

# iDLC, Durable Coating 8μm-12μm

UCS\_GASIR5\_05

**Productnumber:** 2Gas500005

This coating offers exceptional abrasion resistance when deposited onto Umicore's GASIR5® substrate in the pass band 8-12μm. It is a rugged coating that can withstand severe abrasion. It complies with the environmental specifications of DLC type coatings on Germanium, while offering comparable transmission and lower reflection values. This coating is applied to the outside surface of a lens or window and is normally used with the high efficiency UCS\_GASIR5\_01 on the second side.



## Spectral - additional

|                        |                                |                                                                                                |
|------------------------|--------------------------------|------------------------------------------------------------------------------------------------|
| Transmission (Average) | >90% 8μm-12μm, >85% 8μm-14μm   | For a 2 mm thick witness piece, coated one face iDLC UCS_GASIR5_05 and one face UCS_GASIR5_01. |
| Reflection (Average)   | <1.5% 8μm-12μm, <4.0% 8μm-14μm | Per surface, for a 2mm thick witness piece, coated one side UCS_GASIR5_05.                     |
| AOI                    | 0°                             |                                                                                                |

## Environmental Properties

|                   |                                        |
|-------------------|----------------------------------------|
| Adhesion          | MIL-C-48497A, 08/09/1980, para 4.5.3.1 |
| Adhesion Remark   | Tape Test                              |
| Humidity          | MIL-C-48497A, 08/09/1980, para 4.5.3.2 |
| Humidity Remark   | 72Hrs, 49°C, 95-100% relative humidity |
| Abrasion          | MIL-C-48497A, 08/09/1980, para 4.5.5.1 |
| Abrasion Remark   | Severe, 20 Strokes Eraser              |
| Salt spray        | MIL-C-675C, 22/08/1980, para 4.5.9,    |
| Salt spray Remark | 7 days salt spray fog exposure         |

## Environmental - additional

|            |                                |                              |
|------------|--------------------------------|------------------------------|
| Wiper Test | TS1888, 01/07/1979, para 5.4.3 | 10,000 wipes with windscreen |
|------------|--------------------------------|------------------------------|

