

Appendix A

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X				Page number		5.4.1.2.3	Yes	- checked by accepting operator (air);
	X					5.4.1.2.3	Yes	- checked by carrier
		X				172.201(c)	Yes	
			X				No	N/A
X				(Air) Waybill No.		-		
	X			N/A				
		X				N/A		
			X				No	N/A
X				Name & Address of Consignor	Individual or Company name, street address, town/city, state & country	5.4.1.3	Yes	- checked by accepting operator (air); - incident/accident investigation
	X					5.4.1.3	Yes	- checked by carrier - incident/accident investigation
		X		Name of consignor Point of origin	Not specified	FMCSR 373.101	Yes	-checked by carrier
			X				As required by regulations	Required only on transborder shipments terminating in Canada
X				Name & Address of Consignee	Individual or Company name, street address, town/city, state & country	5.4.1.3	Yes	- checked by accepting operator (air);
	X					5.4.1.3	Yes	-checked by carrier
		X		Name of consignee Destination	Not specified	373.101	Yes	-checked by carrier
			X				As required by regulations	Required only on transborder shipments terminating in Canada

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X				Statement that shipment is within limits for "passenger and cargo" aircraft or "cargo aircraft only" (Air transport only)	"Passenger and cargo aircraft or "Cargo aircraft only" shown on document.	5;4.1.5.8.1(b)) ICAO TI ref.	Yes	- checked by accepting operator (air); - used to validate per package limit and PI number during acceptance check (air); - CAO indicated on NOTOC ¹ ; - incident/accident investigation
	X			N/A				
		X		N/A				
			X	N/A			No	N/A
X				(Air)Port of Loading (Departure)		-		
	X			(Water) Port of Loading				
		X		Call APS				
			X				No	N/A

¹ "NOTOC" is the acronym for Notification to Captain, which is the written information that must be provided to the Pilot-in-Command where dangerous goods are carried as cargo on an aircraft.

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X				(Air)Port of Loading (Destination)		-		
	X			(Water) Port of Discharge				
		X		N/A - Call APS				
			X					
X								
	X			(Water) Destination				
		X						
			X					
X								
	X			Ship Name				DG Manifest? If yes, feed to add official vessel number
		X		Carrier Name???				
			X					
X								
	X			Name of Master				DG Manifest?
		X						
			X					
X								
	X			Voyage Number				
		X						
			X					
X								
	X			Nationality				
		X						
			X					

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X								
	X			Handling				???
		X						
			X					
X								
	X			Freight Forwarder				
		X						
			X					
X								
	X			Container Data				Container Number?
		X						
			X					
X								
	X			Consignor Reference Number				
		X		BOL#???				
			X					

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
Dangerous Goods Description								
X				UN Number	4 digit number preceded by "UN" or "ID"	5.4.1.4.1(a)	Yes	- checked by accepting operator (air); - validated against PSN, etc. during acceptance check (air); - shown on NOTOC / written instructions / manifest; - incident/accident investigation
	X					5.4.1.4.1.1	Yes	- checked by carrier - validated against PSN - incident/accident investigation - segregation/stowage
		X			4 digit number preceded by "UN" or "NA"	172.202(a)(3) 172.101 col col. 4	Yes, but exceptions apply (ORM-D) or any that may be special exceptions derived from from column 8(a) (ex - batteries 173.159e)	
			X			172.202(a)(1)	As required by regulations	-validated by receiving carrier - validated against PSN - validated against Hazardous Materials Response Code (HMRC)

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
Dangerous Goods Description								
X				Proper shipping name	alpha-numeric	5.4.1.4.1(b)	Yes	- checked by accepting operator (air); - validated against UN number, etc. during acceptance check (air); - shown on NOTOC / written instructions / manifest; - incident/accident investigation
	X					5.4.1.4.1.2	Yes	- checked by carrier - validated against PSN - incident/accident investigation -segregation/stowage
		X			Alpha-numeric	172.202(a)(3) 172.101 col. 2 172.203(k)	Yes – minus ORM-D & special exceptions	-Checked by carrier -validated against UN number, etc Incident/accident Investigations?
			X			172.202(a)(2)	Yes	-validated by receiving carrier - validated against Hazardous Materials Response Code (HMRC)
X				Class/Division	numeric	5.4.1.4.1(c)	Yes	- checked by accepting operator (air); - validated against UN number, etc. during acceptance check (air); - shown on NOTOC / written instructions; - incident/accident investigation
	X					5.4.1.4.1.3	Yes	- checked by carrier - validated against PSN - incident/accident investigation -segregation/stowage
		X			numeric	172.101 col. 3 172.202(a)(2)	Yes – minus ORM-D & special exceptions	-checked by carrier -Validated against PSN & UN#
			X			172.202(a)(3)	As required by regulations	-validated by receiving carrier - validated against PSN - validated against Hazardous Materials Response Code (HMRC)

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
Dangerous Goods Description								
X				Subsidiary risk	numeric	5.4.1.4.1(d)	When applicable	
	X					5.4.1.4.1.4	When applicable	- checked by carrier - validated against PSN - incident/accident investigation -segregation/stowage
		X			Numeric	172.101 col. 6 172.202(a)(2)	When applicable – not required for combustibles	
			X			172.202(a)(3)	As required by regulations	-validated by receiving carrier - validated against PSN - validated against Hazardous Materials Response Code (HMRC)
X				Packing Group	Roman I, II or III	5.4.1.4.1(e)	When applicable	- checked by accepting operator (air); - validated against UN number, etc. during acceptance check (air); - shown on NOTOC; - incident/accident investigation
	X					5.4.1.4.1.5	When applicable	- checked by carrier - validated against PSN - incident/accident investigation -segregation/stowage
		X			Roman I, II or III	172.202(a)(4)	When applicable	-Checked by carrier -validated against PSN
			X			172.202(a)(4)	As required by regulations	-validated by receiving carrier - validated against PSN - validated against Hazardous Materials Response Code (HMRC)

Air	Water	Road	Rail	DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS				
				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
Supplementary Information to PSN								
X				Technical name	alpha-numeric added following PSN	5.4.1.4.3(a)	When applicable	- checked by accepting operator (air); - shown on NOTOC
	X					5.4.1.4.3.1	When applicable	
		X			Entered in parentheses in association with the basic description	172.101(b)(4)) 172.202(d) 172.203(k)	When required (permissive)	
			X			172.202(d)	As required by regulations	-validated by receiving carrier - validated against PSN - validated against Hazardous Materials Response Code (HMRC)
X				Empty Uncleaned	"Empty uncleaned" or "Residue last contained" before or after PSN	5.4.1.4.3(b)	When applicable	
	X					5.4.1.4.3.2	When applicable	
		X		"Residue last contained" in association with the basic description	172.203(e)	Permissive for a package, required for a tank car		
			X		"RESIDUE: Last Contained****" in association with description of the hazardous material last contained	172.203(e)	When applicable	-validated by receiving carrier - validated against PSN - validated against Hazardous Materials Response Code (HMRC)

Air	Water	Road	Rail	DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS				
				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X				Wastes	"Waste" before or after PSN if not part of PSN	5.4.1.4.3(c)	When applicable	
	X					5.4.1.4.3.3	When applicable	
		X			"Waste" before or after PSN if not part of PSN Waste Manifest required for waste shipments	172.101(c)(9) 172.205	When applicable	
			X			172.205	Paper document to conform with 40CFR262.20	
X				Elevated temperature substances	"HOT" shall precede PSN	5.4.1.4.3(d)	When applicable	
	X					5.4.1.4.3.4	When applicable	- checked by carrier - validated against PSN - incident/accident investigation -segregation/stowage
		X			"HOT" shall precede PSN if the PSN does not identify the material as "Molten" or "Elevated temperature"	172.203(n)	When applicable	
			X		"HOT" shall precede PSN	172.203(n)	When applicable	
Marine Pollutants								
X								
	X			Marine pollutants	Goods shall be identified as "MARINE POLLUTANT"	5.4.1.4.3.5	When applicable	- checked by carrier - validated against PSN in the index of the IMDG Code - incident/accident investigation -spill prevention/discharge requirements (MARPOL)
		X						
			X					

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X								
	X			Marine pollutants assigned to for n.o.s. entries	The PSN shall be supplemented with the recognized chemical name of the marine pollutant	3.1.2.9.1	When applicable	- required under MARPOL - spill mitigation - emergency response
		X			Goods shall be identified as "MARINE POLLUTANT" - not required for non-bulk packages specific to highway transport	172.203(l)	When applicable	
			X					
Flashpoint								
X								
	X			Flashpoint in degrees C closed-cup (c.c.)	Dangerous goods with a flashpoint of 60 degrees C must indicate the minimum flashpoint on the shipping paper in Celsius	5.4.1.4.3.6	When applicable	- checked by carrier - validated against PSN - incident/accident investigation - used by carriers to determine suitability of stowage location in accordance with SOLAS Reg 19 (i.e. Document of Compliance) - conveys information on the flammability of dangerous goods with a primary hazard class other than Class 3.
		X			Dangerous goods with a flashpoint of 60 degrees C must indicate the minimum flashpoint on the shipping paper in Celsius	172.203(i)(2)	Ocean Transportation	
			X					

Air	Water	Road	Rail	DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS				
				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)

Information Required in Addition to the Dangerous Goods Description								
X				Quantity of dangerous goods, number and type of packagings	numeric for number of packages, description of packaging type, numeric for volume or mass followed by unit of measurement	5.4.1.5.1	Yes	- checked by accepting operator (air); - validated against PSN, etc. during acceptance check (air); - shown on NOTOC; - incident/accident investigation
	X					5.4.1.5.1	Yes	- checked by carrier - validated against PSN - incident/accident investigation
		X			Total quantity – mass or volume Number and type of packages	172.202(a)(5) 172.202(a)(6)	yes	
			X		Total quantity of hazardous materials covered by the description (by mass or volume, or by activity for Class 7 materials) and must include applicable unit of measure. Number and type of packages must be indicated also	172.202(a)(5) (6) and (7)	Yes	
X				Limited quantity	"Limited quantity" or "LTD QTY" shown	5.4.1.5.2	When applicable	- checked by accepting operator (air); - validated against PSN, etc. during acceptance check (air); - incident/accident investigation
	X					5.4.1.5.2	When applicable	- checked by carrier - validated against PSN - incident/accident investigation
		X			"Limited quantity" or "LTD QTY" shown following the basic description	172.203(b)	When applicable	-checked by carrier -validated against PSN -incident/accident investigation
			X		"Limited quantity" or "LTD QTY" shown	172.203(b)	When applicable	

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Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)

X								
	X			Excepted quantity	"dangerous goods in excepted quantities" shown	3.5.6.1	When applicable	- checked by carrier - validated against PSN - incident/accident investigation
		X			Small Quantity Exception	173.4	Shipper Requirement	Not required to be shipped as hazmat
			X					

X				Salvage packagings	"Salvage package" shown as packaging type?	5.4.1.5.3	When applicable	
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	X					5.4.1.5.3	When applicable	
		X			N/A			Shipping paper not required to note salvage package
			X				No	N/A

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)

X				Substances stabilized by temperature control	"Control temperature: ...°C Emergency temperature: ...°C"	5.4.1.5.4	When applicable	- shown on written information? - incident/accident information?
	X					5.4.1.5.4	When applicable	
		X			"Control temperature: ...°C Emergency temperature: ...°C"	172.203(o)(2))	When applicable (4.1 & 5.2)	
			X			No	N/A	

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X				Self-reactive substances & organic peroxides	"Control temperature: ...°C Emergency temperature: ...°C"	5.4.1.5.5	When applicable	- shown on written information?; - incident/accident information?
	X				- "Explosive sub risk label dispensed with"; - "self-reactive substance transported under approval" or "organic peroxide transported under approval" shown?; - "sample self-reactive substance" or "sample organic peroxide"	5.4.1.5.5.1 5.4.1.5.5.2 5.4.1.5.5.3	When applicable	- Self-reactive substances and organic peroxides transported under approval must have a copy of the classification approval including condition of transport attached to document.
		X			Statement of approval if required Control Temp and Emergency Temp	172.203(o)	When applicable	
			X			172.203(o)	When applicable	
X				Infectious substances & controlled substances	Name and telephone number of a responsible person	5.4.1.5.6	When applicable	- incident/accident response; - incident/accident investigation
	X					5.4.1.5.6	When applicable	
		X			See attachment	172.203(k) 172.200(b)(4)	When applicable	
			X					

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X				Radioactive material	- name or symbol of radionuclide; - description of physical and chemical form, "Special form" or "Low dispersible material"; - numeric of activity followed by Bq or for fissile the mass followed by unit of measurement; - category of package; - transport index (for II-Yellow and III-Yellow only); - criticality index for fissile materials, other than as excepted; - identification mark for each competent authority certificate; - number of packages; - "Exclusive use shipment" shown when applicable; - for LSA-II, LSA-III, SCO-I and SCO-II the total activity of the consignment.	5.4.1.5.7.1	Yes, for Class 7	- checked by accepting operator (air); - number or packages, category and transport index shown on NOTOC / written instructions? / manifest?; - incident/accident investigation
	X					5.4.1.5.7.1	Yes, for Class 7	- checked by carrier - validated against PSN - incident/accident investigation
		X			See attachment	172.203(d)	Yes	
			X			172.203(d)	As required by regulations	

Air	Water	Road	Rail	DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS				
				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)

	X			Radioactive material	The transport document shall include a statement regarding any actions to be taken by the carrier .1 supplementary info on loading, unloading, handling, stowage and transport .2 Restrictions .3 Emergency arrangements	5.4.1.5.7.2	Yes, for Class 7	- checked by carrier - validated against PSN - incident/accident investigation -handling -stowage
		X						
			X					
X								
	X			Aerosols	If capacity of an aerosol is above 1,000 ml, this should be declared in the transport document	5.4.1.5.8	When applicable	- checked by carrier - validated against PSN - incident/accident investigation -stowage/segregation
		X		N/A				
			X					

Air	Water	Road	Rail	DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS				
				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X								
	X			Explosives assigned to n.o.s. entries	When a specific entry does not exist, the CA of the country of origin shall use the entry appropriate to the hazard division and compatibility group and include the following statement: "Transport under this entry approved by the competent authority of..." is shown	5.4.1.5.9.1	When applicable	- checked by carrier - incident/accident investigation
		X		I cannot find anything in the regulations on this so I believe it is N/A				
			X					

Air	Water	Road	Rail	DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS				
				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X								
	X			Explosives containing less water or phlegmatizer than the specified minimum	"Transport under this entry approved by the competent authority of..." is shown	5.4.1.5.9.2	When applicable	- checked by carrier - incident/accident investigation
		X						
			X		Forbidden	173.60(b)(13)		
X								
	X			Explosives packed "as approved by the competent authority"	"Packaging approved by the competent authority of..." is shown	5.4.1.5.9.3	When applicable	- checked by carrier - incident/accident investigation
		X						
			X					
X								
	X			Viscous substances transported in accordance with 2.3.2.5	"Transport in accordance with 2.3.2.5 of the IMDG Code	5.4.1.5.10	When applicable	- checked by carrier - incident/accident investigation
		X						
			X					

Air	Water	Road	Rail	DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS				
				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X								
	X			Substances, mixtures, or solutions assigned to a n.o.s. entry and belong to a segregation group	"IMDG Code segregation group" followed by the segregation group name	5.4.1.5.11.1	When applicable	- checked by carrier - incident/accident investigation - stowage/segregation
		X						
			X					
X								
	X			Substances loaded in the same CTU in accordance with 7.2.1.13.1.2	"Transport in accordance with 7.2.1.13.1.2 of the IMDG Code"	5.4.1.5.11.2	When applicable	
		X						
			X					
X								
	X			Acid and alkali substances of class 8 in the same CTU in accordance with 7.2.1.13.2	"Transport in accordance with 7.2.1.13.2 of the of the IMDG Code"	5.4.1.5.11.3	When applicable	
		X						
			X					

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
X				Transport of solids in bulk containers	"Bulk container BK(x) approved by competent authority of..."	5.4.1.5.8	When applicable	Checked by accepting carrier?
	X					5.4.1.5.12	When applicable	
		X						
			X			No	N/A	
X				Packing Instruction number	3 character numeric with prefix "Y" if limited quantity packing instruction	ICAO 5;4.1.5.8.1 a)	Yes	Checked by accepting operator/carrier. Used to validate compliance.
X				Reference to Special Provision A1, A2 or A109	"A1", "A2", "A109"	ICAO 5;4.1.5.8.1 a)	When applicable	Checked by accepting operator/carrier. Used to validate compliance.
X				Certification	Required certification statement	5.4.1.6.1	Yes	Checked by accepting operator / carrier?
	X					5.4.1.6.1	Yes	Checked by carrier
		X			Required certification statement	172.204	Yes	
			X		Required certification statement	172.204(a) & (b)	Yes	
X				Signature	signature of shipper (digital?)	5.4.1.6.1	Yes	Checked by accepting operator / carrier?
	X					5.4.1.6.1	Yes	Checked by carrier
		X			Manually, typed, or other mechanical means	172.204(d)	Yes	
			X		Signature of principal, officer, partner, or employee of the shipper or his agent	172.204(d)	Yes	Checked by accepting carrier
X				Date	Applicable date	5.4.1.6.1	Yes	Checked by accepting operator / carrier?
	X					5.4.1.6.1	Yes	Checked by carrier
		X			Date of acceptance by carrier	172.201(e)	Yes	
			X				No	N/A

DANGEROUS GOODS TRANSPORT DOCUMENT - DATA ELEMENTS								
Air	Water	Road	Rail	Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
Additional Documentation								
X				Container / vehicle packing certificate		5.4.2.1	When applicable	- checked by accepting carrier?; - incident/accident investigation.
	X					5.4.2.1	When applicable	- checked by accepting carrier; - incident/accident investigation.
		X		N/A				
			X				No	N/A
X								
	X			Dangerous goods manifest	Each ship must have a list or manifest indicating the quantity and location of all dangerous goods on board	5.4.3	Yes	-stowage/segregation - checked by carrier -emergency responders - port authorities
		X			Original shipping papers work or a manifest containing the HM info can be used		Yes	
			X					
X								
	X			Emergency Response Information	Appropriate entries in the special list, manifest or dangerous goods declaration (Optional – if MSDS or a Guide book is not provided	5.4.3.2.1.1	When applicable	- emergency responders - carrier - crew
		X			On a shipping paper or on another specified document such as an MSDS or ERG book	172.602(b)	Yes	
			X					

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				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
Additional Documentation								
X								
	X			Weathering Certificate	As required in the individual entries of the Dangerous Goods List	5.4.4.1.1	When applicable	-stowage/segregation
		X		N/A				
			X					
X								
	X			A certificate exempting a substance from the IMDG Code	As required for entries such as charcoal, fishmeal and seedcake	5.4.4.1.2	When applicable	-stowage/segregation
		X						
			X	N/A				
X								
	X			New self-reactive substances and organic peroxides	A statement by the CA of the country of origin of the approved classification and conditions of transport	5.4.4.1.3	When applicable	-stowage/segregation -handling
		X			Add the word "SAMPLE"	172.203(o)(3)		
			X					
X								
	X			Fumigated Units	Show the type and amount of fumigant used and the date and time of fumigation. In addition, instructions for disposal of any residual fumigant, including fumigation devices, if used (This may take the form of a fumigation certificate)	5.4.4.2	When applicable	- stowage/segregation - carrier/crew - emergency response
		X			Shipping paper requirement for International shipments, the U.S. only has a marking requirement	173.9(f)		
			X					

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				Information	Format	Reference	Mandatory	Requirement (how is the data used, by whom and when)
Additional Documentation								

X				P099 approval	Indication on dangerous goods transport document?	P099	When applicable	Copy of the approval showing quantity limitations, packing requirements, etc. attached to document or statement on document.
	X					P099	When applicable	
		X		?				
			X				No	N/A
X				Alternative packagings approval	Indication on dangerous goods transport document?	4.1.3.7	When applicable	Copy of the approval attached to document or statement on document.
	X					4.1.3.7	When applicable	
		X		?				
			X			172.202(a)(7)	No	Optional information by shipper

Additions:

RQ – Hazardous Substance notation – 172.203(c)(2)

Poison Inhalation Hazards – Notating the Inhalation Zone - 172.204(m)