



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

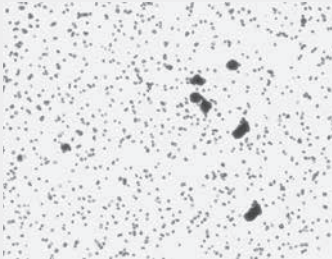
Liquid Diamond is supplied in a high concentration. The product must be diluted with deionized water, water-soluble lubricants, or other additives. The desired diamond concentration can be achieved by mixing a weighted amount of Liquid Diamond to the desired liquid base. The slurry components should 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. Get in touch with us.

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 ¹ [ct/kg]	Concentration ² [%] 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 ¹ [ct/kg]	Concentration ² [%] 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

¹ Diamond concentration, in carats per kg total Liquid Diamond weight

² Diamond concentration, in % weight of total Liquid Diamond weight

Contact

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