent high temperature stability and oxidation resistant in air up to 900°C
- Non-toxic, safe for human contact and the environment
- White, clean appearance

Key Applications

- Food processing H1 lubricants
- High temperature greases and oils
- High load and extreme pressure applications
- Anti-seize compounds
- Dielectric grease
- Coatings and dry film lubricants
- Gear boxes and chain oils
- Release agent on gaskets or seals
- Additive to gaskets or seals

Target Markets

- Automotive
- Food Processing
- Industrial machinery
- Oil and gas (down hole exploration)
- Recreational
- Energy (wind mill lubricants)

BORON NITRIDE



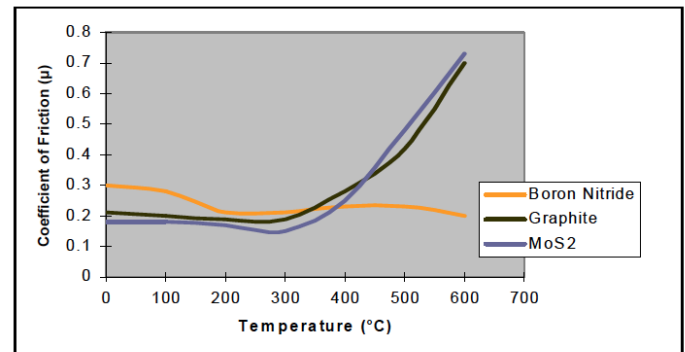
IDEALUBE® BORON NITRIDE PLATELET POWDERS - STANDARD GRADES AND TYPICAL PROPERTIES

Part No.	NSF Reg. No.	Chemistry, %			Particle Size Distribution, μm					Other Physical		
		BN	O ₂	B ₂ O ₃	mV	D10	D50	D90	Max Particle	US Sieve, 95%	Tap Density, g/cc	Surface Area, m ² /g
IDL100	141444	98.0	2.0	1.0	6	1	4	14	37	-325	0.6	60
IDL200	141445	99.5	0.5	0.3	12	2	12	30	60	-325	0.6	15
IDL300	141446	99.5	0.4	0.02	6	4	6	11	22	-400	0.4	7
IDL400	141447	96.0	3.5	1.0	7	0.5	3	20	53	-325	0.55	25
IDL600	141449	98.8	1.2	0.1	2	1	2	4	11	NA	0.2	15
IDL700	141450	99.5	0.5	0.02	10	4	8	18	44	NA	0.5	4
IDL800	141451	99.6	0.4	0.02	13	5	12	22	52	NA	0.5	3.5
IDL900	141452	99.8	0.2	0.02	31	11	30	49	103	NA	0.6	1

IDEALUBE VS. OTHER COMMONLY USED SOLID LUBRICANTS

Properties	IDEALUBE Boron Nitride	Graphite	MoS ₂	PTFE
Color Flexibility	****	○	○	****
Thermal Conductivity	****	***	*	○
Electrical Insulation	****	○	○	****
Oxidation Resistance at Temperatures > 400°C	****	*	*	○

**** very high *** high ** average * low ○ none



For further information, please visit us at www.bn.saint-gobain.com, or contact your IDEALUBE specialist at bnsales@saint-gobain.com.



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