St. Louis - General Offices

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Pydraul AC - Toxicity Statement

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The following is suggested for consideration as an expanded toxicity statement in the new Pydraul AC bulletin:

TOXICITY AND SAFE HANDLING OF PYDRAUL AC

"In animal toxicity studies with Pydraul AC, the oral lethal dose in rats is approximately 40 grams per kilogram and for rabbits, 3.5 to 4.5 grams per kilogram. The greater sensitivity of rabbits is typical of this type of fluid. This lethal dose is of such an order, however, that the fluid may be considered only 'slightly toxic' to man from the standpoint of accidental ingestion of single oral doses. The fluid may be absorbed through the unbroken skin of rabbits in doses resulting in death, but again the minimum lethal dose is such that accidental massive skin exposures to man do not present a hazard. Skin and eye irritation studies with rabbits classify the fluid as a mild irritant. Laboratory animals survived six-hour exposures to an atmosphere saturated with the vapors of the fluid. On the basis of this data, it is concluded that Pydraul AC requires no special handling precautions other than avoiding prolonged or repeated skin contact. Accidental splashing in the eyes will result in moderately severe pain and irritation but no permanent damage should result.

"In connection with using Pydraul AC in air compressors where the air may be supplied to air masks or other respiratory protective devices, we believe that any Pydraul AC carried over in the compressed air presents no hazard to humans breathing the air. A limited series of samples taken from a compressed air line used for such purposes indicated that no measurable quantities of the components of the fluid were present. The compressor in question had been supplied with Pydraul AC for a period of more than three years at the time the samples were taken.

"In spite of the limited evidence that the compressed air will not contain dangerous amounts of the fluid, we believe that any system involving the supply of compressed air to underwater diving apparatus, workmen's masks, respirators or suits, should incorporate a filter in the air supply line. The purpose is to remove any foreign material which might be present including rust, oil droplets, odors, or organic vapors. Such a filter should be used with any kind of compressor lubricant."

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