Methyl Isobutyl Ketone Product Stewardship Summary

(CAS number 108-10-1)

What is Methyl Isobutyl Ketone?

Methyl Isobutyl Ketone (MIBK) is a colourless liquid solvent with a characteristic mild odour. It is produced from acetone.

How is Methyl Isobutyl Ketone used?

Methyl Isobutyl Ketone is used in paintings and coatings, cleaning products, industrial processes and adhesives.

Health, Safety and Environmental considerations

Methyl Isobutyl Ketone is highly flammable and flammable atmospheres can be created at temperatures as low as 14°C. This means that any environment where MIBK is being used needs to be well ventilated. 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 MIBK, well in excess of the occupational exposure limits, can result in unconsciousness and death. The effects of swallowing large quantities of MIBK are similar to the effects of excessive alcohol intake. This can include narcosis (numbness and stupour), coma or death.

MIBK is harmful by inhalation and short-term, high-level exposure to MIBK vapours can result in eye and respiratory tract irritation. If the skin repeatedly comes into contact with MEK, it can result in skin dryness or cracking. Exposure may enhance the toxicity of other materials.

MIBK has low toxicity to aquatic organisms. It is biodegradable and has a low potential to bioaccumulate.

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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