

Air Transport of Dangerous Goods

Out of all methods of cargo transport, air transport is by far the most sensitive to proper DG packaging, labelling and handling. Operating and maintaining an aircraft at altitude is already a dangerous task, and small problems that might arise from any DG item being mishandled can be amplified to catastrophic proportions very quickly.

- The air inside aircraft is rapidly recirculated, and any potentially hazardous fumes or smoke can harm crew members quickly.
- Fires spread quickly inside aircraft, and crews have limited space and reaction times.
- Energetic explosive events, or projectile objects can harm essential crew or depressurise a cabin causing serious or fatal accidents.

The majority of commercially operated aircraft take guidance from both the International Air Transport Association (IATA) and the International Civil Aviation Organisation (ICAO)

IATA - IATA is an international consortium of governments and private sector operators that helps define mutually recognised regulations and standards for international transportation of goods and persons, including regulations relating to the transportation of dangerous goods. Many national civil aviation authorities follow IATA guidelines, and virtually all international air operators and international airports follow IATA standards.

ICAO - ICAO is a specialised UN agency that supports the development of mutually recognised civil aviation standards among UN member states, including air safety regulations.

ICAO and IATA collaborate closely on the development and provision of DG regulations which are considered industry standards. IATA publishes the “Dangerous Goods Regulations” (DGR) while ICAO publishes “Technical Instructions for the Safe Transport of Dangerous Goods by Air,” both of which are updated on an ongoing basis. These regulations don’t just designate labelling and handling, but also denote quantity limitations, specialised packaging requirements for air transport, what cargo may not travel on passenger aircraft, and restrict some DG items altogether.

Virtually all commercial and private flights that operate internationally must comply with IATA and ICAO standards, including those standards relating to DG. Commercial shippers, manufacturers, suppliers, airports and ground handling companies should understand these regulations, and have a shared common understanding of how DG should be transported by air. Aircraft that operate in domestic airspace and do not cross an international border are beholden to that country’s civil aviation authority (CAA). Domestic CAAs have the autonomy to operate and regulate aviation activity within their own airspace as they see fit, however most CAAs align their standards closely with both ICAO and IATA. Furthermore, a common adoption of international DG standards makes it easier for pilots and crew to operate multiple countries when required.

DG transported by air will be highly scrutinised by airports, CAA authorities, aircraft operators, crew and insurance companies. The ultimate determining factor of what can or cannot be loaded onto an aircraft is the loadmaster, crew and pilot, who will follow local and international standards, and assess what they feel as safe. Loaders will still expect DG cargo to be properly packaged and declared, that SDS/MSDS/PSDS are provided and DG marked on packing lists, and that persons or organisations who plan to ship DG items by air should identify and work with companies and logistics providers who are fully certified and authorised to manage, label and handle DG items.

Shipper's Declaration for Dangerous Goods

The "Shippers Declaration of Hazardous Goods" (abbreviated as DGD and also known as Hazardous Declaration or HazDec) is a standard, industry wide accepted form for properly declaring dangerous goods as they are loaded onto an aircraft. DGDs should be submitted with regular paperwork – such as a packing list – as well as being stored alongside the DG cargo itself. Air operators, airports, ground handling crews and insurance underwriters rely on DGDs to quickly identify all potential hazards and understand how to assess incoming consignments. Consequently, the person filling out and signing a DGD should be properly certified by an ICAO or IATA accredited certification program in DG. Many air operators in developed contexts will only accept DGDs from certified persons. Falsely declared or improper certification on a DGDs can lead to serious penalties.

SHIPPER'S DECLARATION FOR DANGEROUS GOODS



| | | | | | | | | | | |
|---|----------------------|---|---------------------|--|---------------|---------------|--|--|-----------------|-------------|
| Shipper | | Air Waybill No. Page of Pages Shipper's Reference No. (optional) | | | | | | | | |
| Consignee | | | | | | | | | | |
| Two completed and signed copies of this Declaration must be handed to the operator. | | WARNING Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. | | | | | | | | |
| TRANSPORT DETAILS This shipment is within the limitations prescribed for: (delete non-applicable) <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 50%; text-align: center; font-size: x-small;">PASSENGER AND CARGO AIRCRAFT</td> <td style="width: 50%; text-align: center; font-size: x-small;">CARGO AIRCRAFT ONLY</td> </tr> </table> Airport of Departure (optional): Airport of Destination (optional): | | PASSENGER AND CARGO AIRCRAFT | CARGO AIRCRAFT ONLY | Shipment type: <i>(delete non-applicable)</i> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 50%; text-align: center; font-size: x-small;">NON-RADIOACTIVE</td> <td style="width: 50%; text-align: center; font-size: x-small;">RADIOACTIVE</td> </tr> </table> | | | | | NON-RADIOACTIVE | RADIOACTIVE |
| PASSENGER AND CARGO AIRCRAFT | CARGO AIRCRAFT ONLY | | | | | | | | | |
| NON-RADIOACTIVE | RADIOACTIVE | | | | | | | | | |
| NATURE AND QUANTITY OF DANGEROUS GOODS | | | | | | | | | | |
| Dangerous Goods Identification | | | | | | | | | | |
| UN or ID No. | Proper Shipping Name | Class or Division (subsidiary hazard) | Packing Group | Quantity and Type of Packing | Packing Inst. | Authorization | | | | |
| | | | | | | | | | | |
| Additional Handling Information | | | | | | | | | | |
| I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met. | | | | Name of Signatory Date Signature (See warning above) | | | | | | |