# NEMCON H PC DP164

### Polycarbonate

**Ovation Polymers Inc.** 

#### Message:

PC based, thermally conducting, electrically insulating grade with improved processability.

Ferrally Galaging      Gold Processability      Firstering Gold Processability      Processing Method    inder Conductive      Tensile Gold Processing Method Processing Processing Method Processing Method Processi	General Information			
Good Processibility Thermally ConductiveProcession generation of the procession of the p	Features	Electrically Insulating		
Premaily Conductive        Processing Method      Injection Method        Processing Method      Injection Method      Method        Specific Gravity      I Sind Nature      Method      AstM Dr32        Methodital      Orall Value      Method      AstM Dr32        Methodital      Orall Value      Method      AstM Dr33        Testile Elongation <sup>1</sup> (Resk, 23°C)      I Sind Scatter      AstM Dr33        Testile Elongation <sup>1</sup> (Resk, 23°C)      I Sind Scatter      AstM Dr33        Testile Elongation <sup>1</sup> (Resk, 23°C)      I Sind Scatter      AstM Dr33        Impact      Monital Value      Manu      AstM Dr33        Impact      Monital Value      Vital      AstM Dr33        Impact      Monital Value      Vital Value      Internal Value        Impact      Noral Value      Vital Value      Internal Value        Impact      Sind Scatter      Vital Value      Internal Value        Impact Scatter      Sind Scatter      Vital Value      Internal Value        Impact Scatter      Sind Scatter      Vital Value      Internal Value        Impact Scatter      Sind Scatter		Good Processability		
Processing Method      Injection Modiling        Projection      Normal Value      Unit      Test Method        Specific Gravity      1.35      Gravity      ASTM D792        Mechanical      Normal Value      Unit      Test Method        Testile Modulus <sup>1</sup> (23*C)      3950      Ma      ASTM D638        Testile Ecloration <sup>2</sup> (Break, 23*C)      12      Ma      ASTM D638        Testile Ecloration <sup>2</sup> (Break, 23*C)      12      Ma      ASTM D793        Flexural Modulus <sup>4</sup> (23*C, 50.0m Span      3690      MPa      ASTM D793        Flexural Strength <sup>5</sup> (Break, 23*C, 50.0m Span      38.0      Ma      ASTM D793        Impact      Norminal Value      Unit      Test Method        Norminal Value      Unit      Test Method        Normal Value      Vim/K      Imace        1 23C <sup>5</sup> 13 1.5      Mimal Value      Imace        1 23C <sup>5</sup> 13 1.5      Mimal Value      Imace        1 23C <sup>5</sup> 13 1.5      Mimal Value      Imace        1 23C <sup>5</sup> 13 0.15      Mimal Value      Imace        1 23C <sup>5</sup> 13 0.15		Thermally Conductive		
Processing Methodinjection ModilingProcessing MethodNormal ValueUnitText MethodSpecific Gravity1.35GravitaASTM D792MechanicalNormal ValueUnitText MethodTensile Modulus <sup>1</sup> (2010)3.95ManASTM D683Tensile Storgngh <sup>12</sup> (Reset, 2010)1.90ManASTM D683Tensile Modulus <sup>4</sup> (2010)3.90ManASTM D790Tensile Modulus <sup>4</sup> (2010)1.90ManManTensile Modulus1.90ManManTensile Modulus1.91ManManTensile Modulus1.91ManManTensile Modulus1.91ManManTensile Modulus1.91ManManTensile Modulus1.91ManManTensile Modulus1.91ManManTensile Modulus1.91ManManTensile Modulus1.91 <t< td=""><td></td><td></td><td></td><td></td></t<>				
PhysicalNorinal ValueUnitTest MethadionSpecific Gravity1.35gr.m <sup>2</sup> ASTM D792MechanicalNorinal ValueUnitTest MethodTessile Gravity <sup>1</sup> (Gravity)3.95MeGaASTM D783Tessile Gravity <sup>1</sup> (Gravity)2.70MPaASTM D783Tessile Gravity <sup>1</sup> (Gravity)12.0MPaASTM D783Tessile Gravity <sup>1</sup> (Gravity)12.0MPaASTM D780Tessile Gravity <sup>1</sup> (Gravity)12.0MPaASTM D780Tessile Gravity <sup>1</sup> (Gravity)13.0MPaASTM D780Tessile Gravity <sup>1</sup> (Gravity)13.0MPaASTM D780Tessile Gravity <sup>1</sup> (Gravity)13.0MrASTM D780Tessile Gravity <sup>1</sup> (Gravity)13.0MrASTM D780Tessile Gravity <sup>1</sup> (Gravity)13.0MrASTM D780Tessile Gravity <sup>1</sup> (Gravity)13.0Mr/MCTessile Gravity13.0Mr/MCTessile GravityMr13.0Mr/MCTessile GravityMr13.0MrTessile GravityMr13.0MrTessile GravityMr13.0MrTessile GravityMr13.0MrTessile GravityMr13.0MrTessile GravityMr13.0MrTessile GravityMr1MrMrTessile GravityMr1MrMrTessile GravityMr1MrMr	Processing Method	Injection Molding		
Specific Gravity135g/cm³ASTM D792MechanicalNominal ValueUnitTest MethodTende Modules <sup>1</sup> (2tr)3950MPaASTM D588Tendie Stoegdh <sup>2</sup> (Break, 2tr)27.0MPaASTM D583Tendie Stoegdh <sup>2</sup> (Break, 2tr)12.0MPaASTM D583Fewale Stoegdh <sup>2</sup> (Break, 2tr)12.0MPaASTM D790Fewale Stoegdh <sup>2</sup> (Break, 2tr)30.0MPaASTM D790Fewale Stoegdh 2tr>Monia ValueVirtMethodMethodFewale Stoegdh 2trSto 8.0Wirt/KarcettMethodIndet Stoegdh 2trSto 8.0Wirt/KarcettMethodIngerstreeSto 8.0Wirt/KarcettMethodSiggested Max Moisture10.0CarcettMethodIngerstreeSto 2000GarcettMethodIngerstree20.0CarcettMethodIngerstree20.0GarcettMethodIngerstree20.0GarcettMethodIngerstree20.0GarcettMethodIngerstree20.0GarcettMethod <tr< td=""><td>Physical</td><td>Nominal Value</td><td>Unit</td><td>Test Method</td></tr<>	Physical	Nominal Value	Unit	Test Method
MechanicalNomina ValueUnitTest RetendedTestile Modules <sup>1</sup> (3tr)3950MPaASTM D638Testile Strongh <sup>2</sup> (Break, 23rC)2,0MPaASTM D638Testile Elongation <sup>3</sup> (Break, 23rC)12MPaASTM D538Feural Modules <sup>4</sup> (23rC, 500 mm Spa)390MPaMPaASTM D79Feural Strongh <sup>3</sup> (Break, 23rC)30MPaASTM D79Feural Strongh <sup>4</sup> (Break, 23rC, 500 mm30MPaASTM D79Feural Strongh <sup>4</sup> (Break, 23rC, 500 mm30MPaASTM D79ImpactMonina ValueMpaASTM D79ImpactNomina ValueMinASTM D79ImpactNomina ValueMinASTM D79ImpactSto 8.0Min/KMinImpactSto 8.0Min/KMinImpactSto 8.0Min/KMinImpactSto 8.0Min/KMinImpactSto 8.0Min/KMinImpactSto 8.0MinMinImpactSto 8.0 </td <td>Specific Gravity</td> <td>1.35</td> <td>g/cm³</td> <td>ASTM D792</td>	Specific Gravity	1.35	g/cm³	ASTM D792
Tensile Modulus 1 (23°C)3950MPAASTM D638Tensile Etongation 3 (Break, 23°C)1.2%PAASTM D638Tensile Etongation 3 (Break, 23°C)1.2%PAASTM D638Feural Modulus 4 (23°C, 50.00 mm)3600MPAASTM D70Feural Strength 5 (Break, 23°C, 50.00 mm)3800MPAASTM D70Feural Strength 5 (Break, 23°C, 50.00 mm)3800MPAMPAMothed Indentation1000MPAMethodInternation1010MPAMethodInternation3000MPAMethodInternation1000MPAMethodInternation1000MPAMethodInternation1000MCMethodInternation1000MCMethodInternation1000MCMethodInternation1000MCMethodInternation1000MCMethodInternation1000MEMethodInternation1000MEMethodInternation1000MEMethodInternation1000MEMethod<	Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Break 23°C)27.0MPaASTM D638Tensile Elongation <sup>3</sup> (Break 23°C)1.2%ASTM D790Feural Strength <sup>5</sup> (Break, 23°C, 50.0 mm)36.0MPaASTM D790Foural Strength <sup>5</sup> (Break, 23°C, 50.0 mm)36.0MPaASTM D790Foural Strength <sup>5</sup> (Break, 23°C, 50.0 mm)36.0MPaASTM D790ImpactNominal ValueMinalMatch 200ASTM D260ImpactNominal ValueMinalMatch 200Match 200ImpactNominal ValueM/MKMatch 200Match 200ImpactSto 8.0M/MKMatch 200Match 200ImpactNominal ValueMinalMatch 200Match 200ImpactNominal ValueMinalMatch 200Match 200ImpactSto 8.0MinalMatch 200Match 200ImpactSto 8.0MinalMatch 200Match 200ImpactSto 8.0MinalMatch 200Match 200ImpactSto 8.0MinalMinalMatch 200ImpactSto 8.0MinalMinalMinalImpactSto 8.0MinalMinalMinalImpactSto 8.0MinalMinalMinalImpactSto 8.0MinalMinalMinalImpactSto 8.0MinalMinalMinalImpactSto 8.0MinalMinalMinalImpactSto 8.0MinalMinalMinalImpactSto 8.0Minal	Tensile Modulus <sup>1</sup> (23°C)	3950	MPa	ASTM D638
Tensile Elongation <sup>3</sup> (read, 23°)1.2% for the second seco	Tensile Strength <sup>2</sup> (Break, 23°C)	27.0	MPa	ASTM D638
Flexual Modulus <sup>4</sup> (23°C, 50.0 mm Span390MPaASTM D790SpanSa0MPaASTM D790ImpatNominal ValueUnitTextMethodNominal ValueJmASTM D256ImpatNominal ValueUnitTextMethodImpatNominal ValueUnitTextMethodImpatSta SaW/m/KSta MethodImpationSta SaW/m/KSta SaImpationSta SaW/m/KSta SaImpationSige SaSige SaSta SaImpationSige SaSaSaImpationSaSaSa </td <td>Tensile Elongation <sup>3</sup> (Break, 23°C)</td> <td>1.2</td> <td>%</td> <td>ASTM D638</td>	Tensile Elongation <sup>3</sup> (Break, 23°C)	1.2	%	ASTM D638
Ba0    Mana Mapa    ASTA D790      Impat    Nomina Value    Unit    Text Method      Notched Izod Impact (23°C)    10    J/m    ASTA D256      Thermal    Nomina Value    Unit    Text Method      2 arC <sup>6</sup> Nomina Value    Unit    Text Method      2 arC <sup>6</sup> 13 to 1.5    W/m/K    Unit    Colspan="4">Colspan="4"Colspan="4"    Colspan="4" <th< td=""><td>Flexural Modulus <sup>4</sup> (23°C, 50.0 mm Span)</td><td>3690</td><td>MPa</td><td>ASTM D790</td></th<>	Flexural Modulus <sup>4</sup> (23°C, 50.0 mm Span)	3690	MPa	ASTM D790
Span38.0MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C)130J/mASTM D256ThermalNominal ValueUnitTest MethodThermal ConductivityInternal MethodInternal Method23°C <sup>6</sup> 1.3 to 1.5W/m/KImmal Method1getConS.5 to 8.0W/m/KImmal MethodInjectionNominal ValueUnitImmal MethodDying Temperature100°CImmal MethodDying Temperature0.050%Immal MethodNiddle Temperature260 to 270°CImmal MethodMiddle Temperature260 to 270°CImmal MethodNozzle Temperature270 to 290°CImmal MethodNozzle Temperature101 to 130°CImmal MethodMod Temperature0.414 to 0.689MPaImmal MethodNotEMethodImmal MethodImmal MethodNoterestereMethodSto 2.0Sto 2.0Nozzle Temperature0.00 to 2.0°CImmal MethodNozzle Temperature0.010 to 2.0Sto 2.0Immal MethodMid Temperature0.010 to 0.00Sto 2.0Immal MethodNozzle Temperature0.010 to 0.00Immal MethodNozzle Temperature0.010 to 0.00Immal MethodNozzle Temperature0.010 to 0.00Immal MethodNozzle Temperature0.010 to 0.00Immal MethodNozzle Temperature0.010 to 0.00Im	Flexural Strength <sup>5</sup> (Break, 23°C, 50.0 mm			
ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C)130J/mASTM D256ThermalNominal ValueUnitTest MethodThermal ConductivityInternal MethodInternal Method23°C <sup>6</sup> 1.3 to 1.5W/m/KInternal MethodInjectionS5 to 8.0W/m/KInternal MethodDrying Temperature100°CInternal ConductivityDrying Temperature0.050%Internal ConductivitySuggested Max Moisture0.50 to 260°CInternal ConductivityMiddle Temperature260 to 270°CInternal ConductivityNozal Temperature270 to 290°CInternal ConductivityMod Temperature110 to 130°CInternal ConductivityMod Temperature0.110 to 130°CInternal ConductivityMod Temperature0.110 to 130Processing (Meth) TempInto 130Sterw Speed0.110 to 120Processing (Methode)Into 130MoteInto 130Processing (Methode)Into 130Sterw Speed0.120Processing (Methode)Into 130NoteInto 130Processing (Methode)Into 130	Span)	38.0	МРа	ASTM D790
Notched Izod Impact (23°C)130//mASTM D256Thermal ConductivityTest MethodThermal ConductivityInternal Nethod23°C 61.3 to 1.5W/m/K23°C 75.5 to 8.0W/m/KInjectionNomial ValueUnitDrying Temperature100°CDrying Time0.50%Suggested Max Moisture0.50%Rear Temperature260 to 270°CMiddle Temperature260 to 280°CNozzle Temperature270 to 290°CNozzle Temperature10 to 130°CMold Temperature10 to 130°CStorew Speed0.414 to .689MPaStorew Speed60 to 120rpmNotte120rpmStorew Speed60 to 120rpmStorew Speed <td< td=""><td>Impact</td><td>Nominal Value</td><td>Unit</td><td>Test Method</td></td<>	Impact	Nominal Value	Unit	Test Method
Thermal      Nominal Value      Unit      Test Method        Thermal Conductivity      Internal Method      Internal Method        23°C <sup>6</sup> 1.3 to 1.5      W/m/K        23°C <sup>7</sup> 5.5 to 8.0      W/m/K        Injection      Nominal Value      Unit      Internal Method        Drying Temperature      100      °C      Internal Method        Drying Time      4.0      hr      Internal Method        Suggested Max Moisture      0.050      %C      Internal Method        Middle Temperature      260 to 270      °C      Internal Method        Nozzle Temperature      270 to 290      °C      Internal Method        Mold Temperature      101 to 130      °C      Internal Method        Mold Temperature      041 to 0.689      MPa      Internal Method        Serw Speed      60 to 120      rpm      Internal Method	Notched Izod Impact (23°C)	130	J/m	ASTM D256
Thermal Conductivity      Internal Method        23°C <sup>6</sup> 1,3 to 1,5      W/m/K        23°C <sup>7</sup> 5,5 to 8,0      W/m/K        Injection      Nominal Value      Unit        Drying Temperature      100      C        Drying Time      4.0      hr        Suggested Max Moisture      0.050      %        Middle Temperature      20 to 260      °C        Nord Value      °C      C        Nord Value      °C      C        Nord Value      %      C        Suggested Max Moisture      0.050,0      %        Nord Value      %      C        Nord Value      60 to 270      °C        Nord Value      %      C        Nord Value      %	Thermal	Nominal Value	Unit	Test Method
23°C 61.3 to 1.5W/m/K23°C 75.5 to 8.0W/m/KInjectionNominal ValueUnitDrying Temperature100°CDrying Time4.0hrSuggested Max Moisture0.050%CRear Temperature250 to 260°CMiddle Temperature260 to 270°CNozzle Temperature260 to 280°CNozzle Temperature270 to 290°CNodd Temperature110 to 130°CMold Temperature0.414 to .689MPaNOTEYmYm	Thermal Conductivity			Internal Method
23°C 75.5 to 8.0W/m/KInjectionNominal ValueUnitDrying Temperature100°CDrying Time4.0hrSuggested Max Moisture0.050%0Rear Temperature250 to 260°CMiddle Temperature260 to 270°CFront Temperature260 to 280°CNozzle Temperature270 to 290°CMold Temperature110 to 130°CBack Pressure0.414 to .689MPaNOTEYongYongNOTEYongYong	23°C <sup>6</sup>	1.3 to 1.5	W/m/K	
InjectionNominal ValueUnitDrying Temperature100°CDrying Time4.0hrSuggested Max Moisture0.050%ORear Temperature250 260°CMiddle Temperature260 020°CFront Temperature260 020°CNozzle Temperature270 020°CProcessing (Melt) Temperature10 1030°CMiddle Temperature0.10 100°CStew Speed0.414 0.689MPaNOTEVEVE	23°C <sup>7</sup>	5.5 to 8.0	W/m/K	
Pying Temperature100°CDying Time4.0hSuggested Max Moisture0.050%Rear Temperature200 200°CMiddle Temperature600 200°CStor Zender Temperature200 200°CNozzle Temperature700 200°CProcessing (Meth Temperature)100 100°CMidd Temperature101 000°CStor Zender Temperature0.414 0.089MPaMore Temperature60 120rpmMore Temperature0.120rpmMore Temperature100 100rpmStore Speed60 120rpmMore Temperature100 100rpmMore Temperature100 100rpmStore Speed100 100rpmStore	Injection	Nominal Value	Unit	
Pying Time4.0inSuggested Max Moisture0.50%Rear Temperature250 2.00%Middle Temperature260 0.20%Font Temperature200 2.00%Mozzle Temperature201 0.20%Processing (Melt) Temperature201 0.20%Mod Temperature101 0.30%Scave Speed0.414 0.689MPaMoter101 0.20mmMoter10.10mmStrew Speed0.10 1.00mmMoter1.00mm	Drying Temperature	100	°C	
Suggested Max Moisture0.050%Rear Temperature250 to 260°CMiddle Temperature260 to 270°CFront Temperature260 to 280°CNozzle Temperature270 to 290°CMold Temperature10 to 130°CBack Pressure0.414 to .689MPaScrew Speed60 to 120rpmNOTEVV	Drying Time	4.0	hr	
Rear Temperature250 to 260°CMiddle Temperature260 to 270°CFront Temperature260 to 280°CNozzle Temperature270 to 290°CProcessing (Melt) Temp270 to 290°CMold Temperature110 to 130°CBack Pressure0.414 to 0.689MPaSrew Speed60 to 120rpmMOTEStandard StandardStandard Standard	Suggested Max Moisture	0.050	%	
Middle Temperature260 to 270°CFront Temperature260 to 280°CNozzle Temperature270 to 290°CProcessing (Melt) Temp270 to 290°CMod Temperature110 to 130°CBack Pressure0.414 to 0.689MPaSrew Speed60 to 120rpmMOTEState State Sta	Rear Temperature	250 to 260	°C	
Front Temperature260 to 280°CNozzle Temperature270 to 290°CProcessing (Melt) Temp270 to 290°CMold Temperature110 to 130°CBack Pressure0.414 to 0.689MPaScrew Speed60 to 120rpmNOTEVV	Middle Temperature	260 to 270	°C	
Nozzle Temperature270 to 290°CProcessing (Melt) Temp270 to 290°CMold Temperature110 to 130°CBack Pressure0.414 to 0.689MPaScrew Speed60 to 120rpmNOTEVV	Front Temperature	260 to 280	°C	
Processing (Melt) Temp270 to 290°CMold Temperature110 to 130°CBack Pressure0.414 to 0.689MPaScrew Speed60 to 120rpmNOTEVV	Nozzle Temperature	270 to 290	°C	
Mold Temperature110 to 130°CBack Pressure0.414 to 0.689MPaScrew Speed60 to 120rpmNOTEVV	Processing (Melt) Temp	270 to 290	°C	
Back Pressure0.414 to 0.689MPaScrew Speed60 to 120rpmNOTE	Mold Temperature	110 to 130	°C	
Screw Speed  60 to 120  rpm    NOTE	Back Pressure	0.414 to 0.689	MPa	
NOTE	Screw Speed	60 to 120	rpm	
	NOTE			

1.	50 mm/min
2.	50 mm/min
3.	50 mm/min
4.	1.3 mm/min
5.	1.3 mm/min
6.	Through Plane
7.	In Plane

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

