

## Highlights

- Breakthrough pad platform for single-wafer SiC processing
- Delivers a high removal rate
- Meets the surface roughness requirements for 200 mm SiC wafers

Next-generation pad for SiC single-wafer polish process

# IKONIC<sup>™</sup> 4250L

The polymer formulation IKONIC<sup>™</sup> 4250L delivers a high removal rate. It also meets the surface roughness requirements for 200 mm SiC wafers. The controlled porosity and tight distribution of the pore size results in longer pad lifetime. The pad formulation IKONIC<sup>™</sup> 4250L also offers the possibility for longer lifetime due to lower cut rates with pad conditioning. The pad is with or without subpad. Slurry-reduction grooving options are available to lower slurry consumption and reduce costs.

| Polishing pad | Base<br>material | Compres-<br>sibility % | Hardness | Hardness<br>test | Density<br>[g/cm³] |
|---------------|------------------|------------------------|----------|------------------|--------------------|
| IKONIC™ 4250L | Urethane         | 20                     | 66       | Shore D          | 0.93               |
| IC1000™       | Urethane         | 13                     | 60       | Shore D          | 0.80               |

#### Pad product roadmap for SiC wafer polishing

|                       | Stock            | removal polish   | CMP-step with KMnO4    |           |         |         |
|-----------------------|------------------|------------------|------------------------|-----------|---------|---------|
|                       | Felt-based pads  |                  | Polyurethane-type pads |           |         |         |
| Pad type              | SUBA™<br>600     | SUBA™<br>800     | мн                     | EXTERION™ | IC1000™ | IKONIC™ |
| SEM<br>[×100]         |                  |                  |                        |           |         |         |
| Thickness<br>[mm]     | 1.25             | 1.27             | 1.0                    | 1.0       | 1.3     | 1.3     |
| Density<br>[g/cm³]    | 0.37             | 0.41             | 0.80                   | 0.86      | 0.80    | 0.93    |
| Hardness<br>(Shore D) | 77<br>(Asker -C) | 84<br>(Asker -C) | 30D                    | 54D       | 60D     | 66D     |

# PUREON



IKONIC<sup>™</sup> is a breakthrough pad platform for single-wafer SiC processing. It delivers a high removal rate, while also meeting the surface roughness requirements for 200 mm SiC wafers.



Pureon offers a variety of slurries in a wide range of viscosities and custom formulations to match MH polishing pads. We are happy to assist you in finding the best suitable products.

### Product specifications

| Base material | Urethane                                 |
|---------------|--|
| Shelf life    | . 12 months                              |
| Applications  | Silicon carbide, various hard substrates |

## Application recommendations

Handling ...... Apply only to a clean, dry surface at room temperature. If an appropriate solvent, such as isopropyl alcohol, is used to clean the platen after a pad removal, allow the platen to dry completely and return to room temperature before applying a new pad. Solvents remaining on the platen or an unusually cold platen will lower PSA adhesion.

> When applying the pad to the platen, peel the release liner from one edge of the pad. Fold liner back approximately two inches. Align the pad with the edge of the platen and adhere. In one continuous movement, slowly peel the remaining release liner off the pad while pressing the pad down on the platen. The application should be smooth and uniform with even pressure from the pad mounting tool (such as a flat disk or hand roller).

Do not try to reposition pads with PSA adhesive.

Storage .... Product should be stored and transported in the original packaging. The product should be stored in temperatures between 10 °C to 24 °C (50 °F to 75 °F) and < 50 % humidity. Exposure for six (6) months or less to conditions between -17 °C to 48 °C (0 °F and 120 °F) and / or at relative humidity of up to 100 % will not impact the product performance as long as the release liner remains intact and attached to the PSA. If the product is exposed to temperatures and humidity outside the recommended conditions, it may still be acceptable for use. In all cases, the product should be allowed to return to normal room temperatures prior to use. Disposal Dispose of in accordance with all applicable local regulations.

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