

Much has been said recently about "binary chemical weapons" and the complications they create both for definition and for verification purposes. With respect to the definition criteria the acquisition of such weapons would fall under the ban on the single purpose agent which was finally produced at the target. Where possible, certain of the binary precursors having no other peaceful use could be included in the ban by placing them on the list of additional materials. Otherwise binary precursors must be treated in the same fashion as "dual purpose" chemical agents.

While dual purpose chemical agents are readily placed within the definition given, the banning of the production and stockpiling of materials in this category is not possible. In many instances it may be possible to ban the development, production and stockpiling of critical components of the weapon systems utilizing these materials, such as a projectile filled with the agent. Unfortunately this would lead to difficulties with materials such as tear gases and herbicides which would require dispersal systems for non-warfare uses. This leads then to the conclusion that it may only be possible to ban chemicals having dual purposes on the basis of their use in warfare and this immediately raises the question of encroachment on an existing treaty that is the 1925 Geneva Protocol.

It might be argued on this basis that the use of all dual purpose materials for chemical warfare is already banned by the Geneva Protocol and nothing more can be done. However it has also been seen that the Geneva Protocol lacks both an adequate definition of a chemical weapon and a verification mechanism. Either the Geneva Protocol must be somehow supplemented by a better definition such as the one we have presented above, or a new convention negotiated by the Committee on Disarmament must include a ban on the use of chemicals in warfare in order to deal effectively with dual purpose agents, and a verification mechanism.

It would appear that the use of a comprehensive definition of chemical weapons such as given in this paper provides an adequate means to define the scope of a chemical weapons convention and could form the basis for further negotiation.