

File E184884
Project 03NK37392

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REPORT

on

FLASHLIGHTS AND LANTERNS FOR USE IN
HAZARDOUS LOCATIONS

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Torrance, CA

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DESCRIPTION

PRODUCT COVERED:

USL - Model 2220 VB3 flashlight for Class I, Division 1, Groups A, B, C, and D Hazardous Locations.

GENERAL:

* The flashlight noted above is not provided with a lamp disconnect mechanism. It is for use with two lithium coin cell batteries and two light-emitting diodes. See ILL. 1 for an exploded view of the device.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USL, indicates investigation to U.S. Standard UL 783, Sixth Edition.

MARKING:

The following markings are provided on each device. See ILL. 2.

1. Listee's name and model number.
2. Catalog number.
3. Designation of the Hazardous Locations as shown in "Product Covered."
4. The number, type and size of batteries to be employed.
5. Temperature Code T6.
6. The word "WARNING" and the following or equivalent statement:
"Risk of ignition - Do not open in a hazardous area."

MODEL VB3 - FIG. 1

1. Body - Consists two parts, a top and bottom, each constructed of R/C (QMFZ2) Xenoy 5220U manufactured by GE. The two pieces snap together and house the batteries, battery contacts and circuit board. See ILLS. 2 and 3 for shape and details.

Alternate - Same as above except Zylex X7509 by Sabic.

2. Head - Consists of two parts, a cover and LED housing, each constructed of R/C (QMFZ2) Xenoy 5220U manufactured by GE. The two pieces snap together over the LEDs. The head is connected to the body with a stainless steel pin. See ILLS. 4 and 5 for shape and details.

Alternate - Same as above except Zylex X7509 by Sabic.

3. LED Circuit Board - Main circuit board contains the contacts for the batteries and the switch. The main circuit board is located in the body. A concealed wire extends from this circuit board to a smaller LED circuit board, which is located in the head, and contains the LEDs. See ILL. 6 for shape and details.

*LED - Two given. Part No. **NSPW500DS**, manufactured by Nichia, rated 3.5 V and 100 mA.

4. Clip - Constructed of R/C (QMFZ2) Xenoy 5220U manufactured by GE. The clip is secured to the exterior of the body with a screw. See ILL. 7 for details.

Alternate - Same as above except Zylex X7509 by Sabic.