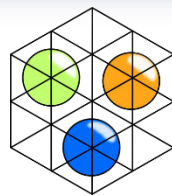




FAR Chemical

SOCMA Expo Presentation
20st February 2025



FAR CHEMICAL
A **CPS** COMPANY

WWW.FAR-CHEMICAL.COM

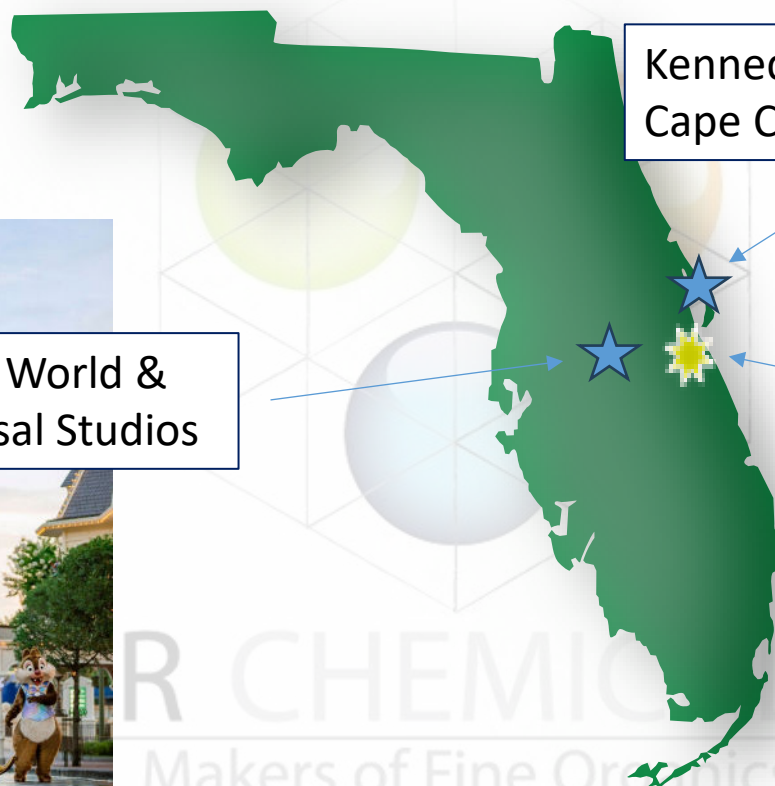
FEBRUARY 2025

FAR Chemical, Palm Bay Florida

- FAR Chemical, a CPS Performance Materials company, is a leading manufacturer of fine and specialty chemicals in Palm Bay, FL
- Our know-how and diverse, flexible asset base enable us to routinely practice a broad spectrum of classic organic chemical syntheses...
- We specialize in and excel at handling challenging, multi-step chemistry, reactive chemicals and toxic/pyrophoric materials (H-2)
- ***FAR Chemical provides comprehensive solutions for the chemistry that our customers cannot or do not want to handle***

FAR CHEMICAL INC
Makers of Fine Organics

FAR Chemical, Palm Bay Florida



Kennedy Space Center
Cape Canaveral



FAR Chemical
Palm Bay, FL

FAR CHEMICAL INC
Makers of Fine Organics

Quality & Compliance Management Focus

- Our **Quality Management System** is compliant with ISO 9001:2015 and is regularly monitored & updated
- Our **Regulatory Affairs** team maintains our TSCA submissions with the EPA, and monitors amendments to international registrations, like REACH



FAR CHEMICAL INC
Makers of Fine Organics

Environmental, Health, & Safety

- Extensive employee training & medical surveillance programs
- Detailed process hazard analyses (PHA) & routine reevaluation of current processes, as part of CPS Fine Chemicals
- Compliant with PSM & EPA risk management programs (RMP)
- Appropriate emission control systems & facility air permits
- **Member of SOCMA ChemStewards program**



The Palm Bay Plant

Key Highlights

- 26,000 ft² manufacturing facility on five acres of property in Palm Bay, FL
- Research and development, scale-up, manufacturing, quality control, order fulfillment, warehousing and shipping services
- Workforce is deployed on a three shift, five days per week schedule (24/5)

Building 2	Production Area
Building 3	Hazardous Materials Storage
Building 4	Portable Equipment Storage
Building 5	Dryer / Packaging Area
Building 6	Hazardous Waste / Raw Material Storage
Building 7	Future Production Area
Building 8	Packaging Materials Storage
Building 9	Shipping / Receiving
Building 9A	Breakroom / Locker Room
Building 10	Boiler Room
Building 11	Labs / Office
Building 12	Out of Use
Building 14	Main Production Area



Palm Bay Equipment & Capabilities

Key Process Equipment

- Glass-lined Steel Reactors 50-2000 gallon
- Stainless Steel Reactors 1000-1500 gallon
- Hastelloy Reactor System 10-500 gallon
- Distillation Columns on 30- & 1000-gallon units
- Wiped-film & Thin-film Evaporators



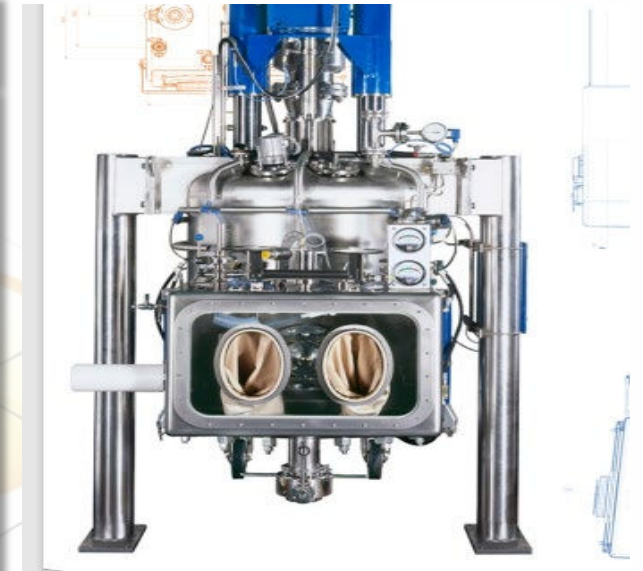
Representative Capabilities

- Gas, liquid, and solid material handling
- **Routine cryogenic reactions to -100°C at the multi-ton scale**
- Solids isolation and drying capabilities
- Short-path, wiped-film and thin-film evaporators with deep vacuum to purify heat-sensitive compounds
- **Handling of alkali metals, alkyl lithium, alkyl aluminum, metal hydrides, and other pyrophoric agents**
- Solid / liquid separations via alloy steel centrifuges, pressure nutsches and sparkler filter
- **Drying of solid products by double cone rotary dryers or vacuum tray dryers**
- Custom packaging...5g bottles to IBC's

Palm Bay Equipment & Capabilities (cont.)

Rosenmund Filter Dryer HU2984DD (Dedietrich)

- Rosenmund produced their Filter Dryer for the Pharmaceutical industry to isolate high value APIs
- The Filter Dryer at FAR Chemical was installed to fulfil orders for Pharma clients for high value raw materials
- Our unit is 0.34m² which would be capable of isolating up to 500Kg and isolating via glove-box
- It is uniquely suited to isolate highly toxic, air-sensitive or pyrophoric solids



Secondary Drying & Packaging Areas

- Solids isolation and drying can be undertake in the main plant or in dedicated/segregated areas
- Drying of solid products by double cone rotary dryers or vacuum tray dryers is available
- Dedicated packaging areas & inventory control for specific products is also possible depending on the project

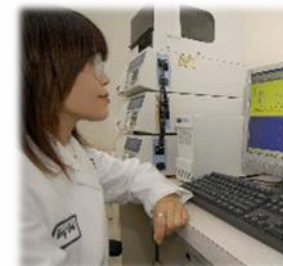
Analytical Services & Development Capabilities

Analytical Equipment

- Gas Chromatographs
- DSC
- HPLC Equipment
- GC-MS Equipment
- GPC
- NMR
- ICP-OES
- KF Titrators
- FT-IR Spectrophotometers
- UV-VIS Spectrophotometers
- Particle Size Analyzer
- Viscometers

Development Equipment

- Laboratory Scale:
 - Glassware—250 ml – 5 L
 - Wiped Film Evaporator
- Kilo Scale Laboratory:
 - Glassware—5 L – 22 L
 - 20 L Rotovap
 - Pope Still
- Plant Scale:
 - 20-50 Gal. Glass Reactors
 - 10 Gal. – 500 Gal. Hastelloy C-22
 - 30 Gal. Glass Distillation Equipment
 - Pilot Vacuum Tray Dryers



Technology Areas & Markets Served

CORE PRODUCTS & CHEMISTRIES

- Metal Acetylacetonates
- Metal-organics & Organometallics
- Organosilanes & TMCS

- Iso-thiocyanates & cyanate esters
- Catalysts & custom precursors
- Specialty polymers & acetylenes

- Halogenated Materials
- HF/Fluorinated Compounds
- Vinyl Bromide & Derivatives
- Pharmaceutical reagents & RMs
- Cyanogen Bromide

- **Pyrophoric Capabilities (H-2)**
Grignard's, Alkyl Lithium, Metal Hydrides, Sodium & Lithium Metal



MAIN MARKETS SERVED



PHARMA



STRUCTURAL COMPOSITES



COATINGS & ADHESIVES



SPECIALTY CHEMICALS



PLASTICS



FLAVOR & FRAGRANCE



ELECTRONICS



ADVANCED MATERIALS

FAR Chemical...Acetylacetonates

FAR Chemical offers an extensive array of metal acetylacetonate compounds... *standard and custom products from A to Z!*

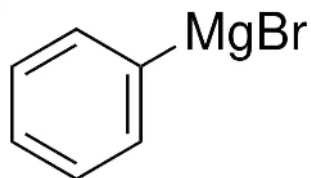


- FARMetI AAC Aluminum AcAc
- FARMetI CHR Chromium AcAc
- FARMetI CBAC Cobaltous (Co II) AcAc
- FARMetI COAC Cobaltic (Co III) AcAc
- FARMetI CUAC Copper AcAc
- FARMetI FAC Ferric (Fe III) AcAc
- FARMetI FRS Ferrous (Fe II) AcAc
- FARMetI GAD Gadolinium AcAc
- FARMetI IND Indium AcAc
- FARMetI LAAC Lanthanum AcAc
- FARMetI LIAC Lithium AcAc
- FARMetI MAC Manganous (Mn II) AcAc
- FARMetI MNAC Manganic (Mn III) AcAc
- FARMetI MOLY Molybdenum AcAc
- FARMetI NAC Nickel AcAc
- FARMetI PTS Potassium AcAc
- FARMetI SNAC Dibutyltin AcAc
- FARMetI SOD Sodium AcAc
- FARMetI TIAC Titanium AcAc
- FARMetI VAC Vanadium (V III) AcAc
- FARMetI VOAC Vanadyl AcAc
- FARMetI YTT Yttrium AcAc
- FARMetI ZNAC Zinc AcAc
- FARMetI ZRAC Zirconium AcAc

FAR Chemical...Grignard's

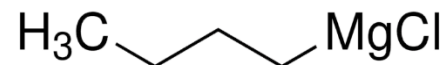
FAR Chemical offers bulk Grignard production and custom packaging to ensure safe delivery of high-quality product

Phenylmagnesium Bromide



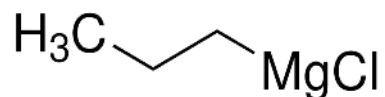
CAS# 100-58-3

n-Butylmagnesium Chloride



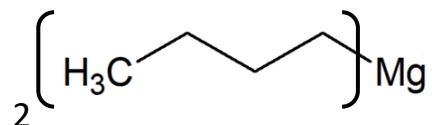
CAS# 693-04-9

N-Propylmagnesium Chloride



CAS# 2234-82-4

Di-butylmagnesium (DBM)



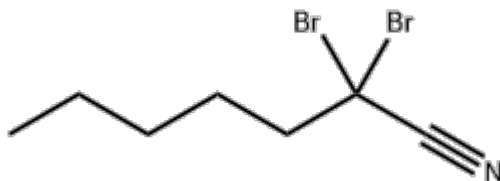
CAS# 1191-47-5

Solutions in tetrahydrofuran (THF) or di-butyl-ether (DBE)

FAR Chemical...*Bromination Compounds*

FAR Chemical has bromine available on site and can produce custom brominated compounds on large scale

2,2-Dibromoheptanitrile



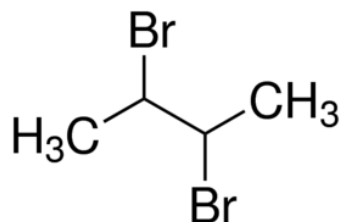
CAS# 60623-74-7

Cyanogen Bromide



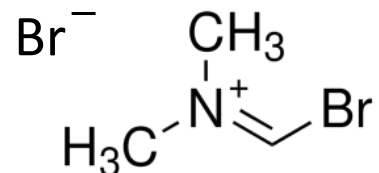
CAS# 506-68-3

2,3-Dibromobutane



CAS# 598-71-0

Bromo Vilsmeier

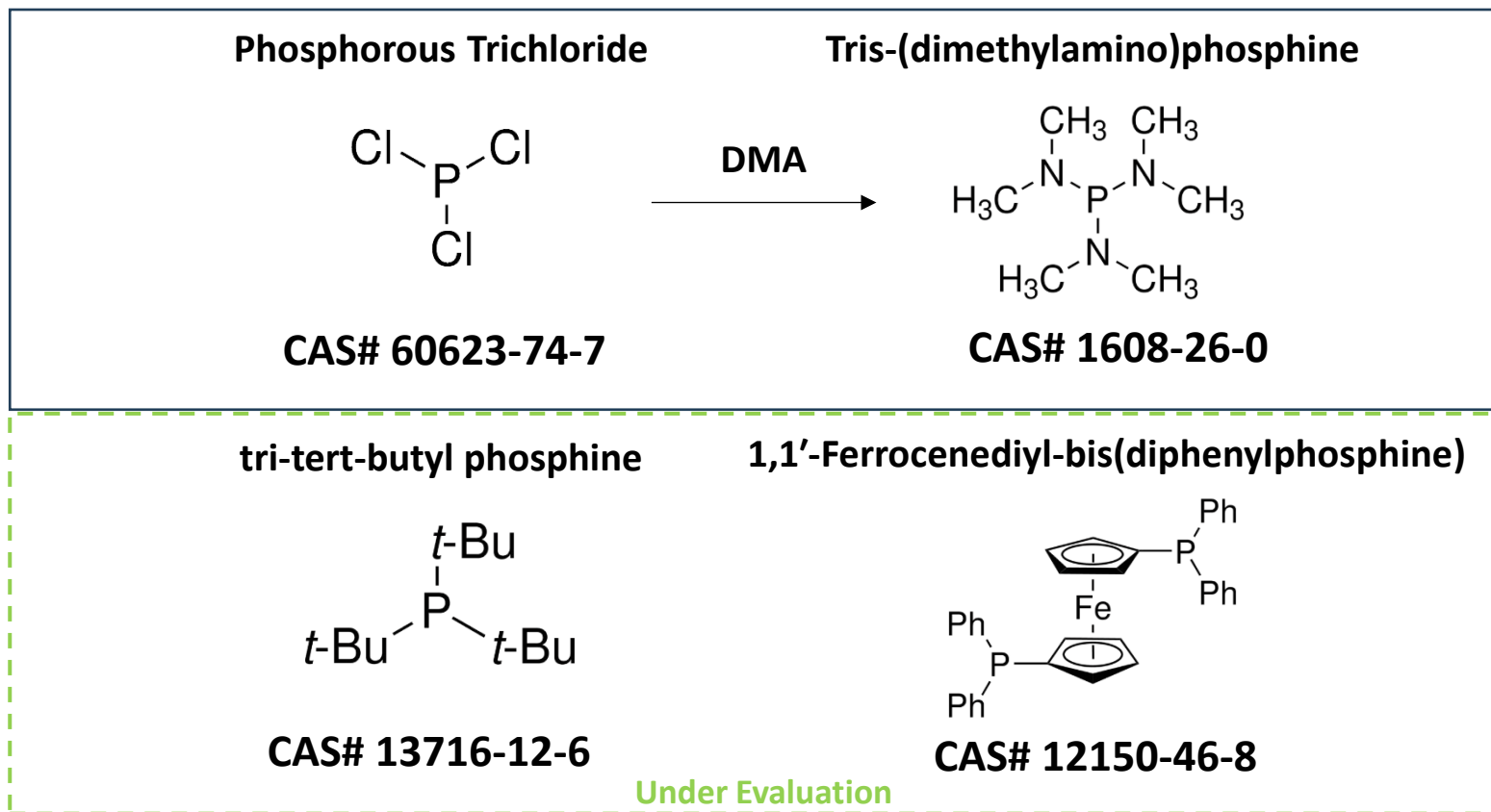


CAS# 24774-61-6

Provided as neat liquids or as solutions in organic solvents

FAR Chemical...*Phosphorous Based Compounds*

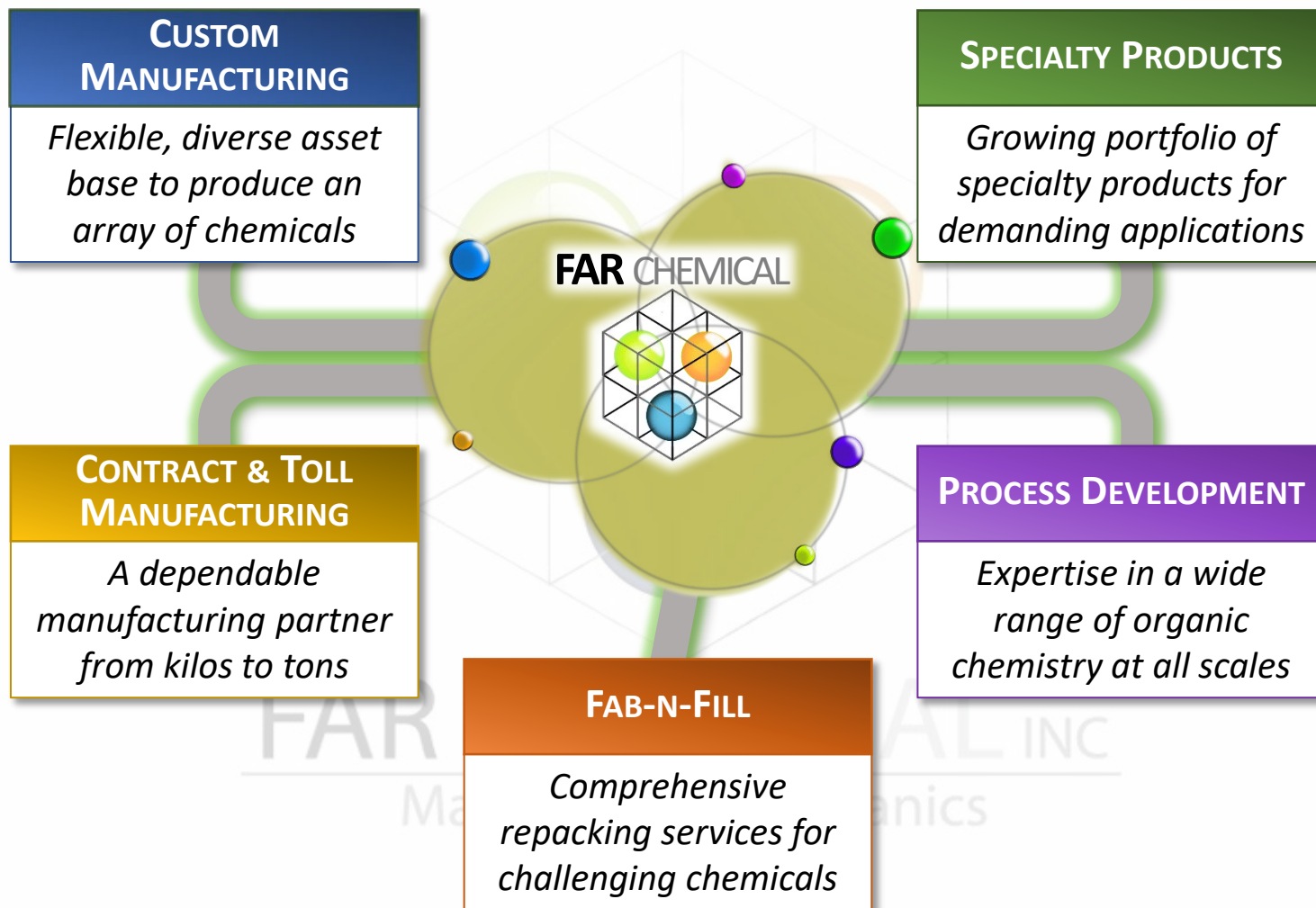
FAR Chemical uses Phosphorous Trichloride and can produce custom Phosphines and Phosphates on commercial scale



Phosphine Ligand Product Line Under Development

Our Core Offerings

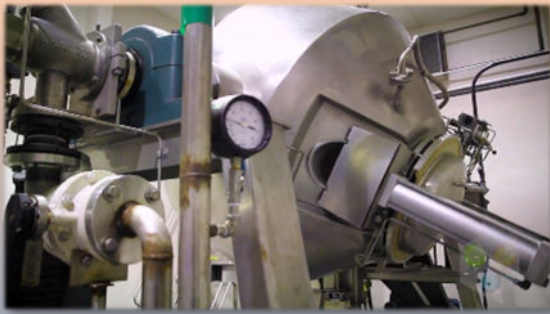
Your manufacturing partner from development through commercial scale production



FAR Chemical...*Fab-n-Fill Services*

- For decades, FAR Chemical has supplied hazardous chemicals to customers in the pharmaceutical and industrial markets
- Our expertise in handling and packaging challenging chemicals, together with our network of portable tank and cylinder fabricators, enables us to deliver customized solutions based on a customer's critical requirements.
- We can select and deliver the right container based on metallurgy and lining, size, weight, fittings, and other key engineering specifications.
- We also provide other value-added services such as on-site training, fleet maintenance, custom fill weights, and logistics coordination.
- We routinely repackage and ship globally hazardous chemicals such as trimethylsilyl chloride, bromine, and cyanogen bromide solutions.





FAR CHEMICAL
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VISIT US AT BOOTH #602

