

Chemical Solvents Product Stewardship Summary

CAS numbers:

123-42-2	Diacetone Alcohol
108-11-2	Methyl Isobutyl Carbinol
108-83-8	Diisobutyl Ketone

What are chemical solvents?

Chemical solvents are liquid oxygenated solvents which are produced through the hydration of propylene. The chemical solvents referred to in this document are Methyl Isobutyl Carbinol (MIBC), Diacetone Alcohol (DAA) and Diisobutyl Ketone (DIBK).

How are chemical solvents used?

Chemical solvents are used in paintings and coatings, cleaning products, industrial processes and adhesives.

Health, Safety and Environmental considerations

Chemical solvents are usually flammable and flammable atmospheres can be created at room temperatures. This means that any environment where chemicals solvents are being used needs to be well ventilated. They should be kept away from heat and open flame. As the vapour is heavier than air, it may spread along the ground, so care needs to be taken that the vapour is not ignited by a distant source.

Continuous inhalation of very high concentrations of minor chemicals solvents, well in excess of the occupational exposure limits, can result in unconsciousness. The effects of swallowing large quantities may include narcosis (numbness and stupor), coma and even death.

Short-term, high-level exposure to minor chemical solvents can result in dizziness, drowsiness and irritation to the eyes, respiratory system and skin. If the skin repeatedly comes into contact with chemical solvents, it can result in skin dryness or cracking.

Chemical solvents may be moderately toxic to aquatic organisms. They are biodegradable and have a low potential to bio-accumulate.

Storing and transporting chemical solvents

Chemical solvents are transported by marine vessels, road tankers, and railcars. During transport, product is stored in bulk containers that meet local and international regulated specifications.

Risk Characterization Summary

Risks associated with exposure to these products have been evaluated for the following “chain-of-commerce” activities: manufacture, storage, product transfer, transportation, and customers/markets. They are manufactured, stored and transported to customers in closed systems. Depending on the customer, applications may vary from use as an intermediate for the manufacture of other chemicals, as commercial products or as certain formulated consumer products. Equipment design and handling procedures ensure exposures, and therefore risks, are low where the product is used as a chemical intermediate. Exposures may be higher in commercial and consumer applications. To minimise risk, additional controls, such as special handling procedures and protective packaging are implemented.

This product stewardship summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of health and safety information. Additional information is available through the chemical’s applicable [Material Safety Data Sheet](#), which should be consulted before use of the chemical. This product stewardship summary does not supplant or replace required regulatory and/or legal communication documents.



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