

Proware™

Mass Transfer Packings

Proware™ Ceramic Mass Transfer Packings

The Original Mass Transfer Saddle

Beginning with our development of the original Intalox® saddle over 60 years ago, Saint-Gobain NorPro has a long history of manufacturing superior products for mass transfer operations. Today our Proware™ ceramic tower packings offer optimum durability and chemical resistance. Proware saddles, super saddles and Raschig rings have the mechanical strength, low porosity, and resistance to alkalis, solvents, and acids (except hydrofluoric acid) needed in more severe chemical services.

Saint-Gobain NorPro's Proware™ silica-alumina ceramic formulation is virtually iron-free and its finely grained microstructure makes it more chemically resistant than typical stoneware products. Proware chemical ceramic is the standard material for all Saint-Gobain NorPro mass transfer packings.

Proware™ Saddles

When you need a ceramic saddle that provides reliable and corrosion resistant performance, Proware saddles are your first choice. Offered in a range of sizes, Proware saddles are still made to the original Intalox® specifications.

(Intalox® is a registered trademark of Koch-Glitsch)

Proware™ Super Saddles

For superior mass transfer performance, our Proware™ super saddle may be the choice for you. The unique scalloped edge and strategically placed holes of the Proware super saddle result in maximum usable area for liquid/gas contact and minimum resistance to flow. The Proware super saddle provides 5-30% greater mass transfer efficiency and 25% lower pressure drop than the corresponding size standard saddle.

Proware™ super saddles are manufactured in two sizes, No. 1 (25mm) and No. 2 (50mm), generally indicated by their widths.

(continued)

Saint-Gobain NorPro

Proware™ Mass Transfer Packings



Proware™ Ceramic Mass Transfer Packings for optimum durability and chemical resistance.

Typical Properties of Proware™ Saddles and Super Saddles

Max Operating Temperature	1100°C
Leachable Iron	≤ 0.01%
Acid Resistance (≤ 50mm sizes)	≤ 4.0%
Acid Resistance (75mm size)	≤ 6.8%
Porosity (as measured by water absorption)	≤ 0.4%
Min Crush Strength (for ≥ 25mm saddle sizes)	120 lbs 54 kg



Proware™ Saddles and Super Saddles.

NORPRO


SAINT-GOBAIN

Proware™

Mass Transfer Packings

Proware™ Raschig Rings

When the excellent pressure drop and liquid distribution provided by Proware™ saddles aren't critical for your tower performance, we offer Proware™ Raschig rings. Proware Raschig rings have consistent strength and corrosion resistance and are manufactured in a range of sizes.

Carbon Raschig Rings

At Saint-Gobain NorPro we understand there are many different needs in mass transfer operations. That's why, for processes where aluminosilicate ceramic packings are not viable, we offer carbon Raschig rings.

For optimum durability in your severe chemical service, look to NorPro® mass transfer packings for reliable tower performance.



Proware™ Raschig Rings.



Carbon Raschig Rings.

Typical Properties of Carbon Raschig Rings

Carbon	> 99.5%
Ash	< 0.5%
Porosity	25%
Max Operating Temperature	400°C

North & South America

+1 330 673 5860

norpro.ceramicsales@saint-gobain.com

Akron, Ohio USA

Europe & Africa

+49 6435 9657 0

norpro.steinefrenz@saint-gobain.com

Steinefrenz, Germany

Russia

+7 812 332 56 60

norpro.stpetersburg@saint-gobain.com

Saint Petersburg, Russia

Asia, Oceania & Middle East

+65 911 61119

norpro.singapore@saint-gobain.com

Singapore

norpro.saint-gobain.com



The information herein does not constitute a guarantee or warranty. Saint-Gobain NorPro's warranty is set forth in its standard terms and conditions which govern sales of Saint-Gobain NorPro products. The standard terms are set forth in Saint-Gobain NorPro quotations and acknowledgements and are also available upon request.