

# AF365S

## Description

AF365S is a Flame Retardant ABS product for extrusion and blow molding, designed to have a flammability rating of V-0 at 2.0mm.

## Key Features

Flame Retardancy

## Application

Battery Tray

Properties	Condition	Method	Unit	AF365S
<b>Physical</b>				
Specific Gravity	23°C	ASTM D792		1.16
Mold Shrinkage	23°C, 3.2mm	ASTM D955	%	0.4 ~ 0.7
Melt Flow Index	220°C, 10kg	ASTM D1238	g/10min	7.5
<b>Mechanical</b>				
Tensile Strength at Yield	23°C, 50mm/min, 3.2mm	ASTM D638	MPa	47
Tensile Elongation at Yield	23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	5
Tensile Elongation at Break	23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	15
Flexural Strength	23°C, 10mm/min, 6.4mm	ASTM D790	MPa	77
Flexural Modulus	23°C, 10mm/min, 6.4mm	ASTM D790	MPa	2550
Izod Impact Strength	Notched, 3.2mm, 23°C	ASTM D256	J/m	290
Izod Impact Strength	Notched, 6.4mm, 23°C	ASTM D256	J/m	200
Rockwell Hardness	R-Scale	ASTM D785		108
<b>Thermal</b>				
Heat Deflection Temperature	Edgewise, 1.82MPa, 6.4mm, Unannealed	ASTM D648	°C	87
Flammability	1.7mm	UL 94		V-1
Flammability	2.0mm	UL 94		V-0, 5VA
Flammability	2.5mm	UL 94		V-0, 5VA
Flammability	3.0mm	UL 94		V-0, 5VA

## Note

Typical values can be used only for the purpose of selecting material, and there can be variation within normal tolerances for various colors.

Values given should not be interpreted as specification and not be used for designing part or tool.

All properties, except melt flow index are measured by injection molded specimens after 48 hours storage at 23°C, 50% relative humidity.

Updated Date: 2021-05-07 Issued Date : 2021-05-14

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## Processing Guide (Extrusion)

Processing Parameters	Unit	Value
Drying Temperature	°C	70 ~ 80
Drying Time	hrs	3 ~ 4
Moisture Content	%	~ 0.01
Extrusion Temperature	°C	200 ~ 230

## Note

Recommend initial lower temperatures settings to avoid material degradation/hang-up in die & purge material from extruder prior to shutdown.

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