

# Leak/ spill incidents with chloroformates



First evacuate personnel from the area using escape PPE and fit suitable PPE (suit/ independent air supply) before follow up. Call emergency services/ authorities and secure the area from further incident



## LEAKS OF CHLOROFORMATES?

- If possible, collect leaking chloroformate in suitable containment (e.g. spill tray/ dike area)
- Otherwise, cover the leaked material with paraffin oil/ alcohol stable foam/ water. Caution must be applied with water and bases as reactions can be delayed and lead to uncontrolled reactions
- Transfer material to destruction unit



## SMALL SPILLS OF CHLOROFORMATES?

- Treat with appropriate absorbents and dispose of as hazardous waste
- Vermiculite can be used to cover the spill
- Consult product experts for cleaning advice (producer/ ICE/ TUIS)
- Clean the area with diluted sodium bicarbonate or (aqueous) ammonia solution. Place all clean up materials/ PPE in sealed container for disposal. Rinse the area with water
- Beware pressure build up in any containers. If needed, treat any Chloroformate that needs venting as per CFSG002 document



## LARGE SPILLS OF CHLOROFORMATES?

- Contain the spill in a dike area
- Consult product experts for cleaning advice (producer/ ICE/ TUIS)
- Clean the area with diluted sodium bicarbonate or (aqueous) ammonia solution.
- Whilst there is limited experience for large scale spills with mineral oil, cover with light mineral oil or alcohol-resistant foam
- Pure chloroformates can be pumped to containment. For mixtures, consult product experts
- Beware pressure build up in any containers. Treat venting chloroformates as required
- Place all clean up materials/ PPE in sealed container for disposal. Rinse the area with water



## TRANSFER OF SPILLS INTO A CONTAINER?

- If the chloroformate is not contaminated with anything else, after ensuring that the pumping equipment is clean and dry, pump into a clean/ dry suitable container
- Long term storage in plastic should be avoided due to diffusion of the chloroformate
- Ensure that the container is not fully sealed or has a vent which can also be treated using a mobile scrubber



## DISPOSAL OF SPILLED PRODUCTS?

- Discard as per appropriate local regulations (safe destruction, hydrolysis on site is advisable)
- Pre-treatment with ammonium or sodium bicarbonate is possible after consultation with ICE / TUIS / product experts
- Dispose of hydrolysates via approved wastewater treatment facility if local rules allow
- Any waste should be considered flammable, corrosive and reactive and should be treated in the same way as the product itself

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