## FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS Alternate Form for Single Chamber Completely Shop-Fabricated Vessels Only As Required by the Provisions of the ASME Code Rules, Section VIII, Division I

| 1. Manufactured l  | by AIR PRODUC           | TS LIMITE                      | D ACREFAI                        | R NEAR WREXHA   | M CIWYD                                   | N. WAIES                  | U.K.  |
|--|-------------------------|--------------------------------|----------------------------------|---|---|---------------------------|---|
| 2. Manufactured f  | for AIR PRODU           | ICTS & CHE                     | MICALS INC                       | TREXIERTOW<br>Name and address of Pur                           | N PENNS                                   | LVANIA U.S                | 5.A.  |
| 3. Type Vertical Vessel No. (74-1485 ) ( ) Natl. Bd. No. 41 Yr. Built 1975.  (Mirs. Serial) Nom. 127 Corr.   |                         |                                |                                  |   |   |                           |   |
| 4. SHELL: Matl. SB209-5083-0 T.S. 40 ksi Thkl. 16B. (Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)  Corr. Allownil In. Diam. 6 Ft. 10 In. Length 31 Ft. 5 In.   |                         |                                |                                  |   |   |                           |   |
| Shell/Shel   | ll welded dh            | Ol. <sub>H.T.</sub> No         | R.T. C<br>(Spo<br>R.T.pa         | cmpletectioned to Complete) (Y                                  | No Efficie<br>es or No)<br>NO No. of      | Courses 4                 | If riveted or<br>brazed describe<br>seams fully under<br>remarks. |
| Head/Shell single weld. b.u.  6. HEADS: (a) MateriaSB 209-5083-0 Crown (Top, buttom, ends) Thickness Radius  T.S. 40 ksi Characteria SB209-5083-0 Crown Radius Ratio Apex Angle Radius Diameter (Convex or Convex)   |                         |                                |                                  |   |   |                           |   |
|  | 1 ~~                    | OOS3-O<br>crown<br>less Radius | T.S. 40 KS1<br>Knuckle<br>Radius | (b) Material SB2<br>Elliptical Conica<br>Ratio Apex An<br>2:1 - | 09-5083-0<br>I Hemispherica<br>gle Radius |                           | Side to Pressure<br>Convex or Conceve)                            |
| (a) TOP<br>(b) BOTTON  |                         |                                | -                                | 2:1 -   | -   |                           | CONCAVE   |
| ***************************************  |                         |                                |                                  |   |   |                           |   |
| If removable, bolts used Other fastening (Material, Spec No., T.S., Size, Number) (Describe or Attach Sketch)  |                         |                                |                                  |   |   |                           |   |
| 7. Constructed for maxet full vac allowable working press. 2 245 psi at max. temp. +150 °F. less than -20°) -320 °F. Hydrostatic Pneumatic or Pneumatic or Press25 psi.  |                         |                                |                                  |   |   |                           |   |
| 8. SAFETY OR E   | RELIEF VALVE            | OUTLETS: Num                   | ber                              | Size  | Loca                                      | ition                     |   |
| 9. NOZZLES:<br>Purpose (Inic<br>Outlet, Drai   | et,<br>.n) Number       | Diam. or Si                    | ze Type                          | Material  | Thickness                                 | Reinforcement<br>Material | How<br>Attache <b>d</b>   |
| TOP & BOTTON   | 4 FILL 2                | _1¼" IPS_                      | A & B                            | SB241-6061T6  | <u> </u>                                  | WEI                       |   |
| OUTLET   |                         |                                |                                  | SB241-6061-T6   |   |                           |   |
|  |                         |                                |                                  | Location_   |   |                           |   |
| OPENINGS:  |                         |                                |                                  | Location_   |   |                           |   |
|  | Threaded, No            |                                | Size                             | Location_   |   | Pads                      |   |
|  |                         |                                |                                  | 2   |   |                           | _1_1  |
| 11. SUPPORTS: Skirt (Yes or No) Lugs (Number) Legs (Number) Other 3 straps (Describe) Attached Welded to shell (Where & How)   |                         |                                |                                  |   |   |                           |   |
|  |                         |                                |                                  | th UG-120(d)): NOZZ   |   |                           |   |
| TRYCOCK  | ist applicable spe<br>1 | a" IPS                         | E                                | SB209-5083-0.   | 15/64"                                    |                           | DED   |
| LIQ.LEVE   | L 2                     | ⅓" TPS                         |                                  | SB241-6061-t6   |   | - WELDED                  |   |
| VENT   | <u> </u>                | l" IPS                         | H                                | SB241-6061-T6   |   | - WELDED                  |   |
|  |                         |                                |                                  |   |   |                           |   |
| CRYOGENIC INNER TANK FOR STORAGE OF LIQUID ARGON NITROGEN & OXYGEN.  |                         |                                |                                  |   |   |                           |   |
|  |                         |                                |                                  |   |   |                           |   |
| (Brief description of purpose of the vessel as Air Pank, Water Pank, L.P.G., Etc.—State Contents.  If postweld heat-treated.  List other internal or external pressures with coincident temperature when applicable.   |                         |                                |                                  |   |   |                           |   |
| We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this wess.   |                         |                                |                                  |   |   |                           |   |
| conform to the ASME Code for Pressure Vessels, Section VIII, Division I.  Date 19 15 Signed ATR PRODUCTS LIMITED By  |                         |                                |                                  |   |   |                           |   |
| Date 8 May 19 % Signed AIR PRODUCTS LIMITED By Esterne   |                         |                                |                                  |   |   |                           |   |
| Certificate of A   | Authorization No.       | 12,042                         |                                  | 28th Februar  | y, 1977.                                  |                           |   |
|  | Tatton 2.action 1.co.   |                                |                                  | F SHOP INSPECT  |   |                           | <del></del>   |
|  |                         |                                |                                  |   |   |                           |   |
| VESSEL MADE BY AIR PRODUCTS LIMITED at ACREFAIR WREXHAM CLWYD. N. WALES U.K.   |                         |                                |                                  |   |   |                           |   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or  |                         |                                |                                  |   |   |                           |   |
| the State or Province MASS and employed by COMMERCIAL UNION ASSURANCE COMPANY of   |                         |                                |                                  |   |   |                           |   |
| BOSTON MASS 02108/ have inspected the pressure vessel described in this manufacturer's data report on 4/2 1270 1975 and state that to the best of my knowledge and belief, the manufacturer's  |                         |                                |                                  |   |   |                           |   |
| turer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.   |                         |                                |                                  |   |   |                           |   |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pres-  |                         |                                |                                  |   |   |                           |   |
| sure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any   |                         |                                |                                  |   |   |                           |   |
| manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.  |                         |                                |                                  |   |   |                           |   |
| Date, 9/1 May 1975  FB Chart 1776 Commissions NB 7277 Mayo 1212  Inspector's Signature Nat'l Car, Nate, Province and No.   |                         |                                |                                  |   |   |                           |   |
| Account to the property of the | Inspector's             | Signature                      | C om                             | missions NB /2  | 1 / 1/16<br>11 Board, State, 1            | 223 /2/2                  |   |
| i  |                         |                                |                                  |   |   |                           |   |