

## Technical datasheet for: ABS

### Overview and Structure

NIV ABS is a single or multi-layer product made from ABS.

Typical Physical Properties Property	Value	Unit	Standard	Test Method
GENERAL PROPERTIES:				
Density*	1.06	g/cm3	ISO 1183	-
MECHANICAL PROPERTIES:				
Tensile Modulus	1900	MPa	ISO 527	23oC
Yield stress	40	MPa	ISO 527	23oC
Elongation at break	2,9	%	ISO 527	23oC
Charpy (notched)	15 - 191	KJ/m2	ISO 179	23oC, 1eA
Charpy (notched)	-	KJ/m2	ISO 179	-30oC, 1eA
Charpy (un-notched)	-	-	-	-
Charpy (un-notched)	-	-	-	-
THERMAL PROPERTIES:				
VICAT softening Point	102	oC	ISO 306	B/50
HDT-A	85	oC	ISO 75	A 1.8MPa un-annealed
UV STABILISATION:				
UV Stabilisation optional	Optional	-	-	According to customer requirement
BURNING BEHAVIOUR:				
Burning Rate**				
Flammability Rating				
Flammability Rating UL**	HB**	-	UL94	
SCRATCH/SURFACE:				
MISCELLANEOUS:				
Mould Shrinkage	0.5 - 0.7	%	-	-
Thermoforming Temperature	180 – 210	oC	-	-

Unless otherwise stated, products are tested at a typical thickness of 4mm

<sup>1</sup> The impact values stated indicate the range that this grade meets and depends on thickness of the sheet, plus actual material grades selected in each layer for every customer's project – typically customised. Mechanical suitability for each formulation should be evaluated based on the material delivered.

\* The density quoted should only be used as a guide. This value can change depending upon the type and quantity of pigments or additives used.

\*\* Fire behaviour values given by raw material suppliers or by indicative test on raw material. Not intended as a specification.