DOT-E 11549  
(SECOND REVISION)

EXPIRATION DATE: OCTOBER 31, 1997

1. **GRANTEE:** Trans-Tech Division, JBF Scientific Co., Inc.  
Winchester, MA

2. **PURPOSE AND LIMITATIONS:**
   
   This exemption authorizes the manufacture, marking and sale  
   of cargo tank motor vehicles conforming to DOT 406  
   specifications, except for head and baffle design, for use  
   in transportation in commerce of the hazardous materials  
   described in paragraph 6 below. This exemption provides no  
   relief from any regulation other than as specifically stated  
   herein.

3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.

4. **REGULATIONS FROM WHICH EXEMPTED:** The marking requirements  
   of 49 CFR Part 107, Appendix B of Subpart B, paragraph (1)  
   and 172.302(c); shipping paper notation requirements of 49  
   CFR Part 107, Appendix B of Subpart B, paragraph (2) and  
   172.203(a); and 178.346-1(d)(3).

5. **BASIS:** This exemption is based on the application of Trans-  
   Tech dated August 30, 1995, submitted in accordance with 49  
   CFR 107.103 and subsequent correspondence dated February 22,  
   1996.

6. **HAZARDOUS MATERIALS (49 CFR 172.101):**

<table>
<thead>
<tr>
<th>Hazardous materials description -- proper shipping name</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>3</td>
<td>UN1203</td>
<td>II</td>
</tr>
<tr>
<td>Fuel oil (No. 1,2,4,5, or 6)</td>
<td>3</td>
<td>NA1993</td>
<td>III</td>
</tr>
<tr>
<td>Diesel Fuel</td>
<td>3</td>
<td>NA1993</td>
<td>III</td>
</tr>
<tr>
<td>Fuel, aviation, turbine engine</td>
<td>3</td>
<td>UN1863</td>
<td>II &amp; III</td>
</tr>
</tbody>
</table>
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7. PACKAGING(S) and SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging must be in full compliance with specifications for DOT 406 cargo tank motor vehicles manufactured from aluminum except that heads and barrels are not dished and flanged. The configuration of heads, baffles and shell of the cargo tank, extruded top rails and box sills, and structural weld details must be as shown in JBF Scientific Company’s drawing no. D-S25-30067 dated May 9, 1995 and as described and modeled in the following engineering reports:

Finite Element Analysis of a Tank Truck Containment Shell - November, 1990

Evaluation of the Trans-Tech Truck Tank Phase 1 - Experimental Study of a Two Compartment Test Section - December, 1993

Evaluation of the Trans-Tech Truck Tank Phase 2 - Finite Element Analysis and Comparison to the Experimental Study - April, 1994

Conformance of the Trans-Tech Baseline Truck Tank to the 1995 DOT 406 Specification - May, 1995

All documents are on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). These cargo tanks are for truck mounting only.

b. TESTING - Each cargo tank motor vehicle must meet all test requirements of 49 CFR 178.346 and be periodically tested and inspected in accordance with 49 CFR Part 180 as it applies to DOT 406 Specification cargo tank motor vehicles.

c. MARKING - Each cargo tank motor vehicle manufactured under this exemption must be identified on the nameplate as "DOT 406-E 11549". The marking requirements of 49 CFR Part 107, Appendix B to Subpart B, paragraphs (1) and (2) and Sections 172.203(a) and 172.301(c) are waived.

d. OPERATIONAL CONTROLS - Shippers using the DOT 406 cargo tank motor vehicles authorized by this exemption must ensure that the maximum allowable working pressure of the cargo tank motor vehicle is greater than or equal to the maximum lading pressure for each material being offered as specified in 49 CFR 173.33(c).
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 by OHMRA 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.

9. **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle.

10. **MODAL REQUIREMENTS:** A copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.

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 law, 49 U.S.C. Section 5101 et seq:

   o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.

   o Registration required 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.

[Signature]

**Alan I. Roberts**  
Associate Administrator  
for Hazardous Materials Safety

**APR 11 1996**  
(DATE)

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