

**Solarglas**  
**Solar Glass**Klasse:  
Class:**U3**  
**U3**Handelsname :  
Trade name : **EcoGuard ExtraClear + 3 mm**Anbieter :  
Distributor : **Guardian Czeszochowa  
Sp. z o.o.**Prüfnummer :  
Test number : **GUAP0703000SGZ**Gültigkeit :  
Validity : **06.2007 – 05.2010**

Das Glas **EcoGuard ExtraClear +** in der Dicke **3 mm** im Vertrieb durch die **Guardian Czeszochowa Sp. z o.o., ul. Korfantego 31/35, PL 42-200 Czeszochowa**, hat das SPF-Verfahren „Zertifizierung von Solarglas“ Version 2.1 durchlaufen und wurde als Solarglas (Solarthermie) zertifiziert und der Klasse U3 zugeordnet. Dem Glas wurde das Qualitätslabel **SPF07•31-U3** verliehen.

*The glass **EcoGuard ExtraClear +** of **3 mm** thickness sold by **Guardian Czeszochowa Sp. z o.o., ul. Korfantego 31/35, PL 42-200 Czeszochowa**, has passed the SPF-procedure "Certification of Solar Glass" version 2.1 and was certified as solar glass (solar thermal) and assigned to class U3. This glass has been awarded the quality label **SPF07•31-U3**.*

Rapperswil, 14.5.2007

**Dr. Andreas Bohren**  
**Leiter SPF Testing**  
**Head of SPF Testing**

Cert. Nr.: **GUAP0703000SGZ**

**Commissioner** Guardian Czestochowa Sp. z o.o.  
ul. Korfantego 31/35  
PL 42-200 Czestochowa

|                 |                                          |                                       |
|-----------------|------------------------------------------|---------------------------------------|
| <b>Product</b>  | EcoGuard ExtraClear + 3mm                | trade name / thickness                |
|                 | None                                     | treatment (anti-reflex; anti-soiling) |
|                 | 29.3.2007                                | date of delivery                      |
| <b>Test</b>     | SPF Certification Solarglass (Vers. 2.1) |                                       |
| <b>Validity</b> | 06.2007 – 05.2010                        |                                       |
| <b>Result</b>   | Solar Glass of class U3                  | <b>Label      SPF07•31-U3</b>         |

|                            |                                      |
|----------------------------|--------------------------------------|
| <b>Transmission Factor</b> | <b><math>F_{\tau} = 0.890</math></b> |
|----------------------------|--------------------------------------|

|                |                    |                                            |
|----------------|--------------------|--------------------------------------------|
| <b>Source:</b> | <b>Institution</b> | SPF-HSR, CH-8640 Rapperswil                |
|                | <b>Report</b>      | Test Report Transmittance Nr. GUAP0703000L |
|                | <b>Date</b>        | 29.3.2007                                  |

|                             |                                     |
|-----------------------------|-------------------------------------|
| <b>IAM Weighting Factor</b> | <b><math>F_{IAM} = 0.990</math></b> |
|-----------------------------|-------------------------------------|

|                |                    |                                                       |
|----------------|--------------------|-------------------------------------------------------|
| <b>Source:</b> | <b>Institution</b> | SPF-HSR, CH-8640 Rapperswil                           |
|                | <b>Report</b>      | Test Report Incidence Angle Modifier Nr. GUAP0703000t |
|                | <b>Date</b>        | 5.4.2007                                              |

|                                |                                    |
|--------------------------------|------------------------------------|
| <b>Photodegradation Factor</b> | <b><math>F_{UV} = 1.000</math></b> |
|--------------------------------|------------------------------------|

|                |                    |                                                                                         |
|----------------|--------------------|-----------------------------------------------------------------------------------------|
| <b>Source:</b> | <b>Institution</b> | SPF-HSR, CH-8640 Rapperswil                                                             |
|                | <b>Report</b>      | Test Report Transmittance Nr. GUAP0703000L & Test Report Transmittance Nr. GUAP0703001L |
|                | <b>Date</b>        | 23.4.2007                                                                               |

|                           |                                     |
|---------------------------|-------------------------------------|
| <b>Degradation Factor</b> | <b><math>F_{DEG} = 1.000</math></b> |
|---------------------------|-------------------------------------|

|                |                    |   |
|----------------|--------------------|---|
| <b>Source:</b> | <b>Institution</b> | - |
|                | <b>Report</b>      | - |
|                | <b>Date</b>        | - |

|                               |                                       |
|-------------------------------|---------------------------------------|
| <b>Glass efficiency value</b> | <b><math>\eta_{GI} = 0.881</math></b> |
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Rapperswil, 14.5.2007

**Dr. Andreas Bohren**  
**Leiter SPF Testing / Head of SPF Testing**

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