DEPARTMENT OF TRANSPORTATION
HAZARDOUS MATERIALS REGULATIONS BOARD
WASHINGTON, D.C. 20590

SPECIAL PERMIT NO. 6576
SIXTH REVISION

Pursuant to 46 CFR 146.02-25 of the U.S. Coast Guard (USCG) Dangerous Cargo Regulations and 49 CFR 170.15 of the Department of Transportation (DOT) Hazardous Materials Regulations, as amended, and on the basis of the January 7, 1975 petition by Kaiser Aluminum & Chemical Corporation, Erie, Pennsylvania.

Special Permit No. 6576 is hereby amended by changing the introductory text to include non-liquefied gas; and by changing paragraphs (2) and (3), by changing the last sentence in the introductory text of paragraph (6), and by changing paragraph (11) to read as follows:

2. COMMODITY. Carbon dioxide, and compressed air.

3. PROPER SHIPPING NAME (49 CFR 172.5). Carbon dioxide, liquefied or Air, compressed, as appropriate.

6. * * * In addition cylinders must be made by Kaiser Aluminum and Chemical Corporation and must comply with the petitioner's specification submitted with letter dated August 9, 1971, as modified by the following changes thereto:

* * * * *

11. EXPIRATION DATE. February 1, 1976.

All other terms of this permit, as revised, remain unchanged. The complete permit currently in effect consists of the original issue and the Fourth and Sixth Revisions.

Expired 2/1/76
No Renewal
Copy pulled from Microfiche
Not Active

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SPECIAL PERMIT NO. 6576

This special permit is issued pursuant to 46 CFR 146.02-25 of the U.S. Coast Guard (USCG) Dangerous Cargo Regulations and 49 CFR 170.15 of the Department of Transportation (DOT) Hazardous Materials Regulations, as amended, to authorize shipments of a nonflammable liquefied compressed gas under conditions as prescribed herein. This permit does not relieve any shipper or carrier from compliance with any requirement of the DOT Regulations, including 46 CFR Parts 146 to 149 of the USCG Regulations, except as specifically provided for herein.

Standard special permit requirements and conditions relating to package markings, preparation of shipping papers, shipping experience reports, etc., are published in 49 CFR 171.6. These requirements are part of this special permit.

1. BASIS. Petitions dated August 9 and November 23, 1971, by Kaiser Aluminum & Chemical Corporation, Erie, Pennsylvania. [illegible] Chemical Corporation.

2. COMMODITY. Carbon dioxide.

3. PROPER SHIPPING NAME (49 CFR 172.5). Carbon dioxide, liquefied.

4. REGULATION WAIVED. 49 CFR 173.304(a)(1).

5. AUTHORIZED SHIPPER. Byrd-Erie Oxygen, Incorporated, Buckeye Fire Equipment Company and any other shipper who registers his identity with this Board and has a copy of the special permit.

6. PACKAGING PRESCRIBED. Non-DOT specification high pressure, seamless aluminum cylinders made of alloy 6351 -T6, having service pressure at least 1800 psig and a water capacity (nominal) not over 1000 pounds. Chemical analyses and tests, as specified, must be made within limits of the United States. In addition, cylinders must comply with the petitioner specification submitted with letter dated August 9, 1971, as modified by the following changes thereto:

Paragraph

2b Service pressure-- at least 1800 psi.

5b Change "10%" elongation to "12%".

"d Maximum average grain size 500 microns.

Paragraph

6a Reword as follows: "Required to be stamped in bottom of cylinder to identify the alloy, manufacturer and manufacturer's heat treat lot number."

8 Manufacture: Change the first sentence to read, "(a) By best appliances and methods, using the impact method, and must be free of dirt, foreign particles, and other defects that impair proper visual inspection. No fissure or other defect acceptable that is likely to weaken the finished cylinder appreciably, reasonably smooth and uniform surface finish required."

11 Design Qualifications: Change to read, "Any change in design or new design will require that sample cylinders be subjected to 100,000 cycles to working pressure to qualify for production. Pressurization shall be performed hydrostatically between approximately zero psig and the service pressure at a rate not in excess of 10 cycles per minute. Adequate recording instrumentation shall be provided if equipment is to be left unattended for periods of time. All cylinders used in cycling tests must be destroyed. This is a qualifying test for new designs only."

12 All finished cylinders must be subjected to the acceptable solution heat-treat and aging treatment for aluminum alloy 6351-T6 prior to hydrostatic testing.

16 Flattening Test: Change to read, "(a) Between knife edges, wedge shaped, 60° angle, radiused as shown in table:

| Material Thickness | Radius |
|---|---|
| Under .150" | .500" |
| .150 to .249" | .750" |
| .250 to .500" | 1.50" |

"Test one cylinder taken at random out of each lot of 200 or less after hydrostatic test. Flattening is to be continued until cracking occurs."

18(b) Change to read, "Flattening required without cracking to at least 10 times wall thickness. Mode of failure must be parallel to cylinder axis in area of bending, not under knife edges."

Paragraph

19 Rejected Cylinders Change to read, "(a) Reheat treatment authorized one (1) time. Subsequent thereto, acceptable cylinders must pass all prescribed tests.

20 Marking Change paragraph (4) to read, "Inspector's official mark near serial number, date of test (such as 7-71 for July 71), so placed that dates of subsequent tests can be easily added.

7. SPECIAL PACKAGING REQUIREMENTS.

a. Each cylinder must be marked "DOT SP 6576."

b. Each cylinder must be retested at least once every five years in accordance with 49 CFR 173.34(e)(1), (3), (4), (5) and (6), except that a cylinder condemned for excessive permanent expansion may not be reheat-treated.

c. A cylinder which has been subjected to the action of fire must not again be placed in service.

8. MODES OF TRANSPORTATION AUTHORIZED. Cargo vessel, passenger-carrying aircraft, cargo-only aircraft, motor vehicle, rail freight, rail express.

9. SPECIAL TRANSPORTATION REQUIREMENTS. A copy of this permit, kept current, must be carried aboard each vessel and aircraft.

10. REPORTING REQUIREMENTS. Any incident involving loss of contents of the package must be reported to this Board as soon as practicable.

11. EXPIRATION DATE. January 15, 1973.

Issued at Washington, D.C.:

Exp → Jan. 15, 1973