

Ship Type: Container Trade Area: Worldwide

Bulletin 57 - 07/98 - Calcium Hypochlorite (Hydrated) - Threat of Explosion - Urgent Preliminary Advice

We have been made aware of some new preliminary findings in respect of this **frequently** carried cargo, which give rise to serious concern.

Calcium Hypochlorite (Hydrated) UN 2880 is a cargo shipped in large quantities in containers. It is commonly used as a bleaching powder but in this strength is better known as a disinfecting and cleaning agent in swimming pools.

As a result of a particular incident, Dr J H Burgoyne and Partners have been commissioned to undertake research into the critical ignition temperature of the hydrated form of high strength hypochlorite UN 2880. The critical ignition temperature for this material is that at which a runaway reaction begins, often followed by fire/and/or explosion.

Whilst the research is ongoing, preliminary findings have revealed that for the type and size of packaging routinely used to ship this material around the world, the temperature at which the runaway reaction is likely to begin **may be much lower** than that indicated in the IMDG CODE (page 5138). Several past incidents tend to reinforce these findings.

Dr J H Burgoyne and Partners believe that in some situations the normal ambient temperature in the holds of containerships could reach the critical ignition temperature of this material and could result in ignition/explosion of the cargo.

They **urgently** recommend that this material is not shipped in the holds of such ships and that containers stowed on deck avoid direct sunlight.

Source of information: Dr JH Burgoyne and Partners through the Swedish Club