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Here's Chloroacetophenone In Your Eye; You Better Blink

CHEMICAL MACE is a trademarked product of the General Ordnance Equipment Corp. of Pittsburgh. The verb "to mace" is, however, rapidly becoming part of common language.

According to several writers, the manufacturer has been reticent about discussing the formula for MACE. If so, this must be mainly to discourage competition for sales. The package label refers to phenylmethylchloroketone, a jargonized version of "chloroacetophenone," as MACE is correctly described in a December, 1967, release of the PHS National Clearinghouse for Poison Control Centers.

Aficianados of chemical warfare will immediately recognize the compound as a common tear gas, "CN" (which is even more confusing, for it has nothing to do with the very poisonous cyanides).

MACE, then, turns out to be a dilute solution of CN tear gas in what the manufacturer calls a "propriatory (sic) blend of synergistic carriers," and packaged in an aerosol spray can.

This weapon has been widely advertised and officially supported as a humane alternative to the nightstick and riot gun. There is nothing new about using tear gas for riot control. Indeed, the literature of injuries from tear gas bullets and bombs makes these appear more hazardous than an aerosol can because they may add mechanical injury to eyes or skin.

Practical experience, since about 1920, with pure tear gas supports the general claim that "CN" does little permanent damage compared to its immediate incapacitating effects. If true, MACE would indeed be an ideal weapon for riot control and for bank robbers.

Unfortunately, there has been almost nothing published to indicate that MACE, which is more than pure tear gas, has been systematically tested along the lines that would be required of the blandest new drug, much less one whose use depended on its being a very powerful irritant. So far, the FDA has ignored the whole question, despite demands by a number of physicians that "CN" be treated as a prescription drug.

Theirs may be an extreme and socially unproductive position. Nevertheless, the possibility of chemical injury by MACE deserves much more serious attention if it is to keep a useful place in the police armory.

Serious eye injuries and skin burns have, in fact, been attributed to MACE by a San Francisco ophthalmologist, Dr. Lawrence Rose. For the most part, these can be blamed on a gross misuse of the product at close quarters, the suspect being drenched during and after arrest. But such a casual use of MACE can be traced to propaganda that it can do no permanent harm, that it is the "rubber hose" of 1968, leaving no marks on the victim.

If MACE is to have the community's approbation, its distribution must be coupled with informed insrtuction.

The unregulated distribution of "CN" opens the door to many abuses apart from its obvious exploitation by robbers as well as cops. There is no guarantee that a can of MACE will have the expected composition, with pure ingredients.

Just because it may be used in anger, such a product should be very carefully supervised. Impurities, or products of chemical aging or decomposition, or the "synergistic carriers," could do a great deal of hardly intended mischief if the user believes he can do no "permanent harm." Furthermore, we know virtually nothing about the biochemistry of action of pure chloroacetophenone, and less about how it will work in the field and in combination with other solvents.

If Dr. Rose's suspicions about the toxicity of inhaled MACE are correct, there will be some fatalities if it has widespread use this year. And the victims will not be the real troublemakers; they will be older and quieter demonstrators with slower feet and weakened lungs.