

PRE-MIXED, NEVER POWDER

PATENT PENDING

MADE IN THE USA

PRODUCT DESCRIPTION

A graphene-enhanced dielectric fluid in white mineral oil for single-phase immersion cooling of data center servers.

Graphene is supplied pre-mixed in a liquid carrier, never as a dry powder.

WHAT IT'S FOR

Typical uses: Single-phase immersion tanks for HPC, edge and immersed servers. Not for two-phase systems, water or glycol loops, or HVAC.

CARRIER

Drakeol white mineral oil (CAS 8042-47-5). Grade selected per order (typically Drakeol 10 NF through Drakeol 35 USP) and shown on the COA. Drakeol is a Calumet / Penreco trademark.

KEY PROPERTIES

Form	Ready-to-use graphene-enhanced dielectric fluid for single-phase immersion.
Graphene loading	0.05–0.20 wt%, stated on the certificate of analysis (COA).
Electrical	Formulated as a dielectric. Breakdown voltage (BDV) and conductivity are reported on the signed TDS for each lot. Do not energize boards until the lot's electricals are on the signed sheet.
Heat transfer	Measured against the unfilled dielectric on the signed lab sheet, at the same temperature with the same method.
Viscosity and flash point	Lot-specific, per the Drakeol grade. Values on the signed lab sheet.
Materials	Coupons (copper, soldermask and elastomers) go in with every pilot.

HOW TO USE

1. Record a baseline: BDV, conductivity, thermal conductivity, viscosity, ΔT and particle count.
2. Install coupons (copper, soldermask, elastomers), mix the container well, then fill the tank.
3. Keep boards powered off until the lot's BDV and conductivity are on the signed TDS.
4. Repeat the measurements at 7, 14 and 30 days, then inspect coupons and filters.

NOT A FIT

- Two-phase boiling systems (different product discussion and TDS).
- Water or glycol loops and cold plates (use ThermaGraph).
- HVAC systems.

PACK SIZES

SKU	Size
GI-TGD-5GAL	5 gal pail
GI-TGD-55GAL	55 gal drum
GI-TGD-275GAL	275 gal tote

Quote only. Online pricing is coming soon. Bulk quantities on request.

STORAGE AND HANDLING

- Keep the container tightly closed until use.
- Mix or stir well before use.
- Avoid contact with eyes and skin. Keep out of reach of children.
- See the Safety Data Sheet (SDS) for full safety information.

ORIGIN AND COMPLIANCE

- Patent pending.
- Made in the USA by Graphene Integrations, LLC, Charlotte, NC.
- Contains no carbon black.

Questions, samples or a quote? Graphene Integrations, LLC • Charlotte, NC, USA •
frans@grapheneintegrations.com • +1 (704) 659-3682 • grapheneintegrations.com • Buy:
<https://grapheneintegrations.com/store/graphene-thermagraph-d>

The information in this data sheet is believed to be accurate as of October 23, 2026. Results vary with formulation, materials, dose and process; users should test and confirm suitability for their own application. This data sheet does not replace the Safety Data Sheet.
Graphene Integrations, LLC • TDS rev. October 23, 2026.