

SAFE WORKING IN A TRANSPORT CONTAINER

-Do these measures BEFORE opening a container

1. ASSESS THE RISKS OF THE CONTAINER



Check documentation

1. Look for indoor air risk factors from the shipping documentation
2. IMDG/ADR/VAK/Fumigation* may indicate a risk
3. Notice goods with high gas exposure risk potential

- 0 Discuss what documentation you should especially acknowledge in your own work
- 0 Fumigation* means gassing the internal air of a container in order to eradicate i.a. insects, rodents and mould spores

2. CHECK THE CONTAINER FROM THE OUTSIDE



Look for external risk factors

1. Check if there are warnings or labelling on dangerous goods on the container
2. Check if the container is labelled as fumigated
3. Other hints for a gas exposure risk include e.g. closed air hatches, and doors closed with tape or urethane



- 0 A marking similar as shown in the picture placed on the door of a container means the container is fumigated: gassed with pesticide. The air inside the container may contain traces of the gas.

3. OPEN THE CONTAINER CAREFULLY



Open the container safely

1. The container door may burst open for various reasons. Use a securing shown in the picture!
2. Use a gas mask when opening the door of the container, and measure the gas composition in the internal air of the container*
3. If possible move immediately upwind to wait for airing of the container

- 0 Please note that there are multiple gases and chemical compounds in use. Manual gas detectors and small analyzers currently in use can indicate a limited number of gas types

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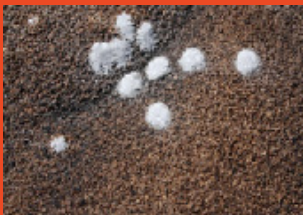
-Do these measures AFTER opening a container

4. LOOK INSIDE THE CONTAINER



Check hints of risks

1. Observe the container from a distance. DO NOT yet go inside!
2. Are there any hints for elements of danger? E.g. dead insects, fumigation gas bags, or dust remains
3. Use armour and remove clear gas sources
4. Air the container



On the left: Traces of source material releasing phosphine (PH₃) gas used in fumigation

5. AIR THE CONTAINER

Tulostulostus (hinnit)												
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hinnit	hinnit	hinnit	hinnit	hinnit	hinnit	hinnit	hinnit	hinnit	hinnit	hinnit	hinnit	hinnit
20	0.04	0.07	0.17	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40											44	0.00
60											25	0.07
80											08	11.00
100											08	10.00
200	1.00	0.90	0.20	0.00	0.00	0.10	20.00	18.00	20.10	20.00	20.00	20.00
240	2.00	1.00	0.20	0.04	1.00	0.00	20.00	20.00	20.00	20.00	20.00	20.00
260	2.40	1.00	0.00	0.00	4.00	0.00	20.00	20.00	20.00	20.00	20.00	20.00
280	2.40	1.00	0.00	0.00	1.00	0.00	20.00	20.00	20.00	20.00	20.00	20.00
300	2.00	1.00	0.00	0.00	1.00	0.00	20.00	20.00	20.00	20.00	20.00	20.00

EXAMPLE

Air the container long enough

1. Many factors* have an effect on ventilation time
2. Information received from risk assessment and/or gas measurement stress the need for ventilation
3. Employer's responsibility includes estimation of an adequate ventilation time

0 Factors having an effect on ventilation time include gas concentration in the container in the beginning, the amount of time the container has been closed, the filling degree of the container, temperature, humidity, and wind conditions

6. TAKE INTO ACCOUNT RESIDUES



Take into account residues of gas

1. Ventilate a closed container before entering into it
2. Do not work alone or behind closed doors inside a container whose transport history is unknown
3. Changing temperature and humidity as well as sweeping have an effect on internal air inside a container

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