# FRblend® PA6-1302

### Polyamide 6

Colour Image Plastic Compound Sdn. Bhd. (CIPC)

#### Message:

FRblend® PA6-1302 is 30% glass fiber reinforced, flame retardant polyamide compound. This grade offers heat stability and excellent flame retardancy.

Additive         Flame Retardant Heat Stabilizer           Features         Flame Retardant Heat Stabilized           Uses         Automotive Applications Electrical/Electronic Applications           Forms         Pellets           Processing Method         Injection Molding           Physical         Nominal Value         Unit         Test Method           Specific Gravity         1.62         g/cm²         ASTM D752           Molding Shrinkage - Flow (3.20 mm)         0.20 to 0.40         %         ASTM D955           Water Absorption (24 hr)         1.2         %         ASTM D570           Mechanical         Nominal Value         Unit         Test Method           Tensile Strength         1.53         MPa         ASTM D638           Tensile Elongation (Break)         2.6         %         ASTM D638           Flexural Strength         2.6         %         ASTM D638           Flexural Greaty         2.6         %         ASTM D638           Flexural Strength         2.6         %         ASTM D638           Flexural Strength         2.6         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8	General Information			
Heat Stabilizer	Filler / Reinforcement	Glass Fiber,30% Filler by Weight		
Features Flame Retardant Heat Stabilized  Uses Automotive Applications Electrical/Electronic Applications Electrical/Electronic Applications Forms Pellets  Processing Method Injection Molding  Physical Nominal Value Unit Test Method  Specific Gravity 1.62 g/cm² ASTM D792  Molding Shrinkage - Flow (3.20 mm) 0.20 to 0.40 % ASTM D955  Water Absorption (24 hr) 1.2 % ASTM D955  Water Absorption (24 hr) 1.2 % ASTM D670  Mechanical Nominal Value Unit Test Method  Tensile Strength 153 MPa ASTM D638  Tensile Strength 153 MPa ASTM D638  Flexural Modulus 9110 MPa ASTM D638  Flexural Modulus 9110 MPa ASTM D638  Flexural Modulus 9110 MPa ASTM D790  Impact Nominal Value Unit Test Method  Notiched Izod Impact (23°C) 130 J/m ASTM D790  Impact Nominal Value Unit Test Method  Notiched Izod Impact (23°C) 130 J/m ASTM D566  Thermal Nominal Value Unit Test Method  Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm) 196 °C ASTM D648  Flammability Nominal Value Unit  Flammability Nominal Value Unit  Plamma Rating (1.60 mm) V-0 Unit  Unit  Test Method  Plamma Rating (1.60 mm) V-0 Unit  Plampacture 80.0 to 100 °C  Drying Temperature 80.0 to 100 °C  Drying Time 4.0 to 6.0 hr  Rear Temperature 2010 230 °C	Additive	Flame Retardant		
Uses Automotive Applications Electrical/Electronic Applications Forms Pellets Processing Method Injection Molding Physical Nominal Value Unit Test Method Specific Gravity 1.62 % ASTM D570 Molding Shrinkage - Flow (3.20 mm) 0.20 to 0.40 % ASTM D570 Molding Shrinkage - Flow (3.20 mm) 1.2 % ASTM D570 Methanical Nominal Value Unit Test Method Tensile Strength 153 MPa ASTM D638 Tensile Elongation (Break) 2.6 % ASTM D638 Tensile Elongation (Break) 2.6 % ASTM D638 Tensile Elongation (Break) 2.6 MPa ASTM D790 Flexural Modulus 9110 MPa ASTM D790 Flexural Strength 1226 MPa ASTM D790 Flexural Strength 130 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 130 J/m ASTM D790 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm) 196 °C ASTM D648 Flemmability Nominal Value Unit Flest Method Fleme Rating (1.60 mm) V-0 Unit Flest Method Fleme Rating (1.60 mm) V-0 Unit Flest Method Fleme Rating (1.60 mm) V-0 Unit		Heat Stabilizer		
Duss	Features	Flame Retardant		
Forms   Pellets   Processing Method   Injection Molding     Physical   Nominal Value   Unit   Test Method     Specific Gravity   1.62   g/cm³   ASTM D792     Molding Shrinkage - Flow (3.20 mm)   0.20 to 0.40   %   ASTM D570     Mechanical   Nominal Value   Unit   Test Method     Test Method   Test Method   Was   ASTM D570     Mechanical   Nominal Value   Unit   Test Method     Test Method   Test Method   Test Method     Test Method   Test Method   Was   ASTM D638     Tensile Strength   153   MPa   ASTM D638     Tensile Elongation (Break)   2.6   %   ASTM D638     Flexural Modulus   9110   MPa   ASTM D790     Flexural Strength   226   MPa   ASTM D790     Impact   Nominal Value   Unit   Test Method     Notched Izod Impact (23°C)   130   J/m   ASTM D256     Thermal   Nominal Value   Unit   Test Method     Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)   196   °C   ASTM D648     Flammability   Nominal Value   Unit   Test Method     Flame Rating (1.60 mm)   V-0   Unit   Test Method     Flame Rating (1.60 mm)   V-0   Unit   UL 94     Injection   Nominal Value   Unit   UL 94     Injection   Nominal Value   Unit   Test Method     Drying Temperature   20 to 230   °C		Heat Stabilized		
Forms         Pellets           Processing Method         Injection Molding           Physical         Nominal Value         Unit         Test Method           Specific Gravity         1.62         g/cm³         ASTM D792           Molding Shrinkage - Flow (3.20 mm)         0.20 to 0.40         %         ASTM D955           Water Absorption (24 hr)         1.2         %         ASTM D570           Mechanical         Nominal Value         Unit         Test Method           Tensile Strength         153         MPa         ASTM D638           Flexural Modulus         9110         MPa         ASTM D790           Flexural Strength         226         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Notched Izod Impact (23*C)         130         J/m         ASTM D256           Thermal         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)         196         *C         ASTM D648           Flammability         Nominal Value         Unit         Test Method           Flame Rating (1.60 mm)         V-0         Unit         Unit         Unit           Drying Tempera	Uses	Automotive Applications		
Processing Method         Injection Molding           Physical         Nominal Value         Unit         Test Method           Specific Gravity         1.62         g/cm³         ASTM D792           Molding Shrinkage - Flow (3.20 mm)         0.20 to 0.40         %         ASTM D955           Water Absorption (24 hr)         1.2         %         ASTM D570           Mechanical         Nominal Value         Unit         Test Method           Tensile Strength         153         MPa         ASTM D638           Flexural Modulus         9110         MPa         ASTM D790           Flexural Strength         226         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Notched Izod Impact (23°C)         130         J/m         ASTM D556           Thermal         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8 Mpa, Unannealed, 4.00 mm)         196         °C         ASTM D648           Flame Rating (1.60 mm)         V-0         Unit         Test Method           Flame Rating (1.60 mm)         Nominal Value         Unit           Drying Time         4.0 to 6.0         hr           Rear Temperature <td></td> <td>Electrical/Electronic Applications</td> <td></td> <td></td>		Electrical/Electronic Applications		
Physical         Nominal Value         Unit         Test Method           Specific Gravity         1.62         g/cm³         ASTM D792           Molding Shrinkage - Flow (3.20 mm)         0.20 to 0.40         %         ASTM D955           Water Absorption (24 hr)         1.2         %         ASTM D570           Mechanical         Nominal Value         Unit         Test Method           Tensile Strength         153         MPa         ASTM D638           Flexural Modulus         9110         MPa         ASTM D790           Flexural Strength         226         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Notched Izod Impact (23°C)         130         J/m         ASTM D256           Thermal         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8 Mrs. Under	Forms	Pellets		
Specific Gravity         1.62         g/cm³         ASTM D792           Molding Shrinkage - Flow (3.20 mm)         0.20 to 0.40         %         ASTM D955           Water Absorption (24 hr)         1.2         %         ASTM D570           Mechanical         Nominal Value         Unit         Test Method           Tensile Strength         153         MPa         ASTM D638           Flexural Modulus         9110         MPa         ASTM D790           Flexural Strength         226         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Notched Izod Impact (23°C)         130         J/m         ASTM D256           Thermal         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)         196         °C         ASTM D648           Flammability         Nominal Value         Unit         Test Method           Flame Rating (1.60 mm)         V-0         Unit         Test Method           Flame Rating (1.60 mm)         V-0         Unit         Test Method           Polying Temperature         80.0 to 100         °C         ASTM D648           Polying Time         4.0 to 6.0	Processing Method	Injection Molding		
Molding Shrinkage - Flow (3.20 mm)         0.20 to 0.40         %         ASTM D955           Water Absorption (24 hr)         1.2         %         ASTM D570           Mechanical         Nominal Value         Unit         Test Method           Tensile Strength         153         MPa         ASTM D638           Tensile Elongation (Break)         2.6         %         ASTM D638           Flexural Modulus         9110         MPa         ASTM D790           Flexural Strength         226         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Notched Izod Impact (23°C)         130         J/m         ASTM D256           Thermal         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)         196         °C         ASTM D648           Flammability         Nominal Value         "C         ASTM D648           Flame Rating (1.60 mm)         V-0         Unit         Unit           Drying Temperature         80.0 to 100         °C         Unit           Drying Time         4.0 to 6.0         hr           Rear Temperature         220 to 230         °C	Physical	Nominal Value	Unit	Test Method
Water Absorption (24 hr)         1.2         %         ASTM D570           Mechanical         Nominal Value         Unit         Test Method           Tensile Strength         153         MPa         ASTM D638           Tensile Elongation (Break)         2.6         %         ASTM D638           Flexural Modulus         9110         MPa         ASTM D790           Flexural Strength         226         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Notched Izod Impact (23°C)         130         J/m         ASTM D256           Thermal         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)         196         °C         ASTM D648           Flammability         Nominal Value         Unit         Test Method           Flame Rating (1.60 mm)         V-0         UL 94           Injection         Nominal Value         Unit           Drying Temperature         8.0 to 100         °C           Drying Time         4.0 to 6.0         hr           Rear Temperature         20 to 230         °C	Specific Gravity	1.62	g/cm³	ASTM D792
Mechanical         Nominal Value         Unit         Test Method           Tensile Strength         153         MPa         ASTM D638           Tensile Elongation (Break)         2.6         %         ASTM D638           Flexural Modulus         9110         MPa         ASTM D790           Flexural Strength         226         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Notched Izod Impact (23°C)         130         J/m         ASTM D256           Thermal         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)         196         °C         ASTM D648           Flammability         Nominal Value         "C         ASTM D648           Flame Rating (1.60 mm)         V-0         Unit         UL 94           Injection         Nominal Value         Unit         Unit           Drying Temperature         80.0 to 100         °C         C           Drying Time         4.0 to 6.0         hr         C           Rear Temperature         220 to 230         °C         S	Molding Shrinkage - Flow (3.20 mm)	0.20 to 0.40	%	ASTM D955
Tensile Strength         153         MPa         ASTM D638           Tensile Elongation (Break)         2.6         %         ASTM D638           Flexural Modulus         9110         MPa         ASTM D790           Flexural Strength         226         MPa         ASTM D790           Impact         Nominal Value         Unit         Test Method           Notched Izod Impact (23°C)         130         J/m         ASTM D256           Thermal         Nominal Value         Unit         Test Method           Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)         196         °C         ASTM D648           Flammability         Nominal Value         C         ASTM D648           Flame Rating (1.60 mm)         V-0         Unit         Test Method           Injection         Nominal Value         Unit         UL 94           Injection         Nominal Value         Unit         UL 94           Injection         Nominal Value         Unit         V-0         C           Drying Temperature         80.0 to 100         °C         V-0	Water Absorption (24 hr)	1.2	%	ASTM D570
Tensile Elongation (Break) 2.6 % ASTM D638 Flexural Modulus 9110 MPa ASTM D790 Flexural Strength 226 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 130 J/m ASTM D256 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm) 196 °C ASTM D648 Flammability Nominal Value Unit Test Method Flame Rating (1.60 mm) V-0 UL 94 Injection Nominal Value Unit Drying Temperature 80.0 to 100 °C Drying Time 4.0 to 6.0 hr Rear Temperature 20 to 230 °C	Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus 9110 MPa ASTM D790 Flexural Strength 226 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 130 J/m ASTM D256 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm) 196 °C ASTM D648 Flammability Nominal Value Unit Test Method Flame Rating (1.60 mm) V-0 UL 94 Injection Nominal Value Unit Drying Temperature Under Load (1.8 Nominal Value Unit Test Method Flame Rating (1.60 mm) V-0 UL 94 Injection Nominal Value Unit Drying Temperature Uniter Load (1.8 Nominal Value Unit Case Test Method Unit Case Test Method Case Test M	Tensile Strength	153	MPa	ASTM D638
Flexural Strength 226 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 130 J/m ASTM D256 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm) 196 °C ASTM D648 Flammability Nominal Value Test Method Flame Rating (1.60 mm) V-0 UL 94 Injection Nominal Value Unit Drying Temperature A0 to 6.0 hr Rear Temperature A200 to 230 °C	Tensile Elongation (Break)	2.6	%	ASTM D638
Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 130 J/m ASTM D256 Thermal Nominal Value Unit Test Method  Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm) 196 °C ASTM D648 Flammability Nominal Value Test Method  Injection Nominal Value Unit UL 94  Injection Nominal Value Unit  Drying Temperature 80.0 to 100 °C  Drying Time 4.0 to 6.0 hr  Rear Temperature 220 to 230 °C	Flexural Modulus	9110	MPa	ASTM D790
Notched Izod Impact (23°C) 130 J/m ASTM D256  Thermal Nominal Value Unit Test Method  Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm) 196 °C ASTM D648  Flammability Nominal Value Test Method  Flame Rating (1.60 mm) V-0 UL 94  Injection Nominal Value Unit  Drying Temperature 80.0 to 100 °C  Drying Time 4.0 to 6.0 hr  Rear Temperature 220 to 230 °C	Flexural Strength	226	MPa	ASTM D790
Thermal Nominal Value Unit Test Method  Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm) 196 °C ASTM D648  Flammability Nominal Value Test Method  Flame Rating (1.60 mm) V-0 UL 94  Injection Nominal Value Unit  Drying Temperature 80.0 to 100 °C  Drying Time 4.0 to 6.0 hr  Rear Temperature 220 to 230 °C	Impact	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)  196  C  RIammability  Nominal Value  Test Method  UL 94  Injection  Nominal Value  Unit  Drying Temperature  80.0 to 100  C  Drying Time  4.0 to 6.0  Rear Temperature  220 to 230  C  C  ASTM D648  ASTM D648  ASTM D648  ASTM D648  ASTM D648  ASTM D648  Test Method  UL 94  In 94  In 95  In 95  In 96  In 96  In 97  In 97  In 98	Notched Izod Impact (23°C)	130	J/m	ASTM D256
MPa, Unannealed, 4.00 mm) 196 °C ASTM D648  Flammability Nominal Value Test Method  Flame Rating (1.60 mm) V-0 UL 94  Injection Nominal Value Unit  Drying Temperature 80.0 to 100 °C  Drying Time 4.0 to 6.0 hr  Rear Temperature 220 to 230 °C	Thermal	Nominal Value	Unit	Test Method
Flame Rating (1.60 mm) V-0 UL 94  Injection Nominal Value Unit  Drying Temperature 80.0 to 100 °C  Drying Time 4.0 to 6.0 hr  Rear Temperature 220 to 230 °C	Deflection Temperature Under Load (1.8 MPa, Unannealed, 4.00 mm)	196	°C	ASTM D648
InjectionNominal ValueUnitDrying Temperature80.0 to 100°CDrying Time4.0 to 6.0hrRear Temperature220 to 230°C	Flammability	Nominal Value		Test Method
Drying Temperature 80.0 to 100 °C  Drying Time 4.0 to 6.0 hr  Rear Temperature 220 to 230 °C	Flame Rating (1.60 mm)	V-0		UL 94
Drying Time 4.0 to 6.0 hr Rear Temperature 220 to 230 °C	Injection	Nominal Value	Unit	
Rear Temperature 220 to 230 °C	Drying Temperature	80.0 to 100	°C	
·	Drying Time	4.0 to 6.0	hr	
Middle Temperature 230 to 240 °C	Rear Temperature	220 to 230	°C	
	Middle Temperature	230 to 240	°C	

Front Temperature	240 to 250	°C	
Nozzle Temperature	250 to 260	°C	
Mold Temperature	80.0 to 100	°C	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

