

4. PRODUCTION, IMPORT, USE, AND DISPOSAL

4.1 PRODUCTION

Production of BCME in this country was curtailed in 1974 following stringent regulation by the Occupational Safety and Health Administration (EPA 1979; OSHA 1974). Available information indicates that BCME is no longer produced for sale in the United States (EPA 1980a; USITC 1987; HSDB 1988), although at least one facility manufactures BCME as a non-isolated, site-limited intermediate used in the production of other chemicals (Brothers 1989; Ress 1977). BCME is produced as a contaminant during the manufacture of chloromethyl methyl ether, usually at estimated levels of approximately 0.5 to 5% (DeFonso and Kelton 1976).

4.2 IMPORT

No data were located on imports of BCME.

4.3 USE

In the past, BCME was used for crosslinking of cellulose, preparation of styrene and other polymers, surface treatment of vulcanized rubber to increase adhesion, and in the manufacture of flameretardant fabrics (EPA 1980a). These applications have been discontinued, and no uses of BCME other than as a nonisolated intermediate were identified.

4.4 DISPOSAL

Any products, residues or container liners contaminated with BCME are considered acute hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.33 (c)), and must be disposed of by transport to a RCRA waste storage and disposal facility. The preferred method of disposal is incineration (OSHA 1974; Sittig 1985).

4.5 ADEQUACY OF THE DATABASE

Section 104(i)(5) of CERCLA, directs the Administrator of ATSDR (in consultation with the Administrator of EPA and agencies and programs of the Public Health Service) to assess whether adequate information on the health effects of BCME is available. Where adequate information is not available, ATSDR, in cooperation with the National Toxicology Program (NTP), is required to assure the initiation of a program of research

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designed to determine these health effects (and techniques for developing methods to determine such health effects). The following discussion highlights the availability, or absence, of exposure and toxicity information applicable to human health assessment. A statement of the relevance of identified data needs is also included. In a separate effort, ATSDR, in collaboration with NTP and EPA, will prioritize data needs across chemicals that have been profiled.

4.5.1 Data Needs

Production, Import, Use and Disposal. Although BCME is not produced as a commercial product in the United States, available information indicates that small quantities are produced and used in captive processes within at least one chemical factory. Determination of the amounts involved and whether BCME is used at other locations would be useful in evaluating whether risk of BCME exposure from current industrial practices remains of concern. In addition, compilation of data on typical contaminant levels of BCME currently found in other products such as CME would be helpful in determining whether or not this is a source of concern.

According to the Emergency Planning and Community Right to Know Act of 1986 (EPCRTKA), (§313), (Pub. L. 99-499, Title III, §313), industries are required to submit release information to the EPA. The Toxic Release Inventory (TRI), which contains release information for 1987, became available in May of 1989. This database will be updated yearly and should provide a more reliable estimate of industrial production and emission.