SPECIALTY AND CONSTRUCTION DIVISION
Markets and Products

Oil Field
- Drilling Lubricants: GEOsulf, GEOslide
- Well Cementing Dispersants: LOMAR®, DAXAD®
- Corrosion Inhibitors and Intermediates: GEOmeen, QUATRENE®
- Demulsifiers: QUATRENE®
- Defoamers: GEO FM Series – Water, Silicone or Oil Based
- Surfactants, Foaming Agents: HYONIC®, GEOsmurf, NOPALCOL®, GEOwet

Concrete Admixtures / Grouts / Cement Manufacturing
- Superplasticizers / Dispersants: LOMAR®, DILOFLO®, DAXAD®
- Waterproofing / Damp Proofing: NOPCOTE®, GEOest
- Defoamers: GEO FM Series – Water, Silicone or Oil Based
- Surfactants: HYONIC®, NOPALCOL®, GEOwet
- Grinding Aids / Cement Performance Enhancers: GEOspere, DAXAD®

Gypsum Wallboard / Plasters / Joint Compound / Textures / Ceiling Tiles
- Water Reducers / Dispersants: LOMAR®, DILOFLO®, DAXAD®
- Defoamers: GEO FM Series – Water, Silicone or Oil Based
- Wetting Agents: GEOwet
- Foaming Agents: HYONIC®

Emulsion Polymerization
- Secondary Emulsifiers: LOMAR®, DAXAD®

Ceramics / Refractories
- Dispersants: LOMAR®, GEOspere, p-DAXAD®
- Lubricants: NOPCOTE®, Ammonium Stearate, Potassium Oleate
- Defoamers: GEO FM Series – Water, Silicone or Oil Based
- Wetting Agents: GEOwet, GEOsulf, NOPALCOL®

Specialty Performance Enhancing Additives (Clay, Mineral, Fiberglass Material, Toll Manufacturing)
- Dispersants for Aqueous Media: LOMAR®, GEOspere, DAXAD®, p-DAXAD®
- Defoamers: GEO FM Series – Water, Silicone or Oil Based
- Wetting Agents: GEOwet
- Surfactants: HYONIC®, NOPALCOL®, GEOsulf, GEOmeen, Glassperse
- Lubricants: NOPCOTE®, Ammonium Stearate
- Corrosion Inhibitors: GEOmeen

LOMAR®, DAXAD®, DILOFLO®, QUATRENE®, GEOspere, DAXAD®, HYONIC®, NOPALCOL®, and DAXAD® are registered trademarks of GEO Specialty Chemicals.
GEO Specialty Chemicals is a global leader in naphthalene sulfonation chemistry. Our technical team has spent decades in the business and has developed some of the world’s most advanced dispersants.

We manufacture the widest variety of products in the industry. We can customize liquids or powders according to your specific needs by altering the degree of sulfonation, molecular weight, solids content, salt type, salt level and several other parameters.

The table below is only a representative sample of our polynaphthalene sulfonate products but it demonstrates their many applications. Numerous more grades are available or being developed.

**let us tailor a dispersant for your application**

<table>
<thead>
<tr>
<th>COLOR</th>
<th>DEGREE OF SULFONATION</th>
<th>SOLIDS / %</th>
<th>SALT TYPE</th>
<th>SALT (DRIY BASIS) / %MAX</th>
<th>AGRICULTURE</th>
<th>CARBON BLACK</th>
<th>CERAMICS</th>
<th>CONCRETE</th>
<th>CRUDE</th>
<th>OILFIELD</th>
<th>EMULSION</th>
<th>POLYMERIZATION</th>
<th>TANNING</th>
<th>TEXTILES</th>
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</table>

Dispersants like Lomar®, Daxad® and Diloflo® function through adsorption of their hydrophobic polymer backbone onto the surface of a suspended particle. The anionic sulfonate group is oriented away from the particle and imparts a negative charge causing them to repel each other. This effect prevents agglomeration and floc formation. Lomar®, Daxad® and Diloflo® dispersants are effective because they:

- Decrease slurry viscosity
- Increase slurry concentration
- Perform in a wide pH range
- Do not affect surface tension
- Do not contribute to foaming
- Aid in forming stable emulsions
- Reduce surface energy
- Produce faster grinding times