



### Highlights

- Scratch-free, uniform and reproducible polishing results
- Elimination of time-consuming diamond dispersion processes
- Elimination of diamond dust
- Easy weighing and dispensing of Liquid Diamond

Diamond concentrate (guaranteed agglomerate free)

## Liquid Diamond GAF

Liquid Diamond GAF consists of highly concentrated diamond and deionized water. The agglomerate-free dispersion of diamond particles permits scratch-free polishing results. Liquid Diamond GAF significantly simplifies the preparation of diamond slurries for sensitive polishing applications. Liquid Diamond GAF is available as polycrystalline and monocrystalline diamond in submicron sizes.

### Composition

Liquid Diamond GAF consists of diamond dispersed in deionized water by our proprietary GAF technology. The product contains no chemical additives such as dispersing agents or tensides. To prevent bacterial contamination, Liquid Diamond is stabilized with biocides.

### Dosage

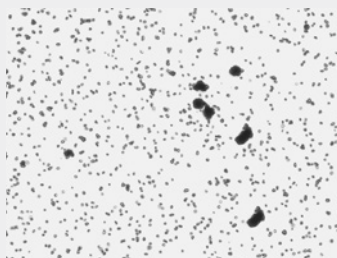
Liquid Diamond is supplied in a high concentration. The product must be diluted with deionized water, water-soluble lubricants or other additives. The desired diamond concentration can be achieved by mixing a weighted amount of Liquid Diamond to the desired liquid base. The slurry components should be mixed or stirred until homogeneous. Ultrasonic treatment may be used, but is generally not necessary.

### Handling and Storage

Liquid Diamond GAF containers should be kept closed when not in use. Do not subject Liquid Diamond to freezing or drying. Store product in a dark room at temperatures of 5 – 30 °C (41 – 86 °F). Avoid direct sunlight.



Liquid Diamond GAF agglomerate-free dispersion



Diamond powder agglomerates in suspension



Pureon offers a wide range of customized solutions. More information can be found on [www.pureon.com/products/overview](http://www.pureon.com/products/overview)

### Order information

Order code ..... Liquid Diamond DP 0-0.25 GAF  
 Packing ..... Bottles of 1 kg  
 Unit of measure ..... Carat [ct], 1 ct = 0.2 grams

### Applications

Liquid Diamond is designed for the preparation of water-soluble diamond polishing slurries. The use of Liquid Diamond instead of diamond powder eliminates the risk of scratches caused by diamond agglomerates. Liquid Diamond is also suitable for the preparation of other water-based formulations where diamond in single-particle dispersion is required.

### Precision size range

#### Polycrystalline synthetic DP Liquid Diamond

| Grit size micron   | Median (D50) [nm] | Upper limit (D99) [nm] max. | Concentration <sup>1</sup> [ct/kg] | Concentration <sup>2</sup> [%] wt |
|--------------------|-------------------|-----------------------------|------------------------------------|-----------------------------------|
| DP 0 – 0.03 GAF    | 18                | 60                          | 50                                 | 1                                 |
| DP 0 – 0.05 GAF    | 25                | 90                          | 100                                | 2                                 |
| DP 0 – 0.1 GAF     | 50                | 150                         | 100                                | 2                                 |
| DP 0 – 0.15 GAF    | 75                | 200                         | 100                                | 2                                 |
| DP 0 – 0.2 GAF     | 90                | 250                         | 100                                | 2                                 |
| DP 0 – 0.25 GAF    | 125               | 330                         | 500                                | 10                                |
| DP 0 – 0.35 GAF    | 180               | 420                         | 500                                | 10                                |
| DP 0 – 0.5 GAF     | 210               | 530                         | 500                                | 10                                |
| DP 0.25 – 0.5 GAF  | 350               | 700                         | 500                                | 10                                |
| DP 0.25 – 0.75 GAF | 500               | 900                         | 500                                | 10                                |
| DP 0.5 – 1 GAF     | 710               | 1'300                       | 500                                | 10                                |

#### Monocrystalline synthetic MSY Liquid Diamond

| Grit size micron    | Median (D50) [nm] | Upper limit (D99) [nm] max. | Concentration <sup>1</sup> [ct/kg] | Concentration <sup>2</sup> [%] wt |
|---------------------|-------------------|-----------------------------|------------------------------------|-----------------------------------|
| MSY 0 – 0.03 GAF    | 18                | 60                          | 50                                 | 1                                 |
| MSY 0 – 0.05 GAF    | 25                | 90                          | 100                                | 2                                 |
| MSY 0 – 0.1 GAF     | 50                | 150                         | 100                                | 2                                 |
| MSY 0 – 0.15 GAF    | 75                | 200                         | 100                                | 2                                 |
| MSY 0 – 0.2 GAF     | 90                | 250                         | 100                                | 2                                 |
| MSY 0 – 0.25 GAF    | 125               | 330                         | 500                                | 10                                |
| MSY 0 – 0.35 GAF    | 180               | 420                         | 500                                | 10                                |
| MSY 0 – 0.5 GAF     | 210               | 530                         | 500                                | 10                                |
| MSY 0.25 – 0.5 GAF  | 350               | 700                         | 500                                | 10                                |
| MSY 0.25 – 0.75 GAF | 500               | 900                         | 500                                | 10                                |
| MSY 0.5 – 1 GAF     | 710               | 1'300                       | 500                                | 10                                |

<sup>1</sup> Diamond concentration, in carats per kg total Liquid Diamond weight

<sup>2</sup> Diamond concentration, in % weight of total Liquid Diamond weight

### Contact

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