



Highlights

- No scratching
- Less sub-surface damage
- No hard-packing
- Less abrasive waste
- Increased removal rate
- Easier post-lap cleaning
- Non-corrosive

Slurry additive for suspending non-treated abrasives (recirculating)

CHALLENGE 550HT

CHALLENGE 550HT was developed for use in “high-speed recirculating” and “high-speed once-through” slurry pumping systems. Utilizing the energy of a high-speed circulating pump, standard on most lapping machines, it evenly disperses aluminum oxide, cerium oxide, silicon carbide, boron carbide, and garnet abrasive. It also reduces abrasive usage by eliminating “hard-packing” and waste.

Typical applications

Ceramic, fused silica, glass, polycarbonate lenses

Slurry additive	Base material	Dilution ratio	pH value	Specific gravity
CHALLENGE 540HT	Water	19:1 (5 %)	9.1	1.00
CHALLENGE 543HT	Water	25:1 (3.8 %)	9.1	1.00
CHALLENGE 550HT	Water	19:1 (5 %)	9.9	1.01
CHALLENGE 555HT	Water	19:1 (5 %)	9.9	–



CHALLENGE grinding fluids improve the quality and consistency of the cut, while also prolonging diamond wheel lifetime.



CHALLENGE lapping additives dramatically improve slurry properties for more consistency and control.



Pureon offers a wide range of customized solutions. Get in touch with us.

Product specifications

Base material Water
Shelf life 24 months

Order information

Packing Product is available in 5-gallon pails and 55-gallon drums. Other sizes available upon request.
Unit of measure Gallon [gal]

Application recommendations

Handling CHALLENGE 550HT is used at approximately 5 % (by volume) with deionized (DI) water or tap water. After CHALLENGE 550HT is mixed with the water in the slurry tank, add the abrasive. The slurry will be ready for use almost immediately. Start grain loading 400 g/liter for a one-meter machine. Flow rate for the slurry should be approximately 300 ml/minute for a one-meter machine.

Disperse the abrasive with DI water at 1'000 rpm for 3 minutes. Add 543HT. Mix for approximately 10 minutes depending upon abrasive surface chemistry. Be careful not to suck air into the slurry when mixing. A small vortex should form at the surface of the slurry. Turn the mixer off, or to a maximum of 50 rpm.

Storage Product should be stored in a temperature-controlled environment. Prolonged exposure to temperatures at or below 32 ° Fahrenheit (0 °C) is discouraged. Prolonged exposure to temperatures at or above 100 ° Fahrenheit (38 °C) is also discouraged. In addition, material should always be sealed when not in use to prevent evaporation.

Disposal Dispose of in accordance with all applicable local regulations.

This product is manufactured by Intersurface Dynamics.

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