

BULLETIN

NO.: 20-070
DATE: May 18, 2020
TO: All Personnel
FROM: David Picone, Battalion Chief, Health and Safety Officer
SUBJECT: **Safety Alert – Butane Honey Oil**

The attached **Safety Alert** addresses a recent incident and subsequent explosion encountered by LAFD yesterday (May 16, 2020), please review the attached Safety Alert with your personnel.

Special thank you to SDFD Hazmat FS45C for assisting.

Refer to bulletin #17-076 for Health and Safety communications descriptions.

Please contact the Health and Safety Office at SDFDHealth&Safety@sandiego.gov with comments or areas of improvement. For all other questions contact HSO/Battalion Chief David Picone at 619.533.4466 or dpicone@sandiego.gov

Wellness Resources link: [“Promoting Safe and Healthy Lives”](#) or call 833-SDFD-HSO
password - support



San Diego Fire-Rescue Department Health & Safety Office

SAFETY ALERT

Div/Sec: All Personnel	Issue/Incident: High Explosive Potential – Butane Honey Oil
Date: May 17, 2020	

Background:

Demand for Butane Hash Oil, also known as Butane Honey Oil (BHO) for its honey like color, has exponentially increased over the last 10 years. BHO is used in edible products and smoked in electronic vaporizer pens. Production of BHO can be found in small residential labs, backroom operations to large cannabis factories. It is illegal in the State of California but not unusual to find BHO manufacturing being performed at or near dispensaries.

When BHO extraction “goes wrong”, it can have catastrophic consequences. Large quantities of butane can be present inside hundreds of small canisters, 40-pound cylinders, 55-gallon drums and more.

Butane:

A gas which is odorless, colorless, heavier than air (2.05 atm), and has a flammable range of 1.6-8.4%. Open flame, cigarettes, pilot lights, and electrical arcing are just a few examples of common sources of ignition. Butane will stay low to the ground, as low as 2-3 inches and travel a significant distance, into outlets, loose baseboards, and wall cavities. It can find a distant source of ignition which will flash back to its source.

Hazards associated in dispensary fires with BHO production:

- Butane contributes to fire intensity and makes these fires difficult to extinguish
- High explosive potential; including secondary explosions
- After a BLEVE, the structural integrity of the building can be compromised
- Flow path of the fire can be difficult to control due to damaged walls, doors and windows
- Fires in concealed spaces should be expected
- Burn victims are often present

To increase safety and reduce the risk of firefighter injury at dispensary fires:

- Assume that all fires at or near dispensaries are a “**hazmat fire**” until proven otherwise
- If a BHO fire is identified, advise all responding personnel by notifying ECDC and request Hazmat
- If the need for a primary search is indicated and the risk-benefit analysis allows for it, perform the search
- Transition to defensive operations upon completion of primary search
- Offensive operations may occur in exposures or occupancies nearby or adjoining units, if evidence of structural compromise or flammable atmosphere is absent
- Use four-gas meters as soon as possible to establish potential areas of gas pooling (remember butane can be present as low as 2-3 inches from the ground)

References:

Article: [Butane Hash Labs-an Explosive Threat – FIREHOUSE](#)

Document: [NIOSH Pocket Guide to Chemical Hazards – n-Butane](#)



Chris Webber Assistant Chief, Emergency Operations	Colin Stowell Fire Chief	Kevin Ester Assistant Chief, Business Operations
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New Safety Tailboards, Messages, Feedback, Suggestions and/or Reporting to the OHSC - SDFDHEALTH&SAFETY@SANDIEGO.GOV		
“Promoting Safe and Healthy Lives”		

