

# Misdeclared beware!

The shipment of an undisclosed cargo can be a ship owner's worst nightmare which, in some scenarios, can lead to a major casualty putting the safety of the ship's crew, hull and cargo and the environment at risk, as **James Bean**, of the Standard Club, explains

**T**he misdeclaration of cargo is not a new phenomenon. There were a number of high profile incidents in the 1990s where calcium hypochlorite was suspected to be the cause, for example, the *CMA Djakarta* in July 1999, *Aconcagua* in December 1998 and *Recife* in September 1991. While the industry was quick to respond to these incidents with legislative changes and many carriers subsequently refused to carry dangerous goods, recently the Standard Club has been involved in a number of multi-million dollar incidents caused by misdeclared cargo, and specifically involving calcium hypochlorite on container ships, which indicates the need for further work to be done in this area.

This article looks at the issues associated with the carriage of calcium hypochlorite, the problems that can arise when it is misdeclared, the carrier's rights of recovery and an initiative endorsed by the Standard Club which is looking to resolve the problem of misdeclaration in the container trade.

## Calcium hypochlorite

Calcium hypochlorite is commonly used in water treatment as a disinfectant and bleaching agent. Transport is usually by sea with many tens of thousands of tonnes of this material transported annually in containers. It is carried as a white or yellowish solid in powder, granule or tablet form.

Only a limited number of countries manufacture this chemical on a commercial scale with China now being the main manufacturing nation. At the point of manufacture, a corresponding material safety data sheet (MSDS) should be available for the goods, which will include information about potential hazards, the correct UN number and the corresponding IMDG classification.

## Safe stowage

Cargo might be intentionally misdeclared for a number of reasons: usually to obtain cheaper freight rates, but more sinisterly to avoid safety or security considerations for cargo stowage and packaging.

In order to combat issues caused by the misdeclaration of cargos carried on container ships, the International Maritime Organisation made it a requirement for freight forwarders to declare cargos as per their "proper shipping name" according to the International Maritime Dangerous Goods (IMDG) Code. While carriers will check the cargo declarations and corresponding MSDS to ensure that the container is carried correctly, dangerous cargos attract a higher freight rate which some unscrupulous shippers seek to avoid.

In normal carriage conditions, containers carrying calcium hypochlorite should only be stowed on deck, away from sources of heat such as bunker tanks or direct sunlight. This equally applies when the containers are ashore. The IMDG



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Code enforces strict quantity limits on both the inner and outer packaging of calcium hypochlorite. While it can be carried in reefer containers, it is highly corrosive to the metal framework of the container in the presence of moisture.

Misdeclaration of cargo on the manifest can lead to mishandling by crew who do not stow the cargo on board in accordance with the IMDG Code. When exposed to temperatures between 30°C and 55°C, for example bunker tanks or direct sunlight, or where there is the presence of impurities such as powdered metals or certain organic compounds, calcium hypochlorite undergoes exothermic decomposition (releasing gaseous chlorine and oxygen). Oxygen will sustain and exacerbate any fire already caused by the decomposition reaction, and gaseous chlorine is toxic. This can put the ship and crew in danger and has been cited as a cause of some high profile fire and explosion incidents.

## Recent cases handled by the Standard Club

In a recent case handled by the Standard Club, a "slow explosion" occurred in a container ship's hold shortly following departure from port. Salvors intervened and during fire fighting efforts, the hold was filled with water. It appears the fire originated from an explosion in a container. While the identity

of the container responsible for the incident has not yet been confirmed and will be the subject of litigation, it is suspected that the seat of the explosion was a container misdeclared as "water treatment compound" when in fact it contained calcium hypochlorite. The resulting fire led to substantial damage to ship and cargo with considerable time off-hire.

Calcium hypochlorite is only one cargo of many which can cause irrevocable damage if undeclared. In another recent case handled by the Standard Club, thin, light, white smoke was discovered in a container ship's hold during a journey between Vietnam and Hong Kong. The ship was able to properly load and stow dangerous goods, however a cargo of tapioca in hold 4 had been misdeclared. The IMDG Code does not list specific entries for any tapioca however it is widely known to be susceptible to self-heating. Temperatures of the smoking containers were noted at between 32°C and 37.1°C. Other containers were 28°C. Experts were instructed to attend at Hong Kong. The smoking containers were removed and inspected on the barge alongside. During the unloading of some containers, there was an outbreak of fire at the base of one container. The container was discharged and lowered into the sea to submerge the base and extinguish the fire.

### Rights of recovery in respect of misdeclared dangerous cargos

It is an established principle that a shipper is under a duty not to load dangerous cargo that might damage a ship without the carrier's knowledge and consent. All contracts of carriage between a shipper and carrier should incorporate this duty either as express or implied terms and sometimes both. The implied duty under English common law is absolute and requires a shipper not to load dangerous cargo that is likely to damage the ship, or expose the ship or cargo to the risk of detention and delay. In addition, the carrier is empowered at any time to unload, destroy or render a cargo innocuous, as the circumstances may require, without payment of compensation.

The leading textbooks assert unanimously that, in appropriate circumstances, the implied duty also applies to charterers even where they are not the actual shippers of the cargo. A number of charter party forms contain express clauses dealing with dangerous cargo, the breach of which can give rise to an indemnity to an owner for liabilities arising as a result of shipping dangerous goods. Such liabilities can include the ship's proportion of general average, salvage costs, particular average and damages for loss of use to the ship and her cargo which has the potential to run into millions.

Notwithstanding that a shipper is under a duty not to load dangerous cargo that might damage a ship without the carrier's knowledge or consent, the carrier and/or their subrogated insurers' prospects of meaningful recovery for their losses are likely to be slim where the shipper is uninsured or a brass plate company in China.

### Cargo incident notification system and organisation

The Standard Club endorses membership by its liner operating members of the Cargo Incident Notification System and Organisation (CINS) which was created in November 2010 by CMA-CGM, Evergreen, Hapag-Lloyd, Maersk Line and

Mediterranean Shipping Company after multiple serious cargo incidents. The partnership enables the container lines to receive a rapid alert in the case of a worrying incident and allows them to manage the related risks. The total number of CINS members is 27, representing more than 60% of the container shipping industry.

The intention of CINS is to allow the structured capture of key causal information relating to cargo and container incidents. All information about cargo that either has or could have caused an accident is fed into the CINS database via a web application. Analysis of the captured data allows production of statistics and identification of industry trends. This will also provide the ship owners with the evidence to back up their claims if any clear patterns emerge indicating that further action ought to be taken either at industry or regulatory level.

The available CINS statistics are already showing trends and guiding ship owners how to act in order to change the culture, make container shipping safer, and ensure cargo arrives at its destination. This information is resulting in increased numbers of carriers being in favour of measures unprecedented in the shipping industry, such as mandatory auditing and registration of shippers comparable with the International Air Transport Association.

### Conclusion

The safe carriage of dangerous goods relies upon the shipper providing a full and accurate description of the cargo. Only with this information can proper carriage conditions and safe transport be provided.

Attempts by carriers to ban the carriage of dangerous cargos have been unsuccessful as an unscrupulous shipper will find a way round the hurdles put in place, regardless of the risk to life and property. The easiest solution may be to do away with higher freight rates for dangerous cargos in an effort to encourage full and frank disclosure. However, loading dangerous goods requires enhanced planning and special stowage arrangements which comes at a cost to the carrier. While the work of CINS is applauded and seen as a significant step in the right direction, due to scalability, the container industry faces a huge challenge in trying to implement a system comparable to the International Air Transport Association where shippers are registered and audited on a regular basis.

Until then, it remains to be seen whether the CINS initiative will result in changes in legislation or other safe practice recommendations and closer co-operation of the carriers in other areas. All of which the marine insurance industry, including the Standard Club, will be supporting. *MRI*



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