
#### Abstract

NASA Tech Briets announce new technology derived from the U.S. space program. They are issued to encourage commercial application. Tech Briefs are available on a subscription basis from the National Technical Information Service, Springfield, Virginia 22151. Requests for individual copies or questions relating to the Tech Brief program may be directed to the Technology Utilization Office, NASA, Code KT, Washington, D.C. 20546.


# Handbook of Cleaning Requirements, Procedures, and Verification Techniques for Oxygen Systems 

Cryogenic fluids have been used extensively in the space program. Many of these fluids are also being used or considered for use in ground transportation systems, power generation systems and major industrial applications. NASA's Aerospace Safety Research and Data Institute, located at the NASA Lewis Research Center, collects, evaluates, and organizes safety-related information on cryogenic fluids for use by NASA and others. As part of this effort, a handbook on cleaning requirements, procedures, and verification techniques for oxygen systems has been compiled and published.

Oxygen is widely used in industry as well as in the space program. Since the actual degree of cleanliness required has only a small scientific base, many organizations in both government and industry have generated cleaning specifications by trial and have verified them by accumulated operating experience in particular applications. This handbook compiles oxygen system cleaning specifications drawn from twenty-three government and industrial sources, cleaning processes for meeting these specifications, and recommended postcleaning inspection procedures for establishing the cleanliness achieved. Included with the handbook is a microfiche supplement of pertinent pages of the listed references.

## Notes:

1. Copies of this handbook may be obtained from:

National Technical Information Service
Springfield, Virginia 22151
Single document price $\$ 3.95$
(or microfiche \$0.95)

Reference: NASA SP-3072 (N73-15155), ASRDI Oxygen Technology Survey, Volume II: Cleaning Requirements, Procedures, and Verification Techniques
2. Technical questions may be directed to:

Technology Utilization Officer
Lewis Research Center
21000 Brookpark Road
Cleveland, Ohio 44135
Reference: B73-10188
3. A related handbook on oxygen is also available from:

National Technical Information Service
Springfield, Virginia 22151
Single document price $\$ 6.00$
(or microfiche $\$ 0.95$ )
Reference: NASA SP-3071 (N73-13952), ASRDI Oxygen Technology Survey, Volume I: Thermophysical Properties

Source: H. Bankaitis and C.F. Schueller Lewis Research Center
(LEW-11963)

