



FIELD GUIDE · NINE KINDS OF HARD CHEMISTRY, AND WHAT A BUYER PAYS FOR

Custom Chemistry Makers

A custom chemistry plant is worth more than its reactors when it holds a permit, a skill, and a qualified customer that a buyer can't rebuild quickly: about a year at the fast end, and years or decades for a fab, implant or defense approval. I sort the US makers here by that skill. End markets drive demand, but those three things set the price. Two demand stories run through it: the US rebuilding its defense chemicals, and the AI build-out pulling on chip materials and cooling fluids.

This is a page from my research notebook. I'm trying to work out what a custom chemistry plant is worth beyond its reactors.

From the outside, fine chemistry, pharma contract manufacturing, and toll plants look like one market. They share reactors, chemists, and vocabulary. I've spent a lot of my working life around plants like these, and I kept noticing that buyers don't pay for them the same way. So I started writing down why.

THE QUESTIONS I'M WORKING THROUGH What can't a buyer rebuild? Is it the permit, the skill, or the qualified customer? Does a US address earn anything on its own? What happens to a permitted site when the rules shift, or when the equity runs out first?	WHY I'M WRITING IT DOWN In the open, so you can check it Curiously Optimistic is my open notebook on chemicals, materials, growth, teams, and AI in industrials. Every number here comes from a filing, a register, a permit, or a release, dated on the sheet. Nothing from a client engagement shows up.	HOW TO READ IT Start with the map Sheet 4 is the plain-English primer. The grid (sheet 11) and the dashboard (sheet 14) are the map, and my ranking (sheet 18) is my ranking. Each of the nine segments runs in the same order and ends with my call.
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WHERE I MIGHT BE WRONG I'm curiously optimistic about US custom chemistry, and I might be wrong on any call in here. Where a number is soft, I say so. If you see something I've missed, tell me which sheet and what the record says. When I change a call, I'll say which one and why.
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THE GUIDE ON ONE PAGE · MY GRADE FOR EACH SKILL

The whole guide on one page. My top grades go to permits nobody can rebuild quickly.

SKILL · SHEET 18 GRADE	BUILDING BLOCKS AND REAGENTS	INTERMEDIATES AND STARTING MATERIALS	ACTIVES AND MATERIALS	COMPARABLE (SHEET 18)
6 Hazardous RANK 1	Nitro, cyano blocks○	Isocyanate, nitro, phosgene-derived●	Crop actives, energetics●	Adjacent
1 Fluorine and halogens RANK 2	Reagents, F2, TFA●	Fluorinated intermediates①	Refrigerants, fluids, anesthetics●	None
8 Licensed handling RANK 3	Controlled intermediates○	Scheduled, potent intermediates①	Controlled API, HPAPI, radio●	Direct
2 Organometallics RANK 4	Grignard, boranes, metal alkyls①	Coupling steps①	Catalysts, precursors●	Adjacent
4 High pressure RANK 4	Specialty amines○	Hydrogenated, alkoxyated①	Surfactants, performance○	Adjacent
5 Polymers and CASE WATCH	Monomers, photoinitiators○	Oligomers, resin intermediates①	Resins, prepregs, adhesives●	Adjacent
3 Silicon WATCH	Silanes, siloxanes①	Silylating agents○	Fab precursors, silicones●	Adjacent
7 High purity WATCH	Reagents, catalog①	Catalyst salts, precursors①	Electronic-grade acids, salts●	Adjacent
9 Modality synthesis AVOID*	Amino acids, amidites, lipids①	Protected fragments①	Peptide and oligo API●	Adjacent

▲ WHICH STEP PAYS BEST: MY GUESS (SHEET 13)

SHADE = SHEET 18 GRADE 1 2 3 4 watch avoid* DOT = WHERE MONEY WENT (SHEET 5) ● went here ① some ○ little or none disclosed

* Avoid for mid-market entry: modality works with a contract book a mid-market buyer can't get (sheet 18).

Sources: grades and comparables from sheet 18; step contents and money dots from sheet 5, my read of the deal and capex tape on sheets 32, 41, 46, 53, 59, 69, 78, 86 and 94; the middle-step hypothesis from sheet 13. August Grace read, Oct 11, 2026 (judgment, not a document). CASE is coatings, adhesives, sealants and elastomers; row 5 covers the makers of the molecules behind them and the formulators (sheet 57).

[illegible]

August Grace Advisory • curiouslyoptimistic.com 7

MY RANKING · WHERE THE EVIDENCE AND THE DEAL RECORD POINT

Here's where the evidence and the deal record point the money. The permit and the qualified customer earn the premium. Reactors don't.

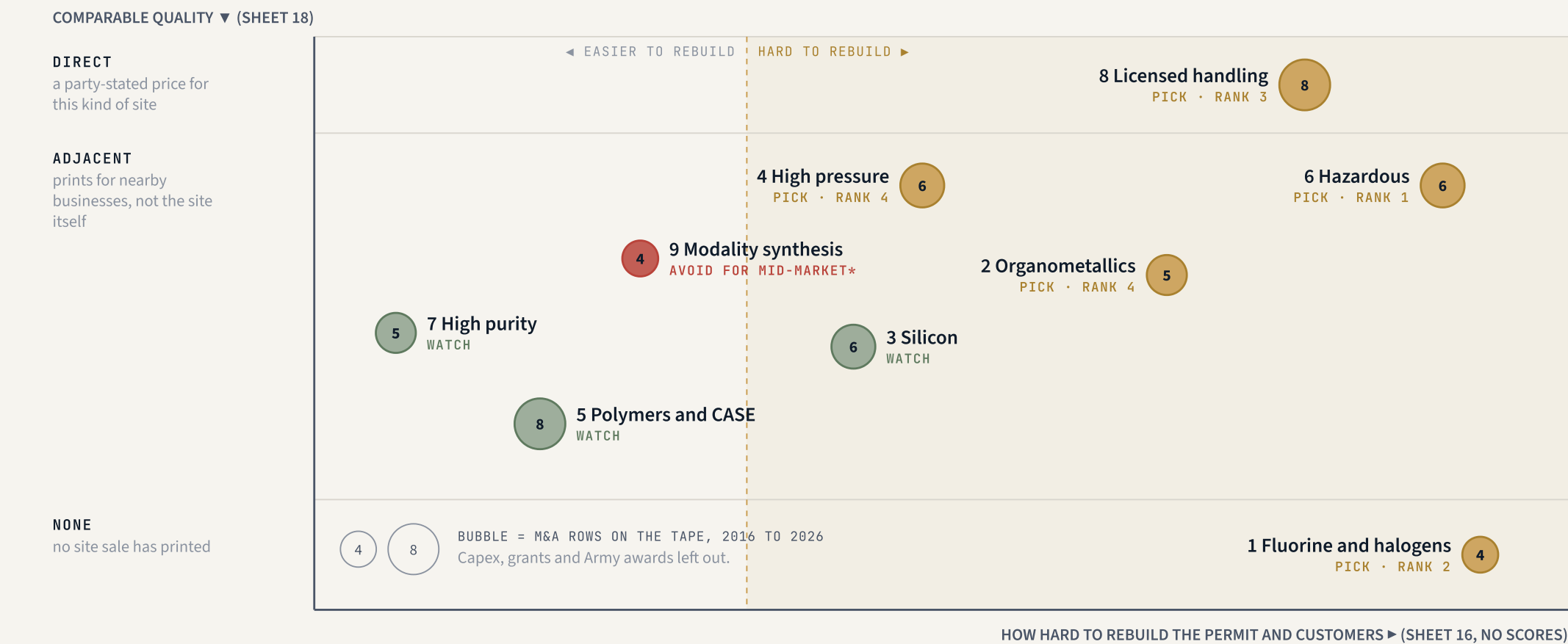
	WHERE	THE COMPARABLE BEHIND IT	CONFIDENCE	REVENUE BAND A SPONSOR WOULD HUNT (MY READ)	KEY RISK
1	A US hazardous-chemistry site with a live permit (6): nitration, phosgene, cyanide, energetics	Adjacent. Product makers printed: Orica 7.5x for Cyanco, NewMarket ~\$700m for AMPAC. Jayhawk (~9x, buyer-stated) is the one multipurpose print	High on the permit; medium on price	\$30m to \$150m; Jayhawk's ~\$78m sits inside it	The risk case is VanDeMark: phosgene at Lockport since 1951, a WARN for 69 jobs in Mar 2026 citing unfunded retooling and debt, then a sale at an undisclosed price. The permit can outlive the equity
2	A Western fluorination or fluorine-reagent site (1), or a partner to an HF owner	None. No site sale has printed; the evidence is capex (Inhance's F2 plant, a Texas fluorination house tripling its site, Arkema's \$150m HF plant)	Medium	\$10m to \$75m	Indian HF (Navin, SRF) undercuts the US reagent step before a first comp prints
3	DEA-registered or high-containment capacity in the US (8)	Direct. Siegfried paid "below 10x" for Noramco's US sites, its words	Medium	\$50m to \$250m; Siegfried guides ~\$100m of 2026 sales from those sites	Quota: opioid classes roughly halved since 2016; stimulants could be next
4	An organometallics or high-pressure independent with Western customers (2, 4)	Adjacent. Grace 9.5x for Albemarle's fine chemistry sites; JM 13.3x and Indorama 6.3x for adjacent businesses; the independents sold undisclosed	Medium	\$20m to \$100m	A sponsor exit that prints at a reagent distributor's price
WATCH	A US silicon maker with a qualified medical or specialty position (3)	Adjacent. Momentive's ~\$3.1bn take-private and Silbond's stated range; Gelest, NuSil, ICM and SiVance sold undisclosed	Medium	\$10m to \$75m	Almost nothing independent is left, and the rest prices against Chinese siloxane
WATCH	Small monomer and photoinitiator makers (5); fab-adjacent high purity (7)	Adjacent. H.B. Fuller under 6x for formulators; Fujifilm \$700m for ~\$360m of fab-acid sales	Low	\$10m to \$50m	CMMC ends up as paperwork and the bench never thins
AVOID FOR MID-MARKET ENTRY	Peptide or oligo capacity without a contract book (9). This grades API capacity; building blocks and intermediates can grade differently	Adjacent. Samsung's CHF 44.31 offer for PolyPeptide, no multiple; CordenPharma bought AmbioPharm undisclosed	Medium	Not a mid-market ticket: CordenPharma's build is €900m	Lilly and Novo insource; Bachem's commercial API fell 19.3% in local currency in H1 2026 while development grew
PASS	Capacity sold mainly on reactor time, with no permit or qualified customer behind it	Adjacent. EUROAPI sold Brindisi at €5m EV	High	Not a hunt	Price is set by Indian and Chinese capacity. Plenty of multipurpose plants do hold a permit and audited customers; those belong in rows 1 to 4

To be straight with you: no US independent hazardous toll site of the row-1 kind has printed a price. The permitted US sites that did print were strategic carve-outs (Albemarle's to Grace) and one Indian purchase (Jayhawk). Why modality isn't a flat avoid: with a contract book the economics work (Bachem's FY2025 EBITDA margin was 30.9%). A mid-market buyer can't get that book.

Sources: Orica, Feb 21, 2024; NewMarket, Dec 4, 2023; Anupam (NSE), Dec 9, 2025; Grace on Albemarle FCS, Feb 25, 2021; Siegfried, Jan 27 and Apr 24, 2026; JM on Catalyst Technologies, May 22, 2025; Indorama on Oxiteno, Apr 4, 2022; H.B. Fuller 2024 Annual Report; Entegris, May 10, 2023; Samsung Biologics offer for PolyPeptide, Jul 20, 2026; Evonik on the Silbond purchase, Feb 28, 2014; MPM Holdings completion 8-K, May 15, 2019; Milliken on SiVance, Oct 2011; CordenPharma, Jul 16, 2024; Bachem Annual Report 2025 and H1 2026 release, Jul 30, 2026; C&EN, Mar 13, 2026; Pulse 2.0, Jun 23, 2026; EUROAPI, Jul 29, 2026. Ranking, confidence and revenue bands are my judgment, not a document. Read it as where the evidence points, not as advice.

MY RANKING ON ONE CHART · HOW HARD TO COPY VS HOW GOOD THE PRICE EVIDENCE IS

My picks are the skills where the permit and the qualified customer are hardest to rebuild. Only one has a price paid for the same kind of site.



MY READ

This is the same claim as sheet 18: hard to copy means the permit and the qualified customer, not the chemistry on its own. Licensed handling is the one pick with a price a buyer stated for this kind of site (Siegfried, "below 10x"). Hazardous and the two pick-four rows lean on adjacent prints, and fluorine has none. Silicon is a watch: Momentive and Silbond sold near it, not on it. * Modality works with a contract book; a mid-market buyer can't get one (sheet 18).

FOR AN OWNER · WHAT A BUYER CHECKS IN A \$30M TO \$150M PLANT

A buyer checks eight things. The permit and the customer list come first. The reactor list comes last.

#	WHAT A BUYER CHECKS	WHAT THEY ASK FOR	READY · PARTLY · NOT YET	ONE PROOF POINT FROM THE PUBLIC RECORD
1	Permits, and whether they move	Title V, RMP and PSM files; DEA registrations by drug code; any NRC license		A Title V permit can change owners by administrative amendment (40 CFR 70.7); a DEA registration can't move without DEA's written consent (21 CFR 1301.52).
2	Customer qualifications and concentration	Which customers audited the site, for which molecules, and each one's share of sales		Park Aerospace: one customer family is 39% of sales and a second is 12%.
3	Quality and inspection history	FDA inspections and outcomes, DMFs, ISO certificates, customer audit findings		About a third of US custom sites run to GMP (SOCMA).
4	EHS liabilities, and how they're priced	Phase I and II reports, consent orders, incident history, who keeps pre-close liabilities		Huntsman's ~\$2.0bn sale to Indorama included ~\$76m of liabilities.
5	Utilization	Reactor hours booked by train, the campaign calendar, idle cost		EUROAPI booked €11.1m of idle costs in H1 2026.
6	Asset age and capex backlog	Vessel inspection records, deferred maintenance, the capex a buyer inherits		VanDeMark's WARN notice cited unfunded retooling.
7	People and key operators	Who runs each hazardous step, their tenure, and the retention plan		Radford's nitroglycerin rebuild drew one bid.
8	Contract terms	Term, volume commitments, price adjustment, change of control		CordenPharma had ~€3bn of contracts before a €900m build.

HOW I'D USE IT

Tick one box per row, from the files you'd hand a buyer today. Start with rows 1 and 2, because that's where a buyer starts. There are no weights and no total score, because nobody prints what each row is worth at this size.

THE ONE PRICE ANCHOR AT THIS SIZE

Jayhawk, a US multipurpose site in Galena, Kansas, sold at ~\$134m EV on ~\$78m of 2024 revenue and ~\$15m of EBITDA. That's about 1.7x revenue (my math on Anupam's figures) and ~9x EBITDA (Anupam's figure). It's one deal, so I wouldn't build a range on it.

Sources: 40 CFR 70.7(d)(1)(iv) and 21 CFR 1301.52(b) (eCFR, Sep 2026); Park Aerospace 10-K, FY ended Mar 1, 2026; SOCMA, Oct 23, 2025; Huntsman 8-K, Jan 5, 2020; EUROAPI H1 2026 press release, Jul 29, 2026; C&EN, Mar 13, 2026; DoD contract announcement, Oct 2023; CordenPharma, Jul 16, 2024; Anupam (NSE), Dec 9, 2025. The boxes are a self-check, not a score.

This is my second Field Guide. Here's what's out, what's on the bench, and what I'm still chewing on. Tell me what to build first.

It's a plan, not a promise, and the order is yours to influence. Reply with the one you want most, or a topic that isn't here. Paid subscribers and founding members get the deciding vote.

STATUS	PIECE	WHAT IT'S ABOUT	WHEN
PUBLISHED	Electronic Chemicals	Field Guide 1. The ~\$73B of materials that make every chip, and where a financial buyer can build. This guide links to it wherever a skill sells into a fab.	Aug 13, 2026
PUBLISHED	M&A Still Finds a Way	Essay. Capital didn't pause this year, it got pickier: spec-driven, domestic, hard-to-copy assets still trade.	Sep 11, 2026
PUBLISHED	What It Takes to Make a Raptor Move Like That	Essay, F-22 part 1. A thousand little shops, and the coatings that keep the F-22 flying.	Oct 7, 2026
PUBLISHED	We Reshored the Buildings	Essay. Ten years of US factory construction, and about a third less chemistry.	Oct 14, 2026
PUBLISHED	Custom Chemistry Makers	Field Guide 2, this guide. What a buyer pays for in a US custom chemistry plant.	Oct 24, 2026
NEXT	F-22, part 2	Essay. The planes before the Raptor, the Raptor itself, and how it got made.	Tentative
NEXT	F-22, part 3	Essay. Where the materials are likely going next, labeled as speculation.	Tentative
NEXT	The F-22 materials map	Deep dive. Mills to formulators to fabricators to primes, with public supplier counts.	Tentative
NEXT	Where's the Chemistry in \$100 of AI Capex?	Essay. A widely shared chart of \$100 of AI spending has no line for chemistry. The ~\$73B of chip materials sits one step back.	Tentative
PARKED	Rates Don't Print Oil	Essay. Rates can cool demand and buy a breather on prices. They don't put missing barrels back.	No date
THINKING ABOUT	The Hormuz quarter	Idea. What multiple do you pay on earnings a shipping chokepoint created? From public company results only.	Not scheduled

Correct me: a filing, a permit, or a transcript line that moves a number changes the guide. Corrections are credited.

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Every number in this guide comes from a filing, a permit, a register or a release, dated on its sheet. A subscription pays for that reading, and keeps the next guide coming.

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ASK ME ABOUT A PRIVATE QUESTION

CLOSE

Thanks for reading. If the public numbers are missing something, tell me.

If you're inside one of these nine skills and the public record is missing something, reply and tell me which sheet. If this was useful, subscribe. I always welcome a dialogue, so please challenge me on my perspective.

REPLY

Correct a sheet

Every sheet has a number. Tell me which one, and what the public record says.

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I write up what I'm working through in Curiously Optimistic. Paid subscribers get every full Field Guide; the options are on sheet 113.

TALK

A live conversation

If you're working a question in one of these segments, I'm glad to talk it through.

ARGUE WITH ME · EACH BUTTON OPENS AN EMAIL

- I DISAGREE
- YOU MISSED SOMETHING
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START A CONVERSATION

What happens to your reply: I read every one. If it changes a sheet, I'll say which one and why.

Where to start: the [grid \(sheet 11\)](#), the [dashboard \(sheet 14\)](#), my [ranking \(sheet 18\)](#), or what I'd do [\(sheet 98\)](#).

Go deeper: want this worked on a question you name? Private work is scoped and priced to the question. Bob Girton, bg@augustgraceadvisory.com.