



# Homeland Security

PRIVATE SECTOR ADVISORY

## (U) Private Sector Role in Preventing Acquisition of Explosive Precursors and Improvised Explosive Device Components

02 September 2014

### (U) Purpose

(U//FOUO) This Private Sector Advisory is intended to provide information on improvised explosive devices (IED) described in recent publications by violent extremist groups. This information is provided to assist private sector retail, E-commerce and security personnel in their efforts to identify suspicious purchasing behavior or other behaviors that could indicate criminal intent as well as instructions for reporting anomalous purchasing behavior and activity to law enforcement.

### (U) Extremists Call for Attacks in the United States

(U//FOUO) Violent extremists continue to release materials that use text and imagery to encourage and rationalize attacks by Westerners in their home countries, with a focus on the availability of components for carrying out attacks using IEDs. These materials call attention to the ease of production of these devices, as well as their effectiveness, highlighting their use in the 2013 Boston Marathon bombings.

### (U) Acquisition Sources: Explosive Precursors and Select IED/VBIED Components

(U//FOUO) The acquisition of materials for constructing improvised explosive devices (IED) is a necessary stage in the execution of any IED attack. This offers an opportunity for detection and disruption of plots. Thus, it is critical that point-of-sale employees are trained to recognize indicators of suspicious purchases and behavior and methods of reporting this information. This document outlines acquisition sources for explosive precursors and select IED and vehicle-borne IED (VBIED) components of concern. It also provides examples of suspicious purchasing behavior that could indicate criminal intent and offers instructions for reporting suspicious purchasing behavior and other suspicious activity.

(U//FOUO) The following table provides a breakdown of select explosive precursors and other IED components, along with their common usage, and likely points of sale.

Chemical / Component	Commercial Uses	Retail Source
<b>Homemade Explosive Mixtures</b>		
Potassium Chlorate	<ul style="list-style-type: none"> <li>Pyrotechnics</li> <li>Herbicides</li> <li>Oxygen candles</li> <li>Matches</li> </ul>	<ul style="list-style-type: none"> <li>Fireworks stands and retail outlets</li> <li>Chemical supply stores</li> <li>Grocery stores</li> <li>Hardware supply stores</li> </ul>
Sodium Chlorate	<ul style="list-style-type: none"> <li>Herbicides</li> <li>Bleaching pulp</li> <li>Pyrotechnics</li> </ul>	<ul style="list-style-type: none"> <li>Fireworks stands and retail outlets</li> <li>Chemical supply stores</li> <li>Agricultural supply stores</li> </ul>

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Chemical / Component	Commercial Uses	Retail Source
Hydrogen Peroxide	<ul style="list-style-type: none"> <li>Bleaching pulp and textiles</li> <li>Bleaching hair</li> <li>Disinfectants</li> <li>Environmental clean-up</li> <li>Pool water softeners</li> <li>Therapeutic health baths</li> </ul>	<ul style="list-style-type: none"> <li>Drug stores (under 8% concentrations)</li> <li>Beauty supply stores (to approximately 35% concentrations)</li> <li>Internet (up to 35% concentrations)</li> <li>Chemical supply stores (up to 98% concentrations)</li> </ul>
Acetone	<ul style="list-style-type: none"> <li>Fingernail polish remover</li> <li>Paint remover</li> <li>Glassware cleaner for college and high school labs</li> <li>Laboratory and industrial solvent</li> </ul>	<ul style="list-style-type: none"> <li>Beauty supply stores</li> <li>Chemical supply stores</li> <li>Drug stores</li> <li>Hardware supply stores</li> <li>Paint supply stores</li> <li>Household supply stores</li> </ul>
Sulfuric Acid	<ul style="list-style-type: none"> <li>Drain pipe cleaners</li> <li>Automotive batteries</li> <li>Polymer manufacture</li> <li>Fertilizer manufacture</li> <li>Chemical manufacture</li> <li>Oil refining</li> </ul>	<ul style="list-style-type: none"> <li>Automotive supply stores</li> <li>Chemical supply stores</li> <li>Industrial supply stores</li> </ul>
Hexamine	<ul style="list-style-type: none"> <li>Camp stove fuel tablets</li> <li>Antibiotics</li> <li>Military explosives</li> <li>Pyrotechnics</li> </ul>	<ul style="list-style-type: none"> <li>Hardware supply stores</li> <li>Camping / Army surplus stores</li> <li>Chemical supply stores</li> <li>Fireworks stands and retail outlets</li> </ul>
Citric Acid	<ul style="list-style-type: none"> <li>Food Additives</li> <li>Water Softeners</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacies</li> <li>Health food stores</li> <li>Chemical supply stores</li> </ul>
Methyl Ethyl Ketone (MEK)	<ul style="list-style-type: none"> <li>Paint removers</li> <li>Laboratory and industrial solvents</li> <li>Plastics manufacture</li> </ul>	<ul style="list-style-type: none"> <li>Hardware stores</li> <li>Chemical supply stores</li> </ul>
Ammonium Nitrate (AN)	<ul style="list-style-type: none"> <li>Fertilizers</li> <li>Explosives</li> <li>First aid cold packs</li> <li>Exploding targets</li> </ul>	<ul style="list-style-type: none"> <li>Farm &amp; feed stores</li> <li>Agriculture supply stores</li> <li>Chemical supply stores</li> <li>First aid supplies</li> <li>Sporting goods stores</li> </ul>
Nitromethane	<ul style="list-style-type: none"> <li>Racing car fuel</li> <li>Remote control vehicle fuel</li> <li>Industrial solvent</li> <li>Propellants and explosives</li> </ul>	<ul style="list-style-type: none"> <li>Chemical supply stores</li> <li>Racing fuel supply stores</li> <li>Remote control hobbyist stores</li> </ul>
Aluminum Powder	<ul style="list-style-type: none"> <li>Paints</li> <li>Pyrotechnics</li> <li>Manufacture of engines, cars, structural members, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Hardware supply stores</li> <li>Paint supply stores</li> <li>Chemical supply stores</li> <li>Fireworks stands and retail outlets</li> </ul>
Urea	<ul style="list-style-type: none"> <li>Fertilizers</li> <li>Road de-icers</li> <li>Food supplement</li> <li>Manufacture of plastics</li> <li>Diesel exhaust fluid</li> </ul>	<ul style="list-style-type: none"> <li>Agricultural supply stores</li> <li>Hardware supply stores</li> <li>Automotive supply stores</li> </ul>
Nitric Acid	<ul style="list-style-type: none"> <li>Rocket Propellants</li> <li>Explosives Manufacture</li> <li>Fertilizer Manufacture</li> <li>Laboratory and industrial processes</li> </ul>	<ul style="list-style-type: none"> <li>Chemical supply stores</li> </ul>
Pentaerythritol	<ul style="list-style-type: none"> <li>Medical use</li> <li>Resins</li> <li>Varnishes</li> <li>Polyvinyl chloride (PVC)</li> </ul>	<ul style="list-style-type: none"> <li>Chemical supply stores</li> </ul>
<b>Explosive Powders</b>		
Black powder, smokeless powder, and black powder substitutes	<ul style="list-style-type: none"> <li>Firearms propellant/gunpowder</li> <li>Fuses</li> <li>Pyrotechnics</li> <li>Special blasting applications</li> <li>Military salute charges and ordnance</li> </ul>	<ul style="list-style-type: none"> <li>Hardware supply stores</li> <li>Household supply stores</li> <li>Sporting goods stores</li> </ul>
Fireworks	<ul style="list-style-type: none"> <li>Fireworks displays / entertainment</li> </ul>	<ul style="list-style-type: none"> <li>Fireworks stands and retail outlets</li> </ul>
<b>Propane Tanks and Compressed Gas Cylinders</b>		

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Chemical / Component	Commercial Uses	Retail Source
Propane Tanks	<ul style="list-style-type: none"> <li>• Cooking</li> <li>• Heating</li> </ul>	<ul style="list-style-type: none"> <li>• Grocery stores</li> <li>• Gas stations</li> <li>• Hardware supply stores</li> </ul>
Compressed Gas Cylinders (Oxygen or Acetylene)	<ul style="list-style-type: none"> <li>• Cutting and welding</li> <li>• Medical</li> <li>• Diving</li> </ul>	<ul style="list-style-type: none"> <li>• Hardware supply stores</li> <li>• Medical supply store</li> <li>• Dive supply store</li> </ul>

*\*This chart is a quick reference guide describing homemade explosive precursor chemicals and other IED components, their common uses, and associated retail sources. The examples in this guide were selected based on historical incidents and information available. Given the variety of commercial materials available for the manufacture of homemade explosives, this chart should not be considered all inclusive.*

TABLE 1.

### (U) Indicators of Suspicious Purchases and Associated Behaviors

(U//FOUO) The following indicators are provided to assist retail point-of-sale employees in recognizing suspicious purchases of explosive precursors and IED/VBIED components.

Note: There are numerous legitimate uses for the equipment and products discussed. Purchase or possession of such is not necessarily an independent indicator of criminal activity and should be evaluated in the context of the situation to determine if suspicious. Multiple indicators increase the likelihood of criminal intent.

- » (U//FOUO) Purchasing abnormally high quantities of a product
- » (U//FOUO) Making multiple purchases within a short period of time
- » (U//FOUO) Making large purchases of fireworks during atypical times of the year
- » (U//FOUO) Vague knowledge of the proper/legitimate use(s) for the product
- » (U//FOUO) Exhibiting nervous or evasive behavior
- » (U//FOUO) Wearing a conspicuous disguise
- » (U//FOUO) Insisting on in-store pick-up for bulk purchases
- » (U//FOUO) Making large cash purchases
- » (U//FOUO) Insisting on shipment to a home address rather than a business
- » (U//FOUO) Refusing to purchase or accept substitute product(s)
- » (U//FOUO) Using third-party freight forwarding
- » (U//FOUO) Asking questions not relevant to the lawful or proper use of the product
- » (U//FOUO) Suspicious questioning about government or private critical structures, functions, personnel, or procedures
- » (U//FOUO) Talking knowingly about a future event, as though the person has inside information about what is going to happen
- » (U//FOUO) Making a statement of intent to commit, or threatening to commit, a violent act, whether serious or supposedly as a joke, or regardless of whether or not you think the person intends to carry out the action
- » (U//FOUO) Expressing interest in bomb-making or engaging in violent activity or statements of support for those who do
- » (U//FOUO) Displaying injuries consistent with explosives experimentation (e.g. missing fingers or scarring, red or irritated eyes, and discoloration or burns on skin)

**(U) Suspicious Activity Reporting**

**(U) Report Suspicious Activity**

**(U) To report suspicious activity, call 911 or contact local law enforcement.** Suspicious Activity Reports (SARs) will be forwarded to the appropriate fusion center and FBI Joint Terrorism Task Force for further action. For more information on the Nationwide SAR Initiative, visit <http://nsi.ncirc.gov/>.

**(U) Resources**

**(U) Retail Sector/Bomb-making Materials Awareness**

(U) DHS offers security awareness training designed to raise awareness for retail employees. FEMA's EMI Course IS-912, "Retail Security Awareness: Understanding the Hidden Hazards" can be accessed at: <https://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-912>.

(U) The Bomb-making Materials Awareness Program (BMAP), a partnership between the DHS Office for Bombing Prevention and the Federal Bureau of Investigation (FBI), aims to increase point-of-sale employee awareness and suspicious activity reporting to prevent illicit use of explosive precursor chemicals and components commonly used in IEDs. Additional BMAP information and outreach products can be accessed at: <https://tripwire.dhs.gov/IED/resources/docs/BMAP%20cards%20rev%20A.pdf>.

**(U) Additional Resources**

(U) DHS's Office for Bombing Prevention (OBP) provides additional counter-IED information sharing, capability analysis and planning support, and training resources and tools to State, local, and private sector partners to enhance their capabilities to prevent, protect against, respond to, and mitigate bombing threats and incidents. For more information on OBP's programs, products, and services, visit: <http://www.dhs.gov/obp> or contact: [OBP@dhs.gov](mailto:OBP@dhs.gov).

**(U) Administrative Note**

(U//FOUO) Information contained in this awareness advisory is for official use only. No portion of this bulletin should be released to the media or the general public. Release of this material could adversely affect or jeopardize investigative activities.

(U) For comments or questions related to the content or dissemination of this document, please contact the DHS Office for Bombing Prevention at [OBP@dhs.gov](mailto:OBP@dhs.gov).