

40 C.F.R. § 721.6498

Modified polyisocyanates (generic).

- (a) Chemical substance and significant new uses subject to reporting. (1) The chemical substance identified generically as modified polyisocyanates (PMN P-96-1428) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.
- (2) The significant new uses are:
- (i) Protection in the workplace. Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(ii), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c). As an alternative to the respiratory requirements listed here, a manufacturer, importer, or processor may choose to follow the NCEL provisions listed in the TSCA section 5(e) consent order for this substance. The NCEL is 0.05 mg/m.
- (ii) Hazard communication program. Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), and (g)(5). The following statements shall appear on each label as specified in § 721.72(b) and the SDS as specified in § 721.72(c): Warnings. Exposure to diisocyanates may cause the following human health effects: Skin irritation and allergic reactions, respiratory irritation, respiratory sensitization, and lung toxicity; some diisocyanates also may cause cancer. The likelihood that these effects will occur depends on a number of factors; among them, the level of exposure, frequency of exposure, part of the body exposed, and sensitivity of the exposed individual. Symptoms of allergic reaction and respiratory sensitization include rashes, cough, shortness of breath, asthma, chest tightness and other breathing difficulties. There is uncertainty as to the mechanism by which sensitization occurs. In sensitized individuals, exposure to even small amounts of diisocyanates (below government-recommended workplace exposure levels) may cause allergic respiratory reactions like asthma and severe breathing difficulties. It is especially important to note that contact with skin may lead to respiratory sensitization or cause other allergic reactions. In some cases, the effects of diisocyanate exposure may be immediate and life-threatening; in others, the effects may be delayed and occur hours after the exposure has ended. Repeated or prolonged exposure to diisocyanates may also cause irritation to eyes, skin, respiratory tract and lungs, as well as adverse chronic lung effects, like decreased lung capacity and function. Individuals experiencing shortness of breath, tightness in the chest or other problems breathing should seek immediate medical attention. When using this substance the following protective measures should be used: In workplaces where individuals handle diisocyanates or coatings or other formulations that contain them, an industrial hygiene and safety program should be operative. Important components of this program include: Hazard communication and training on safe handling practices; use of efficient and well-maintained application equipment, engineering controls and personal protective equipment; housekeeping procedures including spill prevention and cleanup practices; and, if feasible, means to measure airborne levels of polyisocyanates and diisocyanates. During spray applications, workers should take precautions to avoid breathing vapors, mists or aerosols. Inhalation exposures should be limited to <0.05 mg/m as an 8-hour time-weighted average (TWA) for combined polyisocyanates and diisocyanates. Engineering controls should serve as the first, most effective means of reducing airborne polyisocyanate and diisocyanate concentrations; an appropriate National Institute for Occupational Safety and Health/Mine Safety and Health Administration (NIOSH/MSHA) approved respirator

should be used as a secondary tool to lower exposures. Currently, downdraft spray booths and high-volume low-pressure (HVLP) spray guns appear to offer the most efficient technology to reduce inhalation exposures; a maintenance program should always be used to ensure optimal operating efficiencies. To limit dermal contact, individuals should wear impermeable gloves, protective clothing and goggles or glasses with side shields.

This document is only available to subscribers. Please log in or purchase access.

Purchase Login