

** Snell*

Headquarters Medical Dept.
September 15, 1947

CLEVELAND WORKS
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Materials & Process Engr.

I am sorry for the long delay in getting the Safe Practice Data Sheet I-1 prepared. We are still lacking some data on inerteen, but rather than waiting until we get complete information I will send you the following, which takes care of most of the data. I discussed your capacitor installation with several persons at your plant sometime ago, including Mr. T. E. Fuller and Mr. J. Scott. They are familiar with the fact that inerteen is a fairly toxic material which must be handled in such a way as to prevent poisoning.

CONTAINERS AND STORAGE

I believe the type of container is indicated on P. D. Spec. 6935. You can probably determine the exact type of container in which you receive this material from your supplier. There are no special precautions that need be taken in storing the original containers. In case of spillage, the inerteen should be cleaned up promptly so that its vapors will not contaminate the storage area. The use of oil absorbing compound, M-8695-1, is recommended since this compound absorbs the inerteen and keeps the floor in a non-slippery condition.

PROPERTIES

Fire - Non-flammable

Explosion - Non-explosive

BREATHING

I do not yet have data on the odor level of this material. Chronic poisoning may occur where there are repeated or recurring exposures to a sufficient concentration of inerteen (6935) vapor over a period of months or years. Such exposures may produce internal bodily injury which may be disabling or could be fatal. Where people may breathe air containing the

vapor, the Maximum Allowable Concentration is one milligram per cubic meter. This Maximum Allowable Concentration applies to repeated or recurring daily exposures. If the concentration is less than one milligram, there is little chance of poisoning even after years of exposure. When much higher concentrations of vapor are breathed for a relatively short period, there may be irritations of the nose and throat, or, occasionally nausea. If air is saturated with Inerteen vapor at room temperature, it will contain a concentration of 176 milligrams of Inerteen per cubic meter of air. (Note) I am not entirely satisfied with this figure, although it is the best data that I have available. I expect to check this value before issuing the Safe Practice Data Sheet. Even though this relatively high concentration of vapor could be theoretically produced at room temperature, it must be remembered that its evaporation rate at room temperature is very slow and it would require long periods of time, in a totally enclosed space, to reach this saturated condition.

SWALLOWING

Inerteen is highly toxic if taken internally. The swallowing of approximately one or two ounces may cause serious internal injury or perhaps death.

SKIN IRRITATION

It is a mild skin irritant. Even though it is not very irritating to the skin, it is absorbed through the skin and can produce toxic reactions internally. It may also produce, after exposures of months or years, a skin condition known as chlor-acne. This condition is very difficult to heal.

PERSONAL PROTECTIVE EQUIPMENT

If it is necessary, under emergency conditions, to enter a space containing very high concentrations of vapor or fume, either a universal gas mask, M₆6759-1, an air-line respirator, or a hose mask with or without blower, may be used. For usual concentrations of vapor, standard chemical cartridge respirator 8883-1, equipped with an activated charcoal cartridge 8883-2, will provide protection. These respirators should be of a type approved by the U. S. Bureau of Mines. Neoprene aprons and gloves 7530-8 may be used where necessary to protect the skin. If for any reason the neoprene gloves do not stand up well on this application, a glove made from Polyvinyl alcohol resin (such as Resistoflex) could be used. Hand cream, such as West 88 (West Disinfectant Company, 42-16 West Street, Long Island City), or Fend O (Mine Safety Appliances Company, Pittsburgh, Pa.) may be

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of some value as protection for the skin where better methods of protection are not practical.

PRECAUTIONS

Care must be taken to prevent any appreciable contact of this material with the skin, especially when these contacts are repeated. If any appreciable area of the skin becomes coated with the inerteen, it should be removed by washing with soap and water. Butyl stearate is a good solvent for this material and can be used to aid in completely removing the inerteen from the skin. Its use should always be followed by washing with soap and water. The Maximum Allowable Concentration of vapor, previously specified, should not be exceeded under normal working conditions. This can be accomplished either by using a totally enclosed system or by providing adequate ventilation. Where this is not practical, respirators may be used. Proper preplacement and periodic physical examinations should be made by the Medical Department on workers who work with inerteen.

FIRST AID

In cases of swallowing, vomiting should be induced immediately by carefully inserting a finger in the person's throat. In case of any severe exposure, the person should be placed under the supervision of the plant physician.

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