DuPont™ Starblast® Ultra

BLASTING ABRASIVE

DuPont™ Starblast® Ultra abrasive is a uniquely formulated addition to the Starblast® family of abrasive products. Mined from DuPont mineral deposits in Northeast, Florida, the naturally occurring rounded to subangular mineral sands are washed to ensure freedom from dirt, dust, and ultrafines.

Applications

Starblast® Ultra is designed for those applications that require a more aggressive abrasive, such as steel maintenance, heavy rust, and paint removal.

While stronger than DuPont standard Starblast® and Starblast® XL, Starblast® Ultra continues to offer the same product advantages, such as:

- greater blasting visibility due to considerably less dust generation
- lower labor costs through faster, more efficient cleaning
- less material costs due to reusability
- guaranteed to contain <5% free silica, typically <3%
- rounded to subangular grains result in less abrasive embedment
- electrically nonconductive

Physical and Mineral Properties of Starblast® Ultra Abrasive

Typical Screen Analysis

U.S. Sieve No.*	Sieve Opening, µm	Retained on Sieve, %
20	840	<1
30	590	1
40	420	10
50	300	23
70	212	20
100	150	31
140	106	13
200	75	<2
Grit #30/80	_	_

^{*}U.S. Sieve Series according to ASTM E-11-70.

Physical Properties

	Range
Bulk Density (loose)	134 lb/ft³ (2146 kg/m³)
Specific Gravity	3.7
Hardness (Mohs)	7.0

Mineral Composition

	Typical, %*
Staurolite Minerals (FeAl ₅ Si ₂ O ₁₂ OH)	85
Titanium Minerals (Fe ₂ Ti ₂ O ₇)	7
Kyanite (Al ₂ SiO ₅)	2
Zircon (ZrSiO ₄)	3
Quartz (Free Silica)	<3

^{*}This column gives typical analyses based on historical production performance. DuPont does not express or imply any warranty guaranteeing that future production will demonstrate or continue to possess these typical properties.



Personal Safety

DuPont™ Starblast® Ultra abrasive, as shipped, does not pose any inhalation health hazard, because Starblast® Ultra contains essentially no particles in the respirable size range. However, if during handling or use, Starblast® Ultra particles are broken down to a size that can be inhaled, the dust may be harmful to the respiratory system.

DuPont staurolite abrasive products may contain up to 5% crystalline silica (quartz). Long-term overexposure to respirable crystalline silica may cause silicosis. The U.S. Department of Labor (OSHA)* has ruled that an employee's exposure to particulates, not otherwise regulated, should not exceed 5 mg/m³ (respirable dust), 15 mg/m³ (total dust), 8-hr time weighted average (TWA). When these limits might be exceeded, employees should wear dust masks or respirators approved by NIOSH for such dusts.

Packaging

Starblast® Ultra abrasives are available in 22.7-kg (50-lb) multiwall paper bags, 4,000-lb bulk bags, and in bulk carloads and truckloads. Department of Transportation (DOT) Hazard Classification:* NOT REGULATED.

DuPont Titanium Technologies

www.titanium.dupont.com

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^{*} Due to changing governmental regulations, such as those in the Department of Transportation, Department of Labor, U.S. Environmental Protection Agency, and the Food and Drug Administration, references herein to governmental requirements may be superseded. Each user should consult and follow the current governmental regulations, such as: Hazards Classifications, Labeling, Food Use Clearances, Worker Exposure Limitations, and Waste Disposal Procedures for the products described in this literature.