

# smart/te° 550



# ESSENTIAL MOULDING MACHINE REQUIREMENTS

- Accurate machine temperature control ± 1°C
- Machine hydraulic pressure > 160 Bar
- · Non return valve on hydraulics
- Shut off nozzle
- · Ability to set back pressure
- Mould temperature control

For more detailed information please contact your smart  $\mathit{Lite}^{@}$  Design and Technology Centre.

#### TYPICAL SCREW DESIGN AND PROCESSING

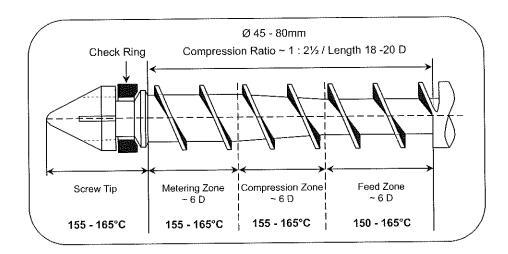
#### MOULD DESIGN

Correct mould design will ensure optimum performance and processing of smart  $\it Lite^{\it @}$  technology.

For recommendations and advice on mould design please consult your smartLite® Design and Technology Centre.

#### HEALTH AND SAFETY ADVICE

Before undertaking any trials with this technology it is essential that all personnel are aware of the necessary precautions that must be taken. These are detailed in the relevant Safety Data Sheets that will be provided by Huntsman.



The smartLite® Design and Technology Centre is located at:

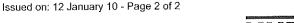
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Tel: (32) 2 758 9874 Fax: (32) 2 758 9018 info@smartlite.biz The manufacture of smart*Lite* and polymer foams is the subject of granted patents and patent applications; freedom to operate patented processes is not implied by this publication. The information and recommendations in this publication are to the best of our knowledge information and belief accurate at the time of publication. Nothing herein is to be constructed as a warranty, express or otherwise. In all cases, it is the responsibility of users to determine the applicability of such information of the suitability of any product for their own particular number.

purpose.

All sales of this product shall be subject to Huntsman LLC and/or its subsidiaries' standard conditions of sale. Huntsman Polyurethane's is a business group of Huntsman Chemicals LLC.

smart $\mathit{Lite}^{\$}$  is a registered trademark of Huntsman International LLC.







# smart/te 550



# INTRODUCTION

smartLite<sup>®</sup> 550 is a novel, high quality soling material offering an unrivalled combination of performance, aesthetics and lightness.

smartLite<sup>®</sup> 550 is suitable for microcellular unit soles and midsoles in high quality applications with a density range between 0.50 and 0.60 g/cm<sup>3</sup> depending on the design.

### CHARACTERISTICS

smartLite<sup>®</sup> 550 is recommended for high quality casual and fashion footwear and provides

- Tactile feel coming from the soft elastomeric structure
- · Ability to reproduce the finest detail and surface textures
- · Long lasting performance
- Substantial contribution to comfort attributed to the unique combination of lightness, flexibility and cushioned support
- Long-term bond reliability to upper materials with minimal preparation

TYPICAL PROPERTIES			
Property	Method	Unit	Value
Density	ISO 2781	g/cm³	0.50
Hardness	ISO 868	Shore A	50
Abrasion	ISO 4649	mg	< 200
Abrasion after hydrolysis	7 days/70°C	% retention	> 80
Flex performance	SATRA TM161	k. cycles	> 70
Bond strength To upper	SATRA TM401	N/mm	> 8

#### PRODUCT SELECTION

Before selecting this product it is necessary that the user ensures its performance will meet all operational and end use requirements. Should changes be contemplated in method of application, materials, service conditions or any other then further checks are strongly recommended.

The type and quantity of any colourant or additive used may have an effect on processing and/or properties.

#### COMPONENT ASSEMBLY

smart $Lite^{\oplus}$  products can be easily combined with other products such as thermoplastic polyurethane through a variety of assembly methods including combination soles or logo incorporation.

Using standard adhesives, high bond strengths to upper materials can be obtained with minimal surface preparation of the unit sole.

#### RECYCLABILITY

smartLite® products can be recycled. It is recommended to dry regrind prior to use. The maximum recommended level of regrind in smartLite® 550 is 30%. Contact the smartLite® Design and Technology Centre for advice if considering use at higher levels.

# SUPPLY AND STORAGE

smartLite® products are supplied in the form of pellets coated with additives, in 25 kg moisture guarded boxes, shrinkage-wrapped. smartLite® has an expected shelf life of minimum 12 months after shipment date. The product should be stored in a dry and cool place in the manufacturer's original packaging. Storage at temperatures above about 40 °C is not recommended, since this can lead to the formation of agglutinate pellets.

# **ECO-LABELLING**

If processed in accordance with smart*Lite*<sup>®</sup> Processing Guidelines, smart*Lite*<sup>®</sup> 550 meets the requirements of article 1 for European Eco-labelling of Footwear.