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ASBESTOS GASKETS ARE GETTING FEWER

By now, everyone is aware of the health hazard of breathing asbestos fibers. On November 4, 1983 OSHA further tightened the regulations on air-borne asbestos fibers to reduce the statistical probability of asbestosis and lung cancer. The allowable level was cut from 2 to 1/2 fiber over 0.0002 in. long per cubic centimeter of air. This level approaches the practical limit for detection and will undoubtedly cause companies which supply and process asbestos to get out of the business. Garlock, the largest U.S. manufacturer of packings and gaskets, discontinued its entire asbestos line at the end of 1982.

Since asbestos fibers in compressed sheet gasketing material are locked in by the rubber binder which makes up about 20% of most sheets, they cause no health hazard to the gasket user with normal handling and use. However, cleanup of flanges from which asbestos gaskets have been removed and handling of used, dried out gaskets will release asbestos fibers. Therefore, from a safety as well as a legal standpoint, many Du Pont locations ban any asbestos-containing materials at the site. Aimed primarily at pipe insulation, woven tapes and loose column packings, the ban also includes packing, brake linings, and compressed asbestos gaskets.

Design Division's Technical Services Section and the Gasket and Packings Standards Subcommittee have begun a transition program to phase out asbestos gaskets over the next few years. They plan to:

- o Advise plant personnel of the transition with articles such as this one, and letters where needed.
- o Highlight asbestos-containing gaskets and packings by bold print of their Du Pont codes in Engineering Standards U2A and U1C, and in Specifications SU2A and SU1C.

- o Begin listing alternative gaskets along with the G-1, G-2 and G-40 gaskets in all new P-codes, and revising existing P-codes and specifications.
- o Remove references to all gaskets containing asbestos from the Du Pont codes after a period of time.

Generally, the stocks of asbestos gaskets on the plants should be used up and not discarded at this time, subject to plant and department policy. Wherever possible, non-asbestos gaskets should be used by plant maintenance personnel.

The Standards now list four sheet gasket codes for "non-asbestos" gaskets which have been specified as substitutes for G-1, G-2 and G-40 (compressed asbestos sheet) gaskets. The new non-asbestos codes are S-80, S-81, S-82 and S-83. The differences are in the rubber used to bond the sheets:

- o S-80 SBR (Styrene butadiene rubber)
- o S-81 NBR (Nitrile butadiene rubber)
- o S-82 CR (Neoprene)
- o S-83 EPDM (Ethylene-propylene terpolymer elastomer--Nordel)

In summary--Du Pont is phasing out asbestos in gaskets and packings. New non-asbestos codes have been established and brands are approved for use. Plants should start using the new non-asbestos gaskets, but only those listed in SU2A.

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