

Focus on BGIA's work

Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung

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Internet information portal for the hazard black spot of container freight

Problem

The world trade in goods now makes extensive use of container freight. In Germany's ports alone, some 15 million containers are transferred and dispatched by land transport throughout the country every year. Over 20% of the containers arriving from overseas are considered to be contaminated with hazardous substances, having been treated with highly dangerous gases prior to shipment, or because they emit industrial chemicals (residues from the manufacturing processes of the goods) in gaseous form. The gas treatment required for certain products is intended to prevent the formation of mould, spoiling of the goods, and the transmission of pathogens and pests. Virtually all natural substances are affected, including wood and also textiles. Machinery packed in wooden crates for instance or loaded onto wooden pallets is also treated with gas.

The air in containers may be contaminated with gas treatment residues or industrial chemicals. Warning signs must be affixed to gas-treated containers. These signs are however frequently missing or defective, with the result that hazardous situations repeatedly arise and accidents occur along the delivery chain.

Opening and unloading of the containers is associated with a wide range of hazards and health risks. These primarily include:

- Acute or chronic poisoning by residues of gas treatment agents or industrial chemicals
- Allergic reactions induced by mould fungi
- Injury caused by loads tipping over or falling out of the container



Container transfer (Source: See-Berufsgenossenschaft)

Anyone opening or unloading a container is at risk:

- Customs personnel during checks
- Employees of logistics companies during transfer
- Employees in the destination companies during unloading and unpacking of the goods

Activities

In order to provide information on the many hazards associated with container freight, all relevant information was collected by a working group and prepared for publication on a website. The working group is made up of representatives from the Deutsche Gesetzliche Unfallversicherung (German Social Accident Insurance – DGUV), the BGIA, several institutions for statutory accident insurance and prevention (BGs) and public-sector accident insurers, the agricultural social insurers, the Social Ministry of the region of Schleswig-Holstein, and the German Federal Ministry of Finance.

Results and Application

The website provides information on the mechanical, biological and chemical hazards to be considered during the opening and unloading of containers. It lists effective protective measures and provides practical advice on the safe handling of containers. This includes model procedures, checklists for the delivery and unloading of containers, and instructions for the production of a risk assessment and on the use of instruments for the checking of containers. The website also contains information for doctors and the fire and rescue services, and on the most important first-aid measures following an accident.

Container markings are explained and methods described by which the presence of toxic chemicals in containers can be determined even in the absence of proper marking.

Area of Application

Persons performing tasks with, on or in containers; doctors and rescue services encountering persons who may have been exposed to the effects of chemical or biological agents as a result of work involving containers

Additional Information

- www.dguv.de/bgia/frachtcontainer (in German)

Expert Assistance:

BGIA, Division 3: Hazardous substances: handling
– protective measures

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