

# 产品比较

## Technical Data

### 产品说明

INSPIRE™  
382

BRASKEM Inspire® 382 Performance Random Copolymer has been developed for injection molding of thin wall packaging and consumer containers e.g. foodkeeper boxes. BRASKEM Inspire®382 provides very high flowability, excellent optics, superior organoleptics (low taste & odor) and a very good balance of mechanical properties.

#### Processing conditions:

BRASKEM Inspire® 382 is easy to process with injection molding equipment with conditions depending on the type of injection molding conversion technology applied. Recommended melt temperature range for injection molding from 210 to 260°C.

#### Applications:

Thin wall packaging, Consumer Goods

#### Processes:

Injection molding., Thin Wall Injection Molding

BorPure RJ766MO is a specially modified high MFR transparent polypropylene random copolymer based on proprietary Borealis Nucleation Technology (BNT), with an excellent organoleptic performance. No tainting of taste & odour of food products and a faster crystallization speed offer benefits towards all parts of the value chain. It is designed for high-speed injection moulding and contains nucleating and demoulding additives.

#### Applications

- Pails
- Square containers
- House ware and thin wall packaging
- Closures

#### Special Features

- Excellent organoleptic properties
- Very good transparency
- Good stiffness and impact balance

RJ470MO is a specially modified highly-transparent polypropylene random copolymer with very high melt flow rate. It is designed for high-speed injection moulding and contains nucleating and demoulding additives.

Additivation has been optimized to provide good antistatic and demoulding properties without blooming or plate-out problems. This polymer is a CR (controlled rheology) grade with narrow molecular weight distribution giving low warpage. Products originating from this grade have excellent transparency and gloss, and good balance of stiffness and impact strength at ambient temperatures.

BorPure™  
RJ766MO

Borealis PP  
RJ470MO

#### Applications

- Lids
- Square containers
- Square boxes



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### Special features

- Good clarity
- Good gloss
- stiffness and impact balance

BJ368MO is a polypropylene copolymer characterized by good flow, and optimum combination of high stiffness and high impact strength.

The material is nucleated with Borealis Nucleation Technology (BNT). Flow properties, nucleation and good stiffness give potential for cycle time reduction. The material have good antistatic performance and good mould release properties.

Borealis PP  
BJ368MO

### Applications

- Thin wall containers

### Special Features

- stiffness and impact balance
- Good flow behaviour
- Reduced cycle time and increased output

YUPLENE™  
R392Y

YUPLENE R392Y is random polypropylene for injection molding. It has high impact strength and excellent transparency. Since its excellent flow property makes it suitable for various large size home appliances and thin wall products. It can be used for food packaging, packaging container, and various home appliances.

YUPLENE R392Y complies with FDA regulation in 21 CFR 177.1520 and 21 CFR 178.2010 for food packaging substances.

总览	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y
生产商/供应商	• Braskem America Inc.	• Borealis AG	• Borealis AG	• Borealis AG	• SK Geo Centric
通用符号	• PP 无规共聚物	• PP 无规共聚物	• PP 无规共聚物	• PP 共聚物	• PP 无规共聚物
添加剂	--	• 成核剂 • 脱模	• 成核剂 • 抗静电性 • 脱模	• 成核剂	--



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总览	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y		
特性	<ul style="list-style-type: none"> <li>光学性能</li> <li>良好的感官特征</li> <li>流动性高</li> <li>气味低到无</li> <li>气味低到无</li> <li>食品接触的合规性</li> <li>无规共聚物</li> </ul>	<ul style="list-style-type: none"> <li>Excellent Organoleptic Properties</li> <li>成核的</li> <li>可回收材料</li> <li>快的成型周期</li> <li>良好刚性</li> <li>良好抗撞击性</li> <li>清晰度，高</li> <li>无规共聚物</li> </ul>	<ul style="list-style-type: none"> <li>成核的</li> <li>低模糊现象</li> <li>低翘曲性</li> <li>高光</li> <li>抗静电性</li> <li>可控流变</li> <li>快的成型周期</li> <li>良好刚性</li> <li>良好抗撞击性</li> <li>流动性高</li> <li>清晰度，高</li> <li>脱模性能良好</li> <li>窄分子量分布</li> </ul>	<ul style="list-style-type: none"> <li>成核的</li> <li>高刚性</li> <li>高抗撞击性</li> <li>共聚物</li> <li>抗静电性</li> <li>可回收材料</li> <li>快的成型周期</li> <li>良好的流动性</li> <li>脱模性能良好</li> </ul>	<ul style="list-style-type: none"> <li>高抗撞击性</li> <li>良好的流动性</li> <li>食品接触的合规性</li> <li>无规共聚物</li> </ul>		
用途	<ul style="list-style-type: none"> <li>薄壁包装</li> <li>非特定食品应用</li> <li>食品包装</li> <li>消费品应用领域</li> </ul>	<ul style="list-style-type: none"> <li>包装</li> <li>薄壁包装</li> <li>容器</li> <li>桶</li> <li>外壳</li> </ul>	<ul style="list-style-type: none"> <li>盖子</li> <li>容器</li> </ul>	<ul style="list-style-type: none"> <li>薄壁容器</li> </ul>	<ul style="list-style-type: none"> <li>包装</li> <li>薄壁部件</li> <li>电器用具</li> <li>家用货品</li> <li>容器</li> <li>食品包装</li> <li>透明或半透明配件</li> </ul>		
机构评级	--	--	--	--	<ul style="list-style-type: none"> <li>FDA 21 CFR 177.1520</li> <li>FDA 21 CFR 178.2010</li> </ul>		
外观	--	<ul style="list-style-type: none"> <li>清晰/透明</li> </ul>	<ul style="list-style-type: none"> <li>清晰/透明</li> </ul>	--	<ul style="list-style-type: none"> <li>清晰/透明</li> </ul>		
形式	--	--	<ul style="list-style-type: none"> <li>粒子</li> </ul>	--	--		
加工方法	<ul style="list-style-type: none"> <li>注射成型</li> </ul>	<ul style="list-style-type: none"> <li>注射成型</li> </ul>	<ul style="list-style-type: none"> <li>注射成型</li> </ul>	<ul style="list-style-type: none"> <li>注射成型</li> </ul>	<ul style="list-style-type: none"> <li>注射成型</li> </ul>		
物理性能	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	测试方法
密度	0.900	0.905	0.905	0.905	--	g/cm³	ISO 1183
熔流率 ( 熔体流动速率 )							
230°C/2.16 kg	--	--	--	--	75	g/10 min	ASTM D1238
230°C/2.16 kg	70	70	70	70	--	g/10 min	ISO 1133
收缩率	--	1.0 到 2.0	1.0 到 2.0	--	--	%	
机械性能	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	测试方法
拉伸模量							
50.0 mm	--	1150	--	--	--	MPa	ISO 527-1
--	--	--	--	1500	--	MPa	ISO 527-1/50
注塑	--	--	1200	--	--	MPa	ISO 527-1/50



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机械性能	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	测试方法
抗张强度							
屈服	--	--	--	--	26.5	MPa	ASTM D638
屈服	--	29.0	--	25.0	--	MPa	ISO 527-2/50
屈服, 注塑	27.0	--	--	--	--	MPa	ISO 527-2
屈服, 注塑	--	--	30.0	--	--	MPa	ISO 527-2/50
拉伸应变							
屈服	--	12	--	4.0	--	%	ISO 527-2/50
屈服, 注塑	13	--	--	--	--	%	ISO 527-2
屈服, 注塑	--	--	12	--	--	%	ISO 527-2/50
断裂	--	--	--	--	> 250	%	ASTM D638
弯曲模量							
--	--	--	--	--	1180	MPa	ASTM D790
--	--	1050	--	1500	--	MPa	ISO 178
注塑	--	--	1150	--	--	MPa	ISO 178
1% 正割 : 注塑	1050	--	--	--	--	MPa	ISO 178
冲击性能	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	测试方法
简支梁缺口冲击强度							
-20°C	--	--	--	3.5	--	kJ/m²	ISO 179/1eA
0°C, 注塑	1.5	--	--	--	--	kJ/m²	ISO 179
23°C, 注塑	5.0	--	--	--	--	kJ/m²	ISO 179
23°C	--	4.5	--	5.5	--	kJ/m²	ISO 179/1eA
23°C, 注塑	--	--	4.0	--	--	kJ/m²	ISO 179/1eA
悬臂梁缺口冲击强度 (23°C)	--	--	--	--	34	J/m	ASTM D256
硬度	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	测试方法
洛氏硬度 (R 级)	--	--	--	--	80		ASTM D785
热性能	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	测试方法
载荷下热变形温度							ISO 75-2/B
0.45 MPa, 未退火	85.0	75.0	--	--	--	°C	
0.45 MPa, 未退火 <sup>3</sup>	--	--	80.0	--	--	°C	
维卡软化温度							
--	--	--	--	--	128	°C	ASTM D1525
--	126	--	--	--	--	°C	ISO 306/A



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光学性能	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	测试方法
雾度 (1000 μm)	--	--	--	--	7.00	%	ASTM D1003
补充信息	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	测试方法
Heat Deflection Temperature							
--	--	--	--	102	--	°C	ISO 75-2
--	--	--	--	--	104	°C	ASTM D648
Oven Aging - in Air (150°C)	--	--	--	--	15.0	day	ASTM D3012
注射	INSPIRE™ 382	BorPure™ RJ766MO	Borealis PP RJ470MO	Borealis PP BJ368MO	YUPLENE™ R392Y	单位制	
加工 (熔体) 温度	--	210 到 260	200 到 250	210 到 260	--	°C	
模具温度	--	15 到 40	15 到 40	10 到 30	--	°C	
注射速度	--	快速	快速	快速	--		
保压	--	20.0 到 50.0	20.0 到 50.0	20.0 到 50.0	--	MPa	

