



# ROLL CALL RELEASE

In Collaboration with the ITACG



16 September 2009

## (U//FOUO) Hydrogen Peroxide and Organic Fuel Mixtures as a Possible Homemade Explosive

(U//FOUO) Terrorists could use hydrogen peroxide and organic fuel mixtures (HPOMs), made by mixing concentrated hydrogen peroxide with a variety of organic fuels, in an attack against the United States. The viability, performance, and sensitivity of these explosives vary and are based on a number of factors including the fuel chosen, the ratio of peroxide to fuel, and the concentration of peroxide used. Peroxide can be concentrated from lower percentages by simple evaporation through heating, and it is readily available in a variety of stores. The organic fuels used in these mixtures include common products such as cumin, black pepper, flour, sugar, honey, acetone, nitromethane, ethanol (grain alcohol) or ground coffee. HPOMs are extremely sensitive to impact, friction, static/spark, and heat and in large quantities can self-heat and ignite if in sunlight or a hot room.

FOR POLICE, FIRE, EMS, and SECURITY PERSONNEL



(U//FOUO) Hydrogen peroxide and flour.

### (U//FOUO) Key Identifiers

- Liquid or semi-liquid gel
- Mixture color varies with additives
- Slightly pungent, caustic odor (generally)
- Odor similar to chemical component



(U//FOUO) Hydrogen peroxide and pepper.

### (U) Chemical Precursors

- **Hydrogen peroxide:** disinfectant, bleaching agent, hair products
- **Food products:** black pepper, coffee, cumin, flour
- **Nitromethane:** racing car fuel, remote control vehicle fuel
- **Ethanol (grain alcohol):** liquor store, chemical supply

### (U) Lab Equipment

- |            |                   |
|------------|-------------------|
| Glassware  | Heating Equipment |
| Distillers | Mixers            |
| Ice Bath   | Filters           |



(U//FOUO) Improvised heating examples.

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(U) Prepared by the Interagency Threat Assessment and Coordination Group (ITACG) in coordination with DHS/I&A and the FBI/Counterterrorism Analysis Section.

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