

## ENCAPSULATION AND PLUGGING COMPOUNDS—DESCRIPTION

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### 1. GENERAL

1.01 This practice describes the various materials used in making pressure plugs, moisture plugs, sealing around grommets, and encapsulating splices.

1.02 This practice is reissued to:

- Add reference to the C plug kit
- Add new paragraphs 3.15 and 3.16.

Revision arrows are used to emphasize the more significant changes.

### 2. SAFETY PRECAUTIONS

2.01 Polyurethane compounds utilize a small amount of isocyanate to cause the 2-part mixture to react, or cure. Unreacted isocyanates can cause allergic reactions in some individuals due to skin or eye contact or as a result of inhaling vapors.

2.02 The B and D encapsulants, as well as J plug compound, are formulated to minimize the

possibility of allergic reactions from unreacted isocyanate; however, a relatively small number of people are unusually sensitive to this material. Care should be exercised when mixing these materials to prevent contact with skin or clothing. Even though the amount of isocyanate vapor released is extremely small, encapsulants and plugging compounds should not be used in confined areas that are not ventilated.

2.03 As a precaution against skin contact, B disposable gloves, AT-8982, (Practice 081-856-101), should be worn when mixing, pouring, or injecting polyurethane compounds. Subsequent contact with reacted polyurethane, such as reentering an encapsulated splice, does not require the use of gloves. Standard safety glasses are to be worn when mixing and pouring the encapsulants. Splash-proof goggles should be worn when mixing and injecting J plug compound due to the method of mixing and injecting the compound.

2.04 Skin that has come in contact with unreacted polyurethane should be washed with soap and water. In case of eye contact, flush thoroughly with running water or KS 21527 eyewash, and then get medical attention.

### 3. DESCRIPTION

#### B ENCAPSULANT

3.01 B encapsulant is a nonreenterable encapsulant used to construct moisture barriers in pedestals as outlined in Practice 631-600-305. The B encapsulant is also used in other jobs requiring a nonexpanding, quick curing compound. It has a gel time of 10 to 15 minutes at 70°F.

3.02 B encapsulant is a nonexpanding, 2-part liquid polyurethane compound furnished in a 180-gram size clear plastic bag with a separator to isolate the parts until mixing. This 2-part bag is furnished in a sealed can or in a chipboard box with a sealed foil moistureproof bag.

**B SEALANT**

**3.03** B sealant is a clear premixed formulation of silicone rubber contained in a metal tube. It is used to form a seal around stub cable grommets used in conjunction with 2-type closure and N-type terminals, and to encapsulate cut ends of binder groups in the network distribution system.

**D ENCAPSULANT**

**3.04** The D encapsulant is intended for use as a **reenterable** encapsulant for encapsulating buried splices in waterproof cable.

**3.05** D encapsulant consists of two parts, both liquid, and is packaged in 750-, 1900-, 5000-, and 8000-gram kits.

**3.06** The two liquid components when mixed together will form a soft pliable urethane moisture barrier. Gel time for the D encapsulant is listed below.

TEMPERATURE(°F)	GEL TIME (MIN.)
20	180
43	105
58	50
73	30
88	20
106	10

**3.07** Instruction sheets covering use of D encapsulant are packaged with encapsulant.

**J PLUG COMPOUND**

**3.08** The J plug compound (Fig. 1) is a 2-part polyurethane compound intended for use in conjunction with the C plug kit. It is used for making pressure and moisture plugs in telephone cable.

QUANTITY	DESCRIPTION
24	6-oz cartridges
♦12	20-oz cartridges♦

**Note:** The special gun necessary to inject the compound must be ordered separately.

**3.09** The J plug compound can be used for constructing pressure plugs in both polyethylene and lead sheath air-core PIC and pulp cables of any size and type except those cables containing coaxials, video pairs, disc-insulated spiral-four quads expanded PIC insulated (LOCAP<sup>®</sup>), or waterproof cable.

**3.10** Allow the J plug compound to cure as listed below before applying pressure to cables.

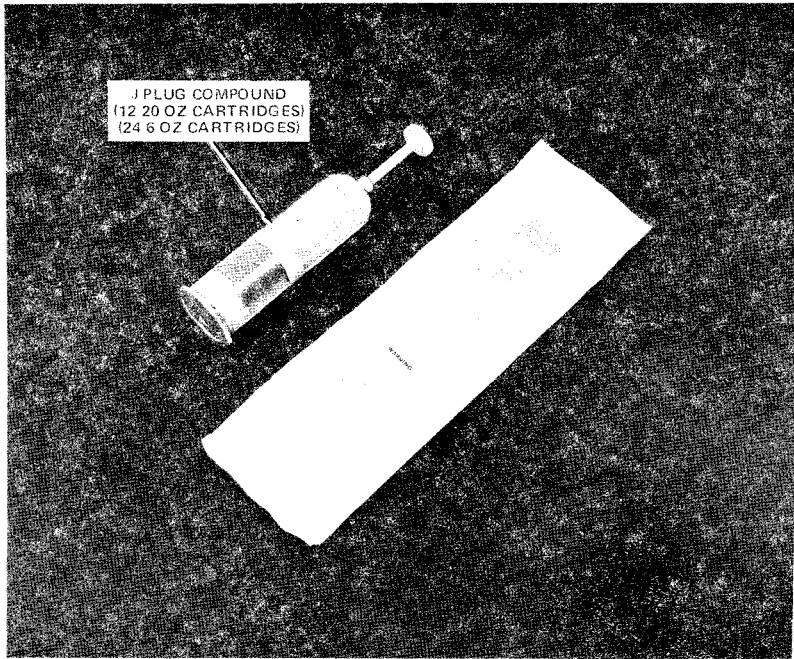
TEMPERATURE (°F)	CURE TIME (HOURS)
20-32	20
33-39	12
40-49	10
50-59	8
60-69	3
70-79	1
80 and above	1/2

**♦C PLUG KIT♦**

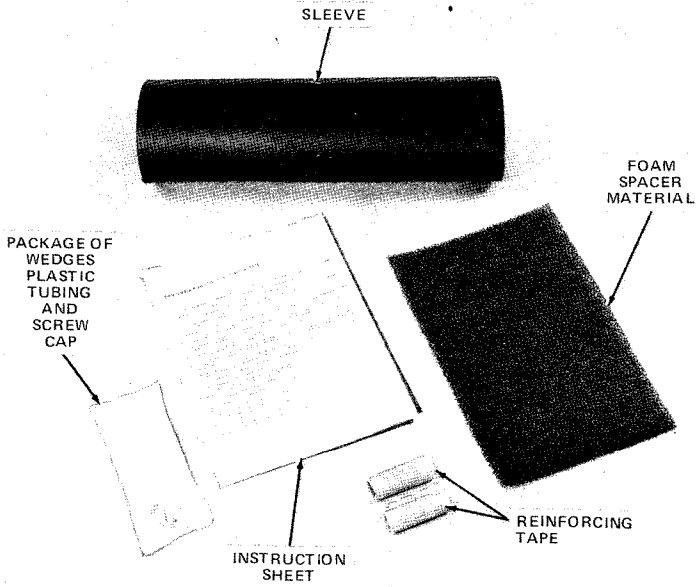
**♦3.11** The C plug kit (Fig. 2) in conjunction with J compound is intended for making pressure plugs in all pair count, air-core telephone cable via the "open sheath" method. This includes DUCTPIC<sup>®</sup> cable, screened, bonded sheath, and all polyethylene- and pulp-insulated conductor cable.

**3.12** The kit consists of a sleeve, 16 channeling wedges, spacer material, two strips of reinforcing tape, plastic tubing for vertical construction, a screw cap, and a set of instructions.♦

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◆Fig. 1—J Plug Compound◆



◆Fig. 2—C Plug Kit◆