



THREAT ALERT: MEDICINE DESIGNED TO MIMIC REGULATED PHARMACEUTICALS FOR SALE ONLINE AT **ETSY.COM**

Etsy is an online marketplace founded in 2005 that most people associate with vintage and handcrafted items. However, there is also a thriving trade in chemicals on the site, including those sold to individuals seeking homemade versions of highly regulated pharmaceuticals. They are sold with a thin veneer of plausible deniability and in clear violation of the Etsy.com Terms of Use. When vendors list items on Etsy.com that violate the marketplace's TOU, those items can result in a public health threat.

Some items or shops are flagged and quickly removed while others sneak under the radar by listing chemical names, purposeful misspellings, and odd spacing, to name just a few.

While many questionable items found are generally not counterfeit prescription drugs, some of the listings reviewed by PSM researchers can be used as a direct substitute for prescription drugs or illicit drugs or are ingredients for the same. Etsy.com has no verification service for sellers of active pharmaceutical ingredients, so customers cannot verify if what they are buying is real or if it was manufactured under safe conditions. The potential danger these vendors pose to public health is significant.

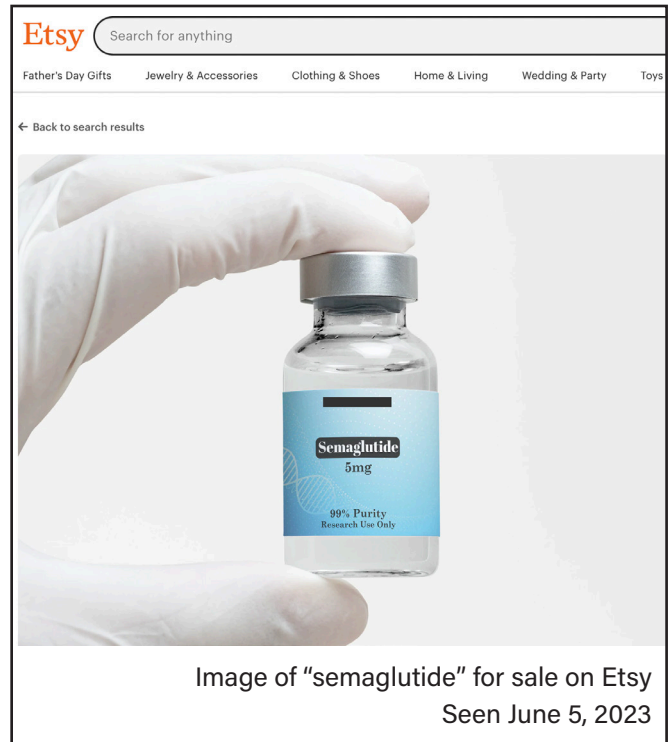
Problems Observed on Etsy

The dangerous items seen by PSM researchers can be broken down into several categories:

● Do-It-Yourself Injectables

Injectables are perhaps one of the scariest items that PSM researchers found on this marketplace. This bottle of "semaglutide" seen for sale in June 2023 could contain anything. Semaglutide is the active pharmaceutical ingredient in Ozempic. The only FDA-approved version of this medicine is made by Novo Nordisk. Anything could be in that vial and it might not be sterile as well.

On October 30th, PSM researchers found a posting for a vial of tirzepatide (see Image Appendix, Image 1), the active pharmaceutical ingredient in Mounjaro. Much like Ozempic, the



only FDA-approved version comes from the manufacturer, Eli Lilly. This listing remained active for over a week before it and that vendor's store were removed from the marketplace.

To evade a violation of Etsy's TOU, vendors advertise that products are "for research purposes only" or "not for human consumption." This technique seems to be done in bad faith.

On October 5, 2023, PSM researchers viewed a posting for a GLP-1 with a description that says the product is not for human use, but then referred to the customers as "home researchers":

"This is a Glp1 fat-loss peptide in a pure lyophilized powder form that is used for home research purposes only. Not intended for any human or animal uses! Tirz 10 mgs per vial for your research needs. If you aren't a home-researcher or aren't familiar with the appropriate research use of these products, please search/research more before continuing to use this item. Strict research peptide only. If home research needs 5 mg and 15 mg, you can find it in the drop-down list. It's very pure

and been tested for the right amount, so it will surely be suitable for experienced researchers like you.”

When PSM researchers looked again in October, this posting and the vendor were no longer active on the marketplace.

● **Miscellaneous Supplies, Not Handcrafted**

PSM researchers noticed listings for items such as saline in vials, excipients, syringes (see Image Appendix, Image 2), and needles (see Image Appendix, Image 3) that stayed up for months. There is nothing handcrafted or vintage about these items. All of these items violate Etsy’s TOU on medical drugs, devices, and drug paraphernalia.

● **Unapproved Foreign Medications**

During PSM’s time monitoring the marketplace, Etsy has improved at finding and removing postings for foreign-made medications as well as postings that appear to be for FDA-approved medications, such as cosmetic injectables. We commend them for these efforts.

● **Raw Chemicals and Precursors**

Listings for chemicals were another type of item that PSM researchers observed stayed active for months. Raw chemicals can have multiple uses, not all of which are immediately obvious. This store (see Image Appendix, Image 4) is a prime example of a vendor hiding in plain sight. They use long chemical names, display images of molecules, and list [Chemical Abstracts Services registration numbers](#)¹ (CAS) in the description. One listing by this vendor is for 2,5-Dimethoxybenzaldehyde. This chemical itself is not illegal to purchase, but it is used in the production of multiple psychoactive drugs.

PSM researchers observed precursor chemicals being sold on Etsy. For example, this posting (see Image Appendix, Image 5) for “Concentrated yellow pigment crystals” lists the CAS of 705-60-2. That number corresponds to Phenyl-2-nitropropene (P2N2), which is used in the synthesis of [Adderall](#)² and other amphetamines.

PSM researchers first observed this posting at the beginning of October and was still active over one month later.

In response to a comment left by a buyer, the vendor gave instructions on how to take the P2NP they were selling and convert it to phenyl-2-propanone, which, if you watched *Breaking Bad*, is the main precursor used in making methamphetamine.

“I assure you it is over 96% pure, just try a reduction using isopropanol medium, sodium borohydride then again in complex with copper chloride dihydrate to reduce the nitro group, then acid base extraction using caustic soda and glacial acetic acid, possibly an organic solvent to do final purification dichloromethane is best unless you have access to diethyl ether. As per description, ensure you wear nitrile or butyl gloves, as it will wear through latex/rubber and badly blister any skin it touches.”

Policy Recommendations

Etsy.com already has a TOU that should preclude marketing of dangerous injectables and precursor chemicals for making dangerous and illegal substances. We implore Etsy to enforce their TOU in a manner that is consistent and timely. Though our main concern is with unapproved medical products, there still remains a threat of counterfeit trademark product sales on the platform. To that end we believe marketplaces like etsy.com should be governed by the compliance requirements of the proposed SHOPSAFE Act (S.2934). PSM endorses S.2934.

Enforcement Recommendations

Brand protection teams and regulators/law enforcement should include etsy.com in their online monitoring efforts. While not as naked of an illegal market as the Dark Web, there are criminals using the platform to transact potentially dangerous chemicals in plain sight.

1. https://en.wikipedia.org/wiki/CAS_Registry_Number

2. <https://www.chemicalbook.com/article/what-is-1-phenyl-2-nitropropene.htm>

IMAGE APPENDIX

1) Posting selling a compounded version of a prescription weight-loss drug

Etsy Categories Search for anything Sign in

Homepage > Bath & Beauty > Personal Care > Supplements

Advanced Research LLC
Not for human consumption
AR
TIRZEPATIDE
10mg
For research purposes only
Exp date: 05/2026
RESEARCH PURPOSE

In 20+ carts
\$160.00
tirz 5mg & 10mg
AdvancedResearch ★★★★★
✓ Arrives soon! Get it by Nov 16 if you order today
✓ Returns & exchanges accepted
Pay in 4 installments of \$40.00. [Learn more](#)

Add to cart

2) Image of bulk excipient for sale

\$23.00+
Microcrystalline Cellulose (MCC) Non-toxic 100% Pure Natural Cosmetic Grade Emulsion Stabilizer Adsorbent Bulk Wholesale
GreenCoastIR ★★★★★
✓ Returns & exchanges accepted
weight and price

Select an option

Add to cart

Buy together, get free shipping

This listing Microcrystalline Cellulose (MCC) Non-toxic...
\$23.00

Menthol Crystals 100% Pure All Natural Fo...
\$26.50

Add both to cart

Related searches
Cosmetic Grade Microcryst...

Other reviews from this shop | ★★★★★ (24) Sort by: Suggested

3) Image of commercially produced materials for injections

Only 6 left and in 3 carts
\$28.99
Nursing Skills Kit - Injection Practice
SharpSkillsKits ★★★★★
✓ Arrives soon! Get it by Jan 11, 22 if you order today
✓ Exchanges accepted

Add to cart

Item details

Materials: Injection practice pad, syringe, alc...

NURSING STUDENTS! This injection practice kit will allow you to work on your skills over and over and build your confidence.

[Learn more about this item](#)

4) Vendor using images and chemical abbreviations instead of common drug names

<chem>Nc1ccc(C)cc1</chem> o-toluidine 99.5% CAS 95-53-4 organ... \$44.60 5 people have this in their cart	<chem>[Li+].[AlH4-]</chem> Lithium aluminum hydride, LAH, LiAlH ₄ \$56.04 3 people have this in their cart	<chem>CC(=O)OC(=O)C</chem> Acetic anhydride 99.5% CAS 108-24-7 ... \$44.60	<chem>COc1cc(C(=O)O)c(OC)c1OC</chem> 3,4,5-Trimethoxybenzaldehyde CAS 93... \$44.60 3 people have this in their cart
<chem>COc1ccc(C=O)cc1OC</chem> 2,5-Dimethoxybenzaldehyde CAS 93-0... \$44.60 5 people have this in their cart	<chem>CN</chem> Methylamine HCl \$56.04	<chem>Nc1ccc2c(c1)c[nH]2</chem> Tryptamine CAS 61-54-1 organic synth... \$44.60	<chem>[Na+].[B-](H)(H)H</chem> Sodium borohydride NaBH ₄ CAS: 169... \$33.17 3 people have this in their cart
<chem>KMnO4</chem> Potassium permanganate KMnO ₄ CAS... \$33.17 3 people have this in their cart	<chem>OC(O)(O)C(O)C(=O)O</chem> L-(+)-Tartaric acid CAS 67-69-4 for synt... \$27.45 3 people have this in their cart	<chem>N#Cc1ccc(Cl)cc1</chem> 2-Chlorobenzonitrile CAS 873-32-5, UL... \$33.17	

5) Vendor selling precursor used in synthesis of amphetamines

Only 4 left and in 4 carts
\$59.84
Concentrated yellow pigment crystals (inc. methyl-nitrostyrene) 14g (0.5oz)
EddolentX ★★★★★
✓ Returns & exchanges accepted
Pay in 4 installments of \$14.96. [Learn more](#)

Add to cart

Item details

Handmade
Materials: benzaldehyde, nitroethane, n butylamine, isopropanol, Distilled water