

**Appendix B –
List of Tier 1 Highway Security-Sensitive Materials (Tier 1 HSSM) and
Tier 2 Highway Security-Sensitive Materials (Tier 2 HSSM)
with Corresponding Security Action Items**

The list of Highway Security Sensitive Materials (HSSM) was prepared by the TSA Transportation Sector Network Management Office

DOT Hazard Class (see 49 CFR 171.8 for definitions of these hazard classes)	Threshold Quantity (unless otherwise noted see 49 CFR 171.8 for definitions)	HS SM		General Security				Personnel Security			Un- Author Access		En-Route Security													
		Tier		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		1	2																							
Division 1.1 Explosives	Any quantity	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Division 1.2 Explosives	Any quantity	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Division 1.3 Explosives	Any quantity	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Division 1.4 Explosives	Not subject other than Division 1.4 Explosives specified by UN number below.																									
Division 1.4B Explosives	Any quantity of the following explosives : UN No. 0361, 0365, 0255, 0267			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
Division 1.4S Explosives	Any quantity of the following explosives: UN No. 0500, 0366, 0456, 0455, 0441			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Division 1.4D Explosives	Any quantity of the following explosives: UN No. 0289, 0104, 0237, 0440			X	X	X	X	X	X	X	X	X	X	X	X	X	X									
Division 1.5 Explosives	Any quantity			X	X	X	X	X	X	X	X	X	X	X	X	X	X									

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		Tier		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		1	2																							
Division 1.6 Explosives	Not Subject																									
Division 2.1 Flammable Gases (for def, see 49 CFR 173.115 and 173.116)	Single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
Division 2.2 Non- Flammable Gases	Not subject other than Division 2.2 substances specified below																									
Division 2.2 Non- Flammable Gas (also meeting the definition of a material poisonous by inhalation ⁱ)	Anhydrous ammonia (UN 1005) in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs) ⁱⁱ	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Division 2.2 Non- Flammable Gas (with a subsidiary hazard of Oxidizer (Division 5.1)) ⁱⁱⁱ	Substances with subsidiary hazard of Oxidizer (Division 5.1) in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

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			Tier 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		1	2																						
Division 2.3 Toxic (Poison) Gas	Hazard zone A & B ≥ 5 lbs. in a single package.	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Division 2.3 Toxic (Poison) Gas	Hazard zone C & D in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs).	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Class 3 Flammable Liquids	PG I and II in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
Class 3 Flammable Liquids	Any quantity desensitized explosives		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Class 3 Flammable Liquids (also meeting the definition of a material poisonous by inhalation ^{iv})	PG I in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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		Tier		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		1	2																							
Division 4.1 Flammable Solids (Desensitized Explosives)	Limited to any quantity of desensitized explosives in Division 4.1 including those categorized as Packing Group I and the following Packing Group II materials: UN2555, UN2556, UN2557, UN2907, UN3319, and UN3349. ^y		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Division 4.2 Spontaneously Combustible Material	Packing groups I and II only in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Division 4.3 Dangerous When Wet Material	Any quantity		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Division 5.1 Oxidizer	Packing groups I & II in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

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		Tier		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		1	2																							
Division 5.1 Oxidizer	Packing Group III perchlorates, ammonium nitrate, ammonium nitrate fertilizers or ammonium nitrate emulsions, suspensions or gels in single bulk packaging greater than or equal to 3,000 L (792 gal) or 3,000 kg (6614 lbs)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Division 5.2 Organic Peroxide	Limited to any quantity of Type B organic peroxide (for def of types, see 49 CFR 173.128), liquid or solid, temperature controlled.		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Division 6.1 Poisonous Materials	Packing groups I, II and III in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Division 6.1 Poisonous Materials (also meeting the definition of a material poisonous by inhalation ^{VI})	Hazard zone A & B ≥ 5 lbs. in a single package	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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		Tier		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		1	2																							
Division 6.1 Poisonous Materials (also meeting the definition of a material poisonous by inhalation ^{vii})	Hazard zone C & D in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs).	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Division 6.2 Infectious substances	Select Agents – (As listed by Centers for Disease Control in 43 CFR 73.3)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Class 7 Radioactive Materials, (10 CFR part 110, Appendix P, Category 1 materials)	International Atomic Energy Agency (IAEA) Code of Conduct Category 1 and 2 materials including Highway Route Controlled quantities as defined in 49 CFR 173.403 or known as radionuclides in forms listed as RAM-QC by the Nuclear Regulatory Commission.	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Class 8 Corrosive Materials	Packing group I in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

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Class 8 Corrosive Materials (also meeting the definition of a materials poisonous by inhalation ^{viii})	Packing group I and II in single bulk packaging ≥ 3000 L (792 gal) or 3000 kg (6614 lbs.)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Class 9	Not Subject																									
Class ORM-D	Not Subject																									
Other Materials	Any quantity of chemicals listed by the Chemical Weapons Convention on Schedules 1, 2, or 3. ^{ix}	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

List of Security Action Items

General Security:

- 1) Security Assessment and Security Plan Requirements.
- 2) Awareness of Industry Security Practices.
- 3) Inventory Control Process.
- 4) Business and Security Critical Information

- 6) Background Checks for Highway Transportation Sector Hazmat Employees other than Motor Vehicle Drivers with a Valid CDL with HME.
- 7) Security Awareness Training for Hazmat Employees.

Personnel Security:

- 5) Possession of a Valid Commercial Drivers License – Hazardous Materials Endorsement.

Unauthorized Access:

- 8) Access Control System for Drivers.
- 9) Access Control System for Facilities Incidental to Transport.

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En-Route Security:

- 10) Establish Communications Plan.
- 11) Establish Appropriate Vehicle Security Program.
- 12) Establish Appropriate Cargo Security Program.
- 13) Implement a Seal/Lock Control Program.
- 14) High Alert Level Protocols.
- 15) Establish Security Inspection Policy and Procedures.
- 16) Establish Reporting Policy and Procedures.
- 17) Shipment Pre-Planning, Advance Notice of Arrival, and Receipt of Confirmation Procedures.
- 18) Preplanning Routes.
- 19) Security for Trips Exceeding Driver Hours of Service.
- 20) Dedicated Truck.
- 21) Tractor Activation Capability.
- 22) Panic Button Capability.
- 23) Tractor and Trailer Tracking Systems

^{ix} Chemicals listed under this designation as Chemicals Weapons Convention are expected to be captured under the previously listed DOT Hazard Classes. They are listed in this Appendix as Other Materials for completeness and are not intended to indicate a new hazard class.

ⁱ See 49 CFR 171.8 for the definition of materials poisonous by inhalation
ⁱⁱ TSA recognizes the provisions for agricultural operations contained in 49 CFR 173.5
ⁱⁱⁱ See 49 CFR 171.8 for the definition of subsidiary hazard
^{iv} See 49 CFR 171.8 for the definition of materials poisonous by inhalation
^v For a listing of desensitized explosives see the United Nations Recommendations on the Transport of Dangerous Goods, Volume I, 14th revised edition, paragraph 2.4.2.4.1, definitions
^{vi} See 49 CFR 171.8 for the definition of materials poisonous by inhalation
^{vii} See 49 CFR 171.8 for the definition of materials poisonous by inhalation
^{viii} See 49 CFR 171.8 for the definition of materials poisonous by inhalation