

# International Hazard Datasheets on Occupation




## Forklift Truck Operator

### What is a Hazard Datasheet on Occupation?

This datasheet is one of the International Datasheets on Occupations. It is intended for those professionally concerned with health and safety at work: occupational physicians and nurses, safety engineers, hygienists, education and Information specialists, inspectors, employers' representatives, workers' representatives, safety officers and other competent persons.

This datasheet lists, in a standard format, different hazards to which forklift truck operators may be exposed in the course of their normal work. This datasheet is a source of information rather than advice. With the knowledge of what causes injuries and diseases, is easier to design and implement suitable measures towards prevention.

This datasheet consists of four pages:

- Page 1: Information on the most relevant hazards related to the occupation.
- Page 2: A more detailed and systematized presentation on the **different hazards** related to the job with indicators for preventive measures (marked  and explained on the third page).
- Page 3: Suggestions for **preventive measures** for selected hazards.
- Page 4: **Specialized information**, relevant primarily to occupational safety and health professionals and including information such as a brief job description, a list of tasks, notes and references.


### Who is a forklift truck operator?





A worker who drives an industrial truck equipped with lifting devices, and performs various tasks related to this job.





### What is dangerous about this job?

- Forklift trucks sometimes overturn due to overload, incorrect load positioning, driving and operating errors, or poor maintenance. This put their operators at a life-threatening risk.
- Operators of forklift trucks may suffer serious traumas when the load falls from the truck, or stacked load collapses, etc.
- Forklift Truck Operators may, in the course of time, suffer from back, neck and hands and arm pains, cause by uncomfortable seating, vibrations and excessive physical efforts.

### Hazards related to this job

Specific preventive measures can be seen by clicking on the respective  in the third column of the table.

Accident hazards		
	<ul style="list-style-type: none"><li>• Fall of truck operator, due to slip or incautious step, while climbing to or descending from the operator's seat</li><li>• Fall of truck from an upper level to a lower level, due to careless driving, slip or collapse</li><li>• Fall of improperly loaded cargo</li></ul>	
	<ul style="list-style-type: none"><li>• Overturning of truck due to overload or incorrect positioning of the center of gravity</li></ul>	 

	<ul style="list-style-type: none"> <li>Overturning due to cargo lifting to an excessive height, or due to careless steering</li> <li>Overturning of truck, esp. 3-wheel, while making an extremely sharp and speedy turn</li> <li>Overturning due to driving on a too steep slope, or at excessive driving speed, or on an unsafe track (esp. in the event of spills on floors with loss of traction), or due to use of improper equipment/accessories</li> </ul>	
	<ul style="list-style-type: none"> <li>Rolling-down of truck due to insufficiently applied handbrake</li> <li>Injury from rotating parts of the truck, not fully protected against accidental contact</li> <li>Collision with a stationary (e.g. building, wall, etc.) or moving object (esp. when field of vision is obstructed by the cargo)</li> <li>Collapse of a stack (mostly a stack of poorly stacked goods, when hit by a truck or due to vibration from a nearby truck)</li> <li>Electric shock resulting from contact with overhead electric cables</li> <li>Acute exposure to hazardous chemicals as a result of fall and crush of fragile containers; also potential injury from broken glass</li> <li>Spill of acid during battery charging</li> </ul>	
<b>Physical hazards</b> 	<ul style="list-style-type: none"> <li>Exposure to excessive noise levels (esp. when operating diesel trucks or working inside closed structures), with resulting hearing impairment</li> </ul>	3
	<ul style="list-style-type: none"> <li>Exposure to whole-body vibration caused by rigid construction of truck (particularly wheels), inadequate shock-absorbing properties of operator's seat (e.g., lacking or improperly adjusted suspension), and prolonged driving on rough grounds</li> <li>Exposure to harsh climatic conditions (heat, cold, rain, winds, etc.) while working outdoors</li> </ul>	
<b>Chemical hazards</b> 	<ul style="list-style-type: none"> <li>Allergic skin reactions as a result of contact with fuel and/or solvents</li> </ul>	4
	<ul style="list-style-type: none"> <li>Eye injury due to splashes of corrosive materials</li> </ul>	5
	<ul style="list-style-type: none"> <li>Intoxication by exhaust gases, esp. asphyxiation by CO resulting from incomplete combustion of fossil fuel, which are emitted from the exhaust pipe and their concentration is rising rapidly inside closed and inadequately ventilated structures</li> <li>Exposure to nitrogen oxides (NOX) emitted together with the exhaust gases inside relatively closed and inadequately ventilated structures</li> </ul>	6
<b>Biological hazards</b> 	<ul style="list-style-type: none"> <li>Exposure to aerosols containing microorganisms, fungi, etc., raised into the air with the dust as result of truck movement</li> </ul>	7
<b>Ergonomic, psychosocial and organizational factors</b> 	<ul style="list-style-type: none"> <li>Cumulative trauma disorders of hands and arms pains resulting from their overexertion while driving a non-laden truck presenting higher resistance to steering</li> <li>Low-back pain, muscle contraction and other disorders caused by prolonged seating (in a rigid and often awkward posture) in an ergonomically inadequate seat</li> </ul>	8
	<ul style="list-style-type: none"> <li>Neck pains as a result of frequent back-turning of head and neck stretching during reverse driving and while transporting bulky load obstructing operator's field of vision</li> <li>Vision problems (eyestrain, eye burn, other kinds of irritation, double vision, etc.) due to prolonged work under condition of insufficient lighting, difficulty of adaptation to abrupt changes in visual environment (e.g., from darkness to</li> </ul>	

bright lighting), blinding effect of other vehicles' headlights and floodlights, etc.

- Psychological stress associated with increased risk of accidents involving other vehicles and suddenly appearing pedestrians
- Psychological problems with coworkers (e.g., caused by their requests of a ride)

## Preventive measures

- 1 Stack and secure pallets safely; do not exceed maximum recommended weight or height
- 2 Install overturning protection (e.g., ROPS)
- 3 Wear hearing protection appropriate for the noise levels and type of noise - consult the supplier or an expert
- 4 Protect hands with chemical-resistant gloves; if impractical, use a barrier cream
- 5 Wear appropriate eye protection; consult a safety supervisor or a supplier
- 6 Do not operate diesel or gasoline-powered forklift truck in confined or inadequately ventilated spaces; use an electrically-operated truck
- 7 Use a respirator if truck motion raises much dust from the floor
- 8 Install an ergonomically-designed driver's seat

## Specialized information

**Synonyms** Forklift truck worker; forklift truck driver; power lift truck operator; industrial -truck operator

**Definitions and/or description** Drives gasoline-, liquefied gas-, or electric-powered industrial truck equipped with lifting devices, such as forklift, boom, scoop, lift beam and swivel-hook, fork-grapple, clamps, elevating platform, or trailer hitch, to push, pull, lift, stack, tier or move products, equipment, or materials in warehouse, storage yard, or factory: moves levers and presses pedals to drive truck and control movement of lifting apparatus. Positions forks, lifting platform, or other lifting device under, over, or around loaded pallets, skids, boxes, products, or materials, or hooks tow truck to trailer hitch, and transports load to designated area. Unloads and stacks material by raising and lowering lifting device. May inventory materials on work floor, and supply workers with materials as needed. May weigh materials or products and record weight on tags, labels, or production schedules. May load or unload materials onto or off of pallets, skids, or lifting device, May lubricate truck, recharge batteries, fill fuel tank, or replace liquefied-gas tank. May be designated according to article moved as Lead Loader (smelt. & refin.); process in which involved as Stripper Truck Operator (smelt. & refin.); or type of truck operated as Electric-Truck-Crane Operator (any industry); Fork-Lift-Truck Operator (any industry); etc. [DOT, Industrial-Truck Operator (any industry), abbr.]



**Related and specific occupations** Operator of heavy mechanical equipment, such as: Bulldozer, draggling, wheel-loader, grader, hydraulic-shovel, scraper, crane, etc.

**Tasks** Arranging; assisting; attaching; carrying; charging (batteries); checking (inventory); classifying;

connecting; controlling (movements); counting; driving; elevating; filling (fuel); heaping; hooking; inventorying; lifting; labeling; loading & unloading; locating; lubricating; maintaining; marking; mobilizing; moving; operating; positioning; pressing; pushing & pulling; raising & lowering; recharging; recording; replacing; reporting; stacking; storing; supplying; tagging; tiering; transferring; transporting; weighing

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**Primary  
equipment  
used**

Forklift truck with internal combustion engine; electric forklift truck; cables; fork legs extenders; hoisting ropes; pallets; baskets and buckets

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**Workplaces  
where the  
occupation  
is common**

Warehouses; heavy industry; metal, wood, food, electronics, textile and similar industries; loading & unloading in docks and air ports; as well as any industry in which mechanical lifting equipment is required

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**References**

Powered Industrial Lift Trucks. Data Sheet I-653 Rev. 82, National Safety Council (USA).



Safety in Working with Lift Trucks. HS(G) 6, HSE (UK), 1992.

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