



Your Partner in Custom Manufacturing

The background of the lower half of the page is a vibrant red gradient. Overlaid on this background is a complex, three-dimensional molecular structure. It consists of several large, semi-transparent spheres connected by thin, translucent tubes. Smaller spheres are attached to the larger ones, creating a network of interconnected nodes and edges, reminiscent of a chemical or biological structure.

# SPECIALTY & CUSTOM CHEMICALS

215.957.5880 | [varsal.com](http://varsal.com)

# The Varsal Story

Since our founding in 1993, Varsal has grown into a technically-focused global manufacturer of specialty chemicals. Headquartered in Warminster, PA, Varsal has an ISO-9001 Certified and GMP-compliant chemical manufacturing center and research/QC laboratory in Tangshan, China.

## The Varsal Advantage

- Guaranteed high-quality products and services with stringent quality assurance program (ISO 9001 Certified, GMP-compliant)
- Deep chemical and instrumentation technical expertise (~ 80 patents)
- Numerous 25+ year relationships with Fortune 500 clients
- 25+ years of ISO/GMP-compliant manufacturing experience
- Extensive global commercial, logistics and procurement capabilities
- Technical, product-driven value creation (2x Inc. 5000 honoree)

**We forge everlasting partnerships by offering quality products at competitive prices with on-time delivery.**



## Core Products

<b>TosMIC</b>	<b>HPA</b>	<b>Triflics (TFA, TFAA)</b>
<b>Application</b>	<b>Application</b>	<b>Application</b>
Intermediate used primarily in pharmaceutical and specialty industrial applications	Powerful reducing agent used in pharmaceutical, industrial, and textile applications	Used in alkylation, esterification, polymerization reactions, and as a reagent
<b>Varsal Advantage</b>	<b>Varsal Advantage</b>	<b>Varsal Advantage</b>
<ul style="list-style-type: none"> <li>✓ Leading large-scale, pharma-grade production capacity</li> <li>✓ Extremely high-purity material maximizes end-product yield and quality</li> </ul>	<ul style="list-style-type: none"> <li>✓ Ion-exchange process that treats negative ions (Cl<sup>-</sup>, SO<sub>3</sub><sup>2-</sup>)</li> <li>✓ Extremely high-purity material maximizes end-product yield and quality</li> </ul>	<ul style="list-style-type: none"> <li>✓ Very clean manufacturing process and has extremely high-purity with low residual impurities</li> <li>✓ Logistics and packaging expertise</li> </ul>
<b>MSC</b>	<b>MSA</b>	<b>MSAA</b>
<b>Application</b>	<b>Application</b>	<b>Application</b>
Used as a building block in the pharmaceutical, personal care, and other industries	Used as a solvent and as a catalyst of alkylation, esterification, and polymerization	Used as a reagent primarily for pharmaceutical and industrial applications
<b>Varsal Advantage</b>	<b>Varsal Advantage</b>	<b>Varsal Advantage</b>
<ul style="list-style-type: none"> <li>✓ Clean DMDS process</li> <li>✓ No methyl mercaptan odor and no detectable esters</li> <li>✓ Harmless to humans</li> <li>✓ Impurity cleansing capabilities</li> </ul>	<ul style="list-style-type: none"> <li>✓ Clean DMDS process</li> <li>✓ No methyl mercaptan odor and no detectable esters</li> <li>✓ Harmless to humans</li> <li>✓ Impurity cleansing capabilities</li> </ul>	<ul style="list-style-type: none"> <li>✓ Corrosive and moisture-sensitive logistics and packaging expertise</li> <li>✓ Extremely high-purity material maximizes end-product yield and quality</li> </ul>

## Industries Served



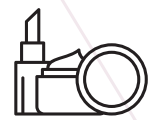
**Pharmaceutical**



**Industrial**



**Electronics**



**Personal Care**

We offer a wide range of packaging options including bulk shipments, intermediate bulk containers (totes), drums, bags, and pails.

Product	Applications				Varsal Advantage
Pharmaceutical/Technical Intermediates	Pharma	Electronics	Industrial	Personal Care/Other	
Toluenesulfonylmethyl isocyanide (TosMIC)	✓		✓		Leading producer, high-purity, low loss on drying leads to higher yield
Trifluoromethanesulfonic acid (Triflic)	✓		✓		High-purity, low waste & corrosion
Trifluoromethanesulfonic acid (Triflic), Anhydride	✓		✓		High-purity, low waste & corrosion
N,N'-Dicyclohexylcarbodiimide (DCC)	✓				High-purity, low loss on drying leads to higher yield
L-Aspartic acid	✓			✓	High-purity, customized to specification
Acetamidine hydrochloride	✓		✓	✓	High-purity, utilizes Varsal's chlorination expertise
L-Arginine ethyl ester dihydrochloride (L-AEE)	✓				High-purity, low waste leads to higher yield
Mechlorethamine hydrochloride	✓				High-purity, utilizes Varsal's chlorination expertise
Sulfonyl Chemicals	Pharma	Electronics	Industrial	Personal Care/Other	
Methanesulfonic acid (MSA) 70%	✓	✓	✓		Low odor, low oxidizables & chlorides
Methanesulfonic acid (MSA), Anhydrous/Pharma	✓	✓	✓		DMDS-based, cleaner & safer than methyl mercaptan, proven quality
Tin/Lead methanesulfonate	✓	✓			Low odor, low oxidizables & chlorides, superior performance
Methanesulfonyl chloride (MSC)	✓	✓	✓	✓	High-purity, low waste & corrosion, effective germ/pest control
Methanesulfonic anhydride (MSAA)	✓	✓	✓		High-purity with low residual properties
4-Octylbenzenesulfonic acid (OBSA)		✓	✓		High-purity with low residual properties
Propanesulfonyl chloride (PSC)	✓		✓		High-purity with low residual properties
Phosphorous Chemicals	Pharma	Electronics	Industrial	Personal Care/Other	
Sodium hypophosphite, Monohydrate	✓	✓	✓		Superior performance, low oxidizables & chlorides
Hyphosphorous acid (HPA)	✓	✓	✓		Superior performance, low oxidizables & chlorides, low odor
Nickel hypophosphite, Hexahydrate			✓	✓	Produced through proprietary process, high-purity
Phosphorus pentoxide	✓		✓	✓	High-purity with low residual impurities