

U.S.Department of Transportation

Research and Special Programs Administration 400 Seventh Street, S.W. Washington, D.C. 20590

DOT-E 9498 (SIXTH REVISION)

EXPIRATION DATE: May 31, 1998

(FOR RENEWAL, SEE 49 CFR 107.105.)

- 1. GRANTEE: E. I. du Pont de Nemours & Company Wilmington, Delaware (See Appendix B of this exemption)
- 2. <u>PURPOSE AND LIMITATIONS</u>: This exemption authorizes the use of non-DOT specification collapsible, water-tight, non-reusable woven polypropylene bulk bags for the shipment of the hazardous materials identified in paragraph 6 below. This exemption provide no relief from any regulation other than as specifically stated herein.
- 3. <u>REGULATORY SYSTEM AFFECTED</u>: 49 CFR Parts 106, 107 and 171-180.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR Part 173 subpart E & F.
- 5. <u>BASIS</u>: This exemption is based on E.I. du Pont de Nemours & Company, Incorporated's application dated May 28, 1996, submitted in accordance with 49 CFR 107.105.
- 6. <u>HAZARDOUS MATERIALS (Descriptor and class)</u>: The following materials may be transported in packaging prescribed in paragraph 7 of this exemption:
  - a. Packing group III solid materials meeting the definition of Class 8 and 9 and Division 4.1, 5.1 and 6.1;
  - b. Solid materials meeting the definition of Class 8 and 9 and Division 4.2, 4.3, 5.1 and 6.1 listed in Appendix A of this exemption;
  - c. Other solid materials which are specifically identified to, and acknowledged in writing by the Office of Hazardous Materials Exemptions and Approvals (OHMEA) prior to the first shipment.

Continuation of DOT-E 9498 (6th Rev.) Page 2

### 7. <u>SAFETY CONTROL MEASURES</u>:

- a. <u>PACKAGING</u> Packaging prescribed is a non-DOT specification collapsible, flexible, water-tight, non-reusable bulk bag. The bag is fabricated of woven polypropylene with a lining (inside or outside) of polyethylene film consisting of one or two layers of 0.006-inch total minimum thickness, incorporating lifting straps of woven polyester webbing and a total bag capacity of not more than 2205 pounds.
- b. <u>TESTING</u> The following test procedures are considered a minimum to ensure that each packaging in service is capable of passing one of the two following test procedures:
  - (1) Drop tests (at least three separate bags from a height of four feet); Jerk test & Topple test (at least two separate bags one bag for each test); Topple and Drag test, Righting test, and Abrasion test (at least one bag used for all these tests in addition, the bag(s) used must have also been used in either a drop, jerk, or topple test); as described in "Procedures for Performance Testing of Flexible Intermediate Bulk Containers," Packaging Institute, U.S.A., procedure T-4102-85, dated February, 1985. These test results must be on file with OHMEA; or
  - (2) Top lift test; Tear test; Stacking test; Drop test; Topple test; Righting test; at least one bag must pass these tests (one bag may be used for all tests or one bag for each test) at the packing group II level as described in Chapter 16 of the United Nations "Recommendations on the Transport of Dangerous Goods Seventh Revised Edition". If this series of tests is used, then each bag must also be capable of passing the vibration standard described in 178.608 as found in 49 CFR dated December 31, 1991.

### 8. SPECIAL PROVISIONS:

a. Persons who receive the packages covered by this exemption may reoffer them for transportation provided no modifications or changes ar made to the packages, all terms of this exemption are complied with and a current copy of this exemption is maintained at each facility from which reoffering occurs.

Continuation of DOT-E 9498 (6th Rev.) Page 3

- b. Shippers using the packaging covered by this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.
- c. MARKING Each bag must be permanently and durably marked in accordance with the requirements of 49 CFR 172.331 with letters at least two inches high on a contrasting background. Each bag must also be marked "DOT-E 9498" in the same manner as described above. In addition, for shipments by cargo vessel, the marking requirements of subsection 26.1.5 of the General Introduction to the IMDG Code must be met. However, the bags marked in accordance with 49 CFR 172.301 may be used under the terms of this exemption until the depletion of existing stock.
- d. Consistent with the regulations adopted under Docket HM-181E for intermediate bulk containers (IBCs), exemptions for IBCs of the type covered by those regulations will not allow new construction after September 30, 1996. Existing IBCs may be continued in service provided renewal provisions under Section 107.105 are met, until September 30, 1998, under the conditions specified in the exemption that applies to their use. After September 30, 1998, each IBC must conform to, and be certified as meeting, a UN IBC standard set forth in Subparts N and O of Part 178 of the Hazardous Materials Regulations (HMR; 49 CFR). A provision for approval of an equivalent IBC is specified in 49 CFR 178.801(i).
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and vessel. Shipments by vessel must be made in conformance with Section 26 of the General Introduction to the IMDG Code.

### 10. MODAL REQUIREMENTS:

- a. A copy of this exemption must be carried aboard each cargo vessel, or motor vehicle used to transport packages covered by this exemption.
- b. Shipment by highway must be in closed vehicles or freight containers, in full truckloads only except that bags containing ammonium nitrate fertilizer may be transported on flatbed trailers provided the bags are restricted from movement and completely covered by waterproof tarpaulins.

## Continuation of DOT-E 9498 (6th Rev.) Page 4

- c. Shipment by rail must be in box cars except that COFC or TOFC service is authorized in accordance with 49 CFR 174.61.
- d. For transportation by vessel, the following additional special provisions apply:
  - i. Materials classed as Division 5.1 (Oxidizer) in packing group III that are permitted by the IMDG Code to be transported without secondary containment may be carried as break-bulk cargo, provided -
  - (1) No readily combustible hazardous material or nonregulated material is stowed in the same hold or compartment.
  - (2) The hold or compartment is dry and thoroughly cleaned of all loose debris and dunnage.
  - (3) The hatches are inspected for weathertightness before loading.
  - (4) The hold or compartment is free of sharp projections which could tear or puncture the bulk bags.
  - (5) After the bulk bags are unloaded, the hold or compartment is inspected for spillage and any residue removed.
  - ii. Whenever a bulk bag containing a material classed as Division 5.1 (oxidizer) is loaded or unloaded as break bulk cargo:
  - (1) Firehoses must be laid out in the loading or unloading area and must be operable at all times.
  - (2) Smoking, carrying matches or lighting devices, or performing hot work shall be prohibited in the loading or unloading area; and the area must be posted with appropriate warnings signs.
  - iii. The provisions of 49 CFR 176.410(d), except subparagraphs (d)(1) and (d)(2) do not apply to shipments of ammonium nitrate fertilizer by vessel under this exemption.

- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. Section 5101 <u>et seq</u>:
  - o All terms and conditions prescribed in this exemption and the Hazardous materials Regulations, 49 CFR Parts 171-180.
  - o Registration require by 49 CFR 107.601 <u>et seg</u>., when applicable.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

Issued at Washington, D.C.

Alan I. Roberts

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Dist: FHWA, FRA, USCG

# APPENDIX A

Hazardous materials description/proper shipping name	Hazard Class or Division	ID number	Packing Group
Aluminum bromide, anhydrous	8	UN1725	11
Aluminum chloride, anhydrous	8	UN1726	II
Ammonium hydrogen fluoride, solid	8	UN1727	II
Ammonium nitrate mixed fertilizer	5.1	NA2069	II
Ammonium perchlorate	5.1	UN1442	11
Antimony compounds, inorganic, solid, n.o.s.	6.1	UN1549	II .
Antimony tribromide, solid	8	NA1549	. 11
Arsenic compounds, solid, n.o.s. <sup>3</sup>	6.1	UN1557	II
Arsenic trioxide	6.1	UN1561	· II
Bromoacetic acid, solid	8	UN1938	II
Calcium carbide <sup>1</sup>	4.3	UN1402	II
Calcium hypochlorite, hydrates	5.1	UN2880	11
Calcium silicide⁴	4.3	UN1405	11/111
Carbamate pesticide, solid, toxic, n.o.s. containing 15% or less aldicarb by weight	6.1	UN2757	. 11
Chloroacetic acid, solid	8	UN1751	11
Chromic acid, solid <sup>1</sup>	5.1	NA1463	11
Dichloroisocyanuric acid, dry	5.1	UN2465	
Lithium Hypochlorite mixtures, dry containing not more than 42% available chlorine	5.1	UN1471	II
Magnesium granules, coated	4.3	UN2950	III
Nicotine sulfate, solid	6.1	UN1658	Ш
Organophosphorus pesticides, solid, toxic, n.o.s. (Fonofos, Dyfonate II 10-G, Dynofate II 15-G, or Dynofate II 20-G)	6.1	UN2783	II

Hazardous materials description/proper shipping name	Hazard Class or Division	ID number	Packing Group
Oxidizing substances, solid, n.o.s. (1-Bromo-3-chloro-5,5- demethylhydantion)	5.1	UN1479	11
Poisonous solids, n.o.s. (amyl phenol, butyl phenol, or octyl phenol)	6.1	UN2811	=
Potassium hydroxide, solid	8	UN1813	- 11
Potassium perchlorate, solid	5.1	UN1489	=
Self heating substance, solid, n.o.s. (sulfur thermal cracked coke)	4.2	.UN3088	11/411
Sodium azide	6.1	UN1687	
Sodium hydrogen fluoride	8	UN2439	II
Sodium chlorate	5.1	UN1495	11
Sodium hydrosulfite <sup>1</sup>	4.2	UN1384	**
Sodium hydroxide, solid	8	UN1823	11
Sodium perchlorate	5.1	UN1502	Ξ.
Sodium sulfide, anhydrous <sup>1</sup>	4.2	UN1385	Ш
Thallium compounds, n.o.s.	6.1	UN1707	11
Trichloroisocyanuric acid, dry	5.1	UN2468	(1
Trichloro-s-triazinetrione, dry²	5.1	NA2468	II.
Zinc dust	4.3	UN1436	11/111
Sodium cyanide⁵	6.1	UN1680	l
Potassium cyanide <sup>5</sup>	6.1	UN1689	l l

# Legend:

- <sup>1</sup> Transport by vessel not authorized.
- This shipment description may only be used when all or part of the transport is by vessel. For transport be vehicle or rail freight, use "trichloroisocyanuric acid, dry."
- For mixtures of arsenic compounds, the name(s) of the hazardous components of the mixture must appear in the parenthesis.

- Packaging for calcium silicide must be hermetically sealed.
- The flexible intermediate bulk container containing Sodium cyanide and Potassium cyanide must successfully withstand the performance tests described in the United Nations Recommendations for Intermediate Bulk Containers (Chapter 16) for Packing Group I. For shipment by water, each bag must be placed in a strong plywood box and the boxes overpacked in a freight container.

## APPENDIX B

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with 49 CFR 107.111 and the public proceeding thereon or 107.105, as appropriate:

Company Name City/State	Applica- tion Date	PTE	Expiration Date	Issue Date
Degussa Corporation Ridgefield, NJ	7/15/94	1	7/31/96	8/24/94
•.				
				<u> </u>
· · · · · · · · · · · · · · · · · · ·				

Alan I. Reperts

Associate Administrator for Hazardous Materials Safety