

## Turning a blind eye to illegal chemical samples

**Small samples of hazardous chemicals** are being regularly packaged and labelled as non-hazardous substances by some Chinese manufacturers in order to avoid the additional cost and paperwork required to comply with International Air Transport Association (IATA) and IMDG Code regulations for the transportation of dangerous goods by air and sea.

Health and safety is being compromised to save money and the consequences could be fatal. The majority of chemical samples are transported internationally via passenger aircraft and many airlines are unknowingly handling flammable and toxic chemical samples labelled incorrectly. The practice is putting both airline employees and passengers at risk as well as those taking delivery of the samples.

Anyone opening a package that they believe contains non-hazardous chemicals could be exposed to dangerous liquids, powders or fumes. Workers are unlikely to have taken adequate precautions or to be wearing the correct personal protective equipment (PPE).

The problem is getting worse with the shift in chemical manufacturing from its traditional base in Europe towards sites in Asia, particularly China. Today, many of the world's major chemical companies source from China, and have operations in the region or outsource production to Chinese manufacturers so that they can compete in an increasingly price sensitive and commoditised market. This means more and more samples are now being sent overseas in order to drive sales.

Unfortunately, too many samples coming out of China are being shipped under false pretences.

There are procedures in place in China to stop this happening however, all chemical products (both hazardous and non-hazardous) must have an identification certificate before being accepted by the airlines. Certificates are issued by a testing body such as DGM or the Shanghai Research Institute. Unfortunately a loophole exists whereby the hazardous product is labelled incorrectly and a non-hazardous identification certificate is used to fool the authorities and keep costs to a minimum.

Bruce Percy is Managing Director at SampleRite, a company that provides a global sample management service. He knows the practice is widespread because SampleRite itself receives supplies of its clients products that are incorrectly labelled and packaged, which have been outsourced and manufactured in China.

Percy explains: "We get situations fairly frequently where the outside of the box indicates one thing but inside the box we find the product labelling is different. Sometimes there may be another safety data sheet inside. If a delivery has not been labelled or packaged properly we immediately contact our clients to make them aware of the situation. Our clients are usually taken aback by the revelations.

"In these situations we quarantine the material. The client then has to send us written confirmation on what the product is. We would expect them to take control of the situation and contact their manufacturer or supplier to ensure it never happens again. The issue is creating enormous confusion and compromising safety so it is important to flag it up. The fact that sample management is not a core function for most chemical manufacturers and distributors is clearly exacerbating the problem. All products have to be sent away for certification before being decanted in controlled conditions, packaged correctly, labelled in line with current legislation and shipped via approved transport companies. All this takes time and money.

"Given the costs involved, when companies try to do this themselves, many cut corners to save on shipping fees," continues Percy. "The difference between sending hazardous samples legally and sending hazardous samples legally and illegally between China and say mainland Europe can be as much as 300%. But that's the price that must be paid. There is no way around it apart from breaking the law.

"Our industry should stop turning a blind eye to these dubious practices."

Everyone knows what's going on but there is too little being done to prevent it. It is not the couriers who are at fault, it is the chemical companies themselves who should demand that best practice is followed at all times, as should the customer who receives the sample. If a European chemical company has outsourced its manufacturing to China it needs to make sure samples dispatched in its name are sent legally."

If an accident happens because labelling has been falsified or if a sample is stopped at customs during a routine check-up, the manufacturer or distributor concerned could face prosecution and severe financial penalties. The European chemical company that asked this manufacturer or distributor to dispatch samples on its behalf could suffer irreparable damage to its reputation in the market.

Clearly companies involved with the transport of chemicals need to be aware of the various international transportation regulations and the specific training that employees are required to take. IATA's Dangerous Goods Regulations cover the transportation of dangerous goods by air. The IMDG code covers transportation of dangerous goods by sea.

To send any hazardous sample overseas requires that the product is first identified with a four-digit UN number. There are 3500 UN numbers listed and published as part of the Recommendations on the Transport of Dangerous Goods, also known as the Orange Book.

IATA's Dangerous Goods regulations have recently undergone sweeping changes that impact how samples must be classified and packaged. Companies and individuals that fail to fully comply with the current rules are subject to severe and unprecedented enforcement actions. It is now more critical than ever that anyone involved in shipping samples is fully trained and up-to-speed on the latest laws and standards.

So chemical companies that regularly send out hazardous samples from China by overseas carriage have three options if they are to ensure all samples are dispatched with the correct paperwork.

Firstly, they could set up and train a team in-house to handle sample requests, which is costly and time consuming. Secondly, they can enlist the help of one of the major courier companies to complete the relevant paperwork on their behalf, which is typically very expensive. Thirdly, the company could look to outsource the process to a company that offers a dedicated sample management service, which is often the most cost effective option.

Percy says: "Providing samples is an involved process. The chemicals have to be stored correctly prior to decanting, technicians must be trained to handle these substances safely; the right type of packaging must be used depending on the sample; an up-to-date health and safety data sheet must be included; all labelling must meet the legal requirements; and finally accompanying paperwork must be filled in correctly by trained personnel before the courier company will agree to deliver the package.

For many companies it is simpler and more cost effective to outsource the process rather than invest in the recruitment and training of staff, not to mention temperature controlled storage areas, cleanrooms and laboratory facilities for handling the chemicals and extra space to keep a supply of packaging materials.

"On many levels an outsourced sample management service can be much more efficient than handling it in-house. SampleRite has a web-based password protected 24/7 ordering facility that allows clients to log sample requests from their customers. Subject to stock availability it can then send samples out within 24/48 hours. At the end of each month management reports are prepared so our clients can see exactly where their product has been sent.

SampleRite currently dispatches over 50,000 samples each year on behalf of its clients, who benefit from the high volume discounts on freight costs that the company has negotiated with the major courier companies. The company can handle a variety of hazardous and non-hazardous chemicals including dyes, corrosive, toxic and flammable products, food and pharmaceutical grade. This allows clients to focus on their core manufacturing and distribution activities. The company has facilities in the UK and China.

Contact www.samplerite.com