NovaOrtho Sheets

materials for functional orthotics and prosthetics

SANGiR

NOVAORTHO

ORTHOTICS & PROSTHETICS

Product Line Card

www.plastnova.com

Technical Specifications for "NovaOrtho" Ortho Sheets:					
	Ortho - 'RC' Reinforced (PREMIUM)	**Ortho – 'P' – 'C' Regular Co-PP (ECONOMY)**	**Ortho – 'P' – 'H' HARD (PREMIUM)**	**Ortho – 'H' (ECONOMY)**	**Ortho – 'FLEX' (PREMIUM)**
Base Polymer	Special blend of raw materials having PP-CP as a base polymer.	Blend of raw materials having PP-CP as a base polymer.	Special blend of raw materials having PP-HP as a base polymer.	Special blend of raw materials having PE-HD as a base polymer.	Special blend of raw materials having PE-LD as a base polymer.
Recommendation	For **weight-bearing** applications.	For **weight-bearing** applications.	For **weight-bearing** applications.	For **non–weight bearing** applications.	For **non–weight bearing** applications where **flexibility/ softness** is required in the articles.
Applications	Ideal for a variety of O & P applications where durability and thermoformability are important eg. upper and lower limb orthoses and prostheses, to make definitive or preparatory sockets, various body jackets and spinal supports.	Ideal for a variety of O & P applications where durability and thermoformability are important eg. upper and lower limb orthoses and prostheses, to make definitive or preparatory sockets, various body jackets and spinal supports.	Ideal for making AFO (Ankle Foot Orthoses).	Suitable for making stiff orthoses for the trunk and can also be used for making various splints, braces, jackets, supports, collars, belts, etc.	Suitable for making body jackets or thigh articles, to create flexible upper limb sockets (inner sockets) and can be used for orthoses to make products (like splints, spinal supports) wherever more flexibility is required for comfort.
	This material with "good hinge property" is the most durable choice for making AFO's and similar articles.	This material is less durable but can be considered for making AFOs and similar articles.			
Speciality	The sheet **WILL NOT STICK** to either the stockinette or Teflon cloth during the heating and has to be draped onto the mould using gloves. Has good melt strength, sagging is even and hence thickness evenness is better. Ideal for **SUCTION MOULDING** Process.	The sheet **WILL STICK** to the stockinette during the heating and draping. Has less melt strength hence a stockinette is used under the sheet as a support during heating. The stretching of the heated sheet is done with the stockinette. Ideal for **HAND DRAPING**.	This variant has better flexural strength which gives an advantage of stiffness at the ankle area in case of an AFO.	Has a low co-efficiency of friction combined with rigidity. Modifications as required, are possible, during the fitting stage.	Is flexible and has a low co-efficiency of friction combined with a soft feel.
Approx. Heating Time	3 to 4 minutes / mm @ 180 to 200 °C	3 to 4 minutes / mm @ 180 to 200˚C	3 to 4 minutes / mm @ 180 to 200˚C	3 to 4 minutes / mm @ 160 to 180˚C	3 minutes / mm @ 160 to 180˚C
Shrinkage	Less shrinkage (upto 15%)	Less shrinkage (upto 10%)		Less shrinkage (upto 15%)	Less shrinkage (upto 15%)
Flexural Strength	Very good	Good	Very Good	Good	Less
Impact Strength	Very good	Good	Less	Good	Good
Draw Strength	Very good	Good	Good	Good	Good
Life to the End Article	Very good	Good	Good	Good	Good
Size: Width	1000 mm, 1220 mm, 1500 mm	1250 mm	1250 mm	1000 mm, 1220 mm, 1500 mm	1000 mm, 1220 mm
Length	2000 mm, 2440 mm, 3000 mm	2000 mm	2000 mm	2000 mm, 2440 mm, 3000 mm	2000 mm, 2440 mm
Thickness	2 mm upto 15 mm	2 mm upto 6 mm (at present)	2 mm upto 6 mm (at present)	1 mm upto 15 mm	1 mm upto 15 mm
Colour	Natural, Caucasian Skin, Olive Brown (Asian Skin) Terra (African Skin)	Natural	Natural	Natural & Caucasian Skin	Natural
Finish	Plain	Plain	Plain	Plain	Plain
Customized Sizes available upon request.					
Disclaimer: The above data is provided as a guidance only. Actual trials can only determine the results.					

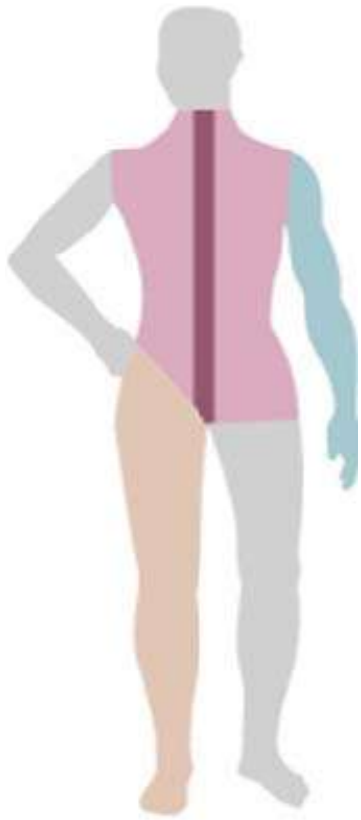
General Properties of Ortho Sheets:

- **Good melt strength.**
- **Minimum shrinkage.**
- **Improved setting time.**
- **Better impact resistance.**
- **Suitable for vacuum forming / suction moulding as well as draping applications.**

Application Guide:

Product Name	Polymer	AFO	Splint	Jacket	Brace	Collars / Belts
Ortho – 'RC'	PP-CP	√	√	√	√	
Ortho – 'P' – 'C'	PP-CP	√	√	√	√	
Ortho – 'P' – 'H' (Hard)	PP-HP	√				
Ortho – 'H'	PE-HD		√	√	√	√
Ortho – 'FLEX'	PE-LD		√	√	√	√

The usage specified here are only recommendations by Plastnova, based on regular consumption by O&P practitioners and equipment providers. The usage must be considered in light of your own requirements and abilities to mould, form or otherwise shape to your individual needs.



Lower Extremity:

Foot Orthoses
Knee Orthoses
Ankle Foot Orthoses
Knee Ankle Foot Orthoses

Spinal:

Corset
Harris Brace
Scoliosis Brace
Cervical Collar

Upper Extremity:

Wrist Hand Orthoses
Elbow Orthoses- Fingers
Boutonniere / Swan neck splint
Thumb Post

We also manufacture and supply ORTHO PIPES:

Material	Pipe OD	Thickness
PP, PPH, PE (HD & LD)	75 mm, 90 mm, 110 mm	5 mm to 6 mm

"NovaOrtho" Ortho – 'RC'

"NovaOrtho" Ortho – 'P' – 'C', Ortho – 'P' – 'H' (HARD)

"NovaOrtho" Ortho – 'H'

"NovaOrtho" Ortho – 'FLEX'

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Sangir Plastics Pvt. Ltd.
3rd Floor, Rajhans Paradise, Near Canara Bank, Bangur Nagar, Goregaon (W), Mumbai - 400104. Tel. +91 22 28717800 e-mail: sales@sangir.in