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Exclusive Distributor for  
Nitto Jushi Kogyo Co. Ltd.  
Manufacturers of **CLAREX®**

Weatherall Equipment & Instruments Ltd.  
Unit 1, Station Approach, Wendover, Bucks.  
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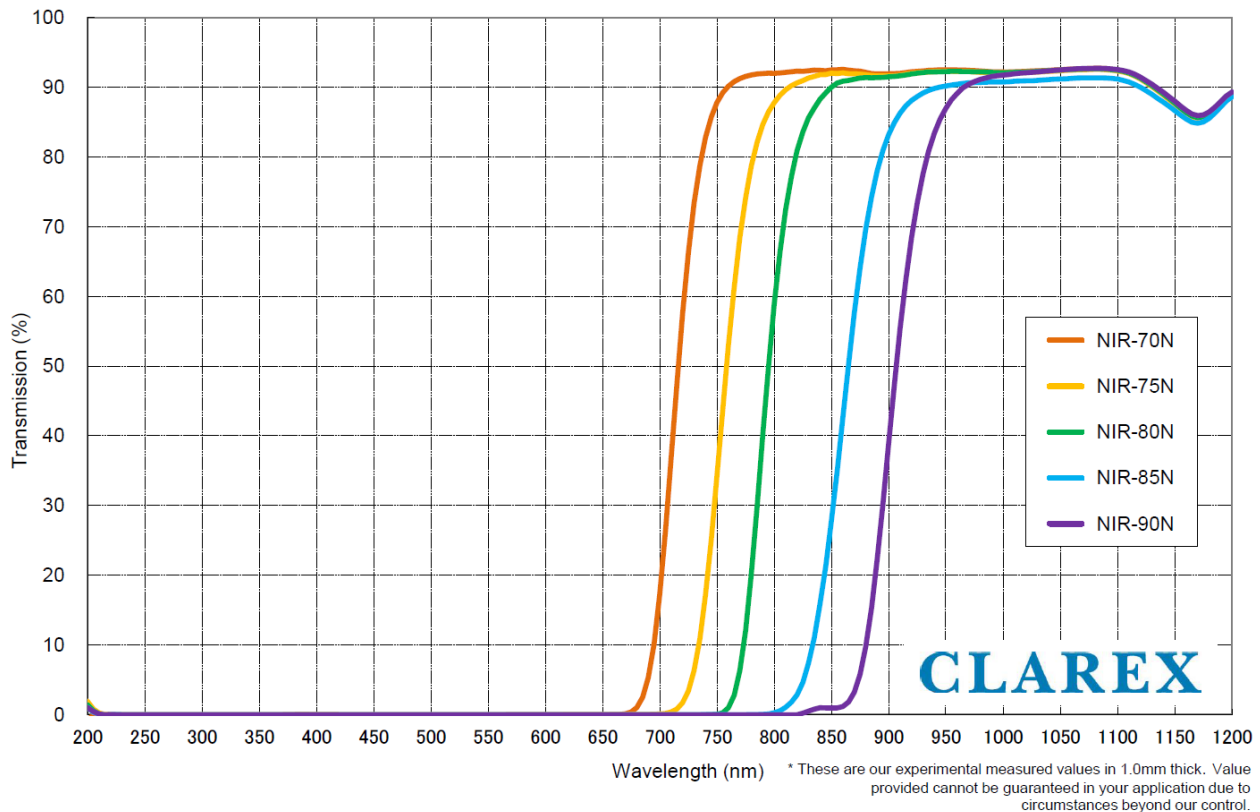
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## Clarex NIR Filter

**CLAREX** NIR Filter transmits infra-red rays and absorbs visible rays. There are 5 types of infra-red filters which transmit through the ranges of 670nm to 860nm.

### Features:

- Transmit Infra-red light.
- Excellent Optical Characteristics and weather resistance.
- Ideally suited to optical sensor applications due to zero birefringence (double refraction).
- Can be combined with Hard Coat and/or other Optical Coatings (such as Anti Reflection).
- May be combined with Flat (glossy) surface and/or Non-Glare (mat) surface sheet.



### Available Sizes and Thickness:

Size	Available Thickness
400x550mm 1000 x 1000mm	5.0mm, 4.0mm, 3.0mm, 2.0mm, 1.5mm, 1.0mm, 0.8mm, 0.5mm

Please contact us if you require another thickness or size.

### Applications:

- Radar sensors / Remote Control / Security IR detection sensor / Eye tracking sensor / etc.
- Bespoke machining and printing available according to the customer's drawings or specification.





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PROPERTIES	METHOD	UNIT	Normal Grade	Hard Coat Grade
SPECIFIC GRAVITY	ASTM D-792		1.19	1.19
OPTICAL				
Refractive Index	ASTM D-542		1.49	1.49 (1.53)
MECHANICAL				
Elongation	ASTM D-638	%	5	5
Tensile Rupture Strength	ASTM D-638	MPa	70	45
Flexural Rupture Strength	ASTM D-790	MPa	118	60
THERMAL				
Heat Distortion Temperature	ASTM D-648	°C	110	110
Maximum recommended continuous temperature		°C	80	80
Coefficient of Thermal Expansion	ASTM D-696	cm/cm/°C	7 x 10 <sup>-5</sup>	7 x 10 <sup>-5</sup>
Specific Heat	ASTM D-638	J/°C	1.47	1.47
DURABILITY				
Hot Resistance	80°C x 100hr		No Change	No Change
Cold Resistance	-40°C x 100hr		No Change	No Change
Humid Resistance	60°Cx90%RHx100hr		No Change	No Change
Thermal Cycle	-40°C ↔ 80°C (10 cycles)		No Change	No Change
ELECTRICAL				
Surface Resistivity	ASTM D-257	Ω	> 10 <sup>16</sup>	> 10 <sup>16</sup>
PENCIL HARDNESS			2H	6~8H
CHEMICAL				
Methyl Alcohol (50%)			No Change	No Change
Ethyl Alcohol (50%)			No Change	No Change
Soap Aqua Solution			No Change	No Change
Toluene			Dissolved	No Change
Acetone			Dissolved	No Change
Benzene			Swollen	No Change
Ethylene Dichloride			Dissolved	No Change
ADHESION	K-5400			100/100
FLAMMABILITY	UL standard	≥0.8mm Thickness	94HB	94HB

