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U.S. Department
of Transportation

Research and
Special Programs
Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

DOT-E 10476
(FOURTH REVISION)

EXPIRATION DATE: September 30,
1998

(FOR RENEWAL, SEE 49 CFR 107.109.)

1. GRANTEE: Syn-Tex B.A.G. Incorporated
Winnipeg, Manitoba, Canada
(U.S. Agent: Fleming, Du Bois & Trenbeath
Cavalier, North Dakota)
2. PURPOSE AND LIMITATIONS: This exemption authorizes the use of large, collapsible, polyethylene lined, woven polypropylene bulk bags having a capacity of not over 2204 pounds each, with four top lifting straps, and top and bottom outlets, for shipment of various Class 8 and 9 materials and Division 4.1, 4.2, 4.3, 5.1 and 6.1 materials identified in paragraph 6 below. This exemption provides no relief from any regulation other than as specifically stated.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Part 173 subpart E & F.
5. BASIS: This exemption is based on Syn-Tex B.A.G., Incorporated's application dated March 14, 1996, submitted in accordance with 49 CFR 107.109.
6. HAZARDOUS MATERIALS (Descriptor and class): 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.

7. SAFETY CONTROL MEASURES:

- a. PACKAGING - Packaging prescribed is a non-DOT specification collapsible, flexible, non-reusable bulk bag. The bag is fabricated of woven polypropylene (with or without a metallic laminated coating), incorporating four lifting straps, with a 3.5 mil interior polyethylene liner, with a total bag capacity of not over 2204 pounds.
- b. TESTING - 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.
- 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 10476" 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. The use of labels, tags or signs for marking purposes is prohibited.

8. SPECIAL PROVISIONS:

a. Offerors for transportation of the hazardous materials specified in this exemption may use the packaging described in this exemption for the transportation of such hazardous materials provided no modifications or changes are made to the packages, all terms of this exemption are complied with, and a copy of the current exemption is maintained at each facility from which such offering occurs.

b. Each packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated for a specific manufacturing facility.

c. A copy of this exemption, in its current status, must be maintained at each manufacturing facility at which this packaging is manufactured and must be made available to a DOT representative upon request.

d. 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.

e. 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 107.109 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 (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.

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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.

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 non-regulated 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.

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11. COMPLIANCE: 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 laws 49 U.S.C. Section 5101 et seq.:

- 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 et seq., 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.

Ann Mazzeo

2/5/97

for Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

(DATE)

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.

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APPENDIX A

<u>Hazardous materials description/proper shipping name</u>	<u>Hazard Class/ Division</u>	<u>Identification Number</u>	<u>Packing Group</u>
Aluminum bromide, anhydrous	8	UN 1725	II
Aluminum chloride, anhydrous	8	UN 1726	II
Ammonium hydrogen fluoride, solid	8	UN 1727	II
Ammonium nitrate mixed fertilizer	5.1	NA 2069	II
Ammonium perchlorate	5.1	UN 1442	II
Antimony compounds, inorganic, solid, n.o.s.	6.1	UN 1549	II
Antimony tribromide, solid	8	NA 1549	II
Arsenic compounds, solid, n.o.s. ³	6.1	UN 1557	II
Arsenic trioxide	6.1	UN 1561	II
Bromoacetic acid, solid	8	UN 1938	II
Calcium carbide ¹	4.3	UN 1402	II
Calcium hypochlorite, hydrated	5.1	UN 2880	II
Calcium silicide ⁴	4.3	UN 1405	II/III

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Carbamate pesticide, solid, toxic n.o.s. (contains 15% or less aldicarb by weight)	6.1	UN 2757	II
Chloroacetic acid, solid	8	UN 1751	II
Chromic acid, solid ¹	5.1	NA 1463	II
Dichloroisocyanuric acid, dry	5.1	UN 2465	II
Lithium hypochlorite mixtures, dry (containing not more than 42 % available chlorine) ¹	5.1	UN 1471	II
Magnesium granules, coated	4.3	UN 2950	III
Nicotine sulfate, solid	6.1	UN 1658	II
Organophosphorus pesticides, solid, toxic, n.o.s. {Fonofos} {Dyfonate II 10-G}; {Dyfonate II 15-G} or {Dyfonate II 20-G}	6.1	UN 2783	II
Oxidizing substances, solid, n.o.s. (1-Bromo-3-chloro-5,5 -demethylhydantion)	5.1	UN 1479	II
Pesticides, solids, toxic, n.o.s.	6.1	UN 2588	II
Poisonous solids, n.o.s. (Amyl phenol) (Butyl phenol) (Octyl phenol)	6.1	UN 2811	II
Potassium cyanide ¹	6.1	UN 1680	II
Potassium hydroxide, solid	8	UN 1813	II
Potassium perchlorate, solid	5.1	UN 1489	II
Self heating substance, solid, n.o.s. (sulfur, thermal cracked coke)	4.2	UN 3088	II\III
Sodium azide	6.1	UN 1687	II

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Sodium hydrogen fluoride	8	UN 2439	II
Sodium chlorate	5.1	UN 1495	II
Sodium hydrosulfite ¹	4.2	UN 1384	II
Sodium hydroxide, solid	8	UN 1823	II
Sodium perchlorate	5.1	UN 1502	II
Sodium sulfide, anhydrous ¹	4.2	UN 1385	II
Thallium compounds, n.o.s.	6.1	UN 1707	II
Trichloroisocyanuric acid, dry	5.1	UN 2468	II
Trichloro-s-triazinetriane, dry ²	5.1	UN 2468	II
Zinc dust	4.3	UN 1436	II/III

Legend:

- ¹ Transport by vessel not authorized.
- ² This shipping description may be used only when all or part of the transport is by vessel. For transport by motor vehicle or rail freight, use "trichloroisocyanuric acid, dry."
- ³ For mixtures of arsenic compounds, the name(s) of the hazardous components of the mixture must appear in the parenthesis.
- ⁴ Packaging for calcium silicide must be hermetically sealed.