FIRE FUDGE

a. Description:

(1) This item consists of a mixture of sugar and potassium chlorate in a hot water solution which solidifies when cooled to room temperature. It can be used to ignite most incendiaries, except thermite. It may be used directly as an incendiary on rags, dry paper, dry hay, or in the combustible vapor above liquid fuels.
(2) The igniter can be initiated by a fuse cord, string fuse, or concentrated sulfuric acid.
(3) Fire fudge resembles a white sugar fudge having a smooth, hard surface. The advantage of this igniter material over Sugar-Chlorate, is its mold-ability. The procedure for preparation must be followed closely to obtain a smooth, uniform material with a hard surface.

CAUTION: THIS MATERIAL IS POISONOUS AND MUST NOT BE EATEN.

b. Material and Equipment:

Granulated Sugar (NOT powdered or confectioners)
Potassium chlorate (no coarser than the sugar)
Metallic, glass, or enameled pan.
Measuring container
Spoon (non-metallic)
Thermometer (200-250 degrees Fahrenheit)

c. Preparation:

(1) Clean the pan by boiling some clean water in it for about five minutes. Discard the water, pour one measure full of clean water into the pan and warm it. Dry the measuring container and add one measure-full of sugar. Stir the liquid until the sugar dissolves.
(2) Boil the solution until a fairly thick syrup is obtained.
(3) Remove the pan from the source of heat to a distance of at least six feet and shut off the heat. Rapidly add two measures of potassium chlorate. Stir gently for a minute to mix the syrup and powder, then pour or spoon the mixture into appropriate molds. If the mold is paper, it can usually be peeled off when the fire fudge cools and hardens. Pieces of cardboard or paper adhering to the igniter will not impair its use. Pyrex, glass, or ceramic molds can be used when a clear, smooth surface is desired. It is recommended that section thickness of molded fire fudge be at least one-half inch. If desired, molded fire fudge can be safely broken with the fingers.

CAUTION: IF THIS IGNITER MATERIAL IS CARELESSLY HANDLED WITH EXCESSIVE BUMPING OR SCRAPING, IT COULD PRESENT A HAZARD.

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d. Application.

(1) Place a piece of fire fudge on top of the incendiary. Minimum size should be about one inch square and one-half inch thick. Prepare the fire fudge for ignition with a fuse cord, string fuse, or concentrated sulfuric acid in the normal manner.

(2) If only battery grade sulfuric acid is available, it must be concentrated before use to a specific gravity of 1.835, by heading it in an enameled, heat resistant glass or porcelain pot, until dense, white fumes appear.

(3) When used to ignite flammable liquids, wrap a quantity of the igniter mixture in a non-absorbent material and suspend it inside the container near the open top. The container must remain open for easy ignition and combustion of the flammable liquid.

(4) To minimize the hazard of premature ignition of flammable liquid vapors, allow at least two feet of fuse to extend from the top edge of an open container of flammable liquid before lighting the fuse .