ISO/TC 197
HYDROGEN TECHNOLOGIES

HYDROGEN FUEL – PRODUCT SPECIFICATION
ISO 14687
WORKING GROUP 3

Dr. Addison Bain – Convener

HYDROGEN FUEL – PRODUCT SPECIFICATION

PURPOSE

The purpose of this ISO standard is to describe the quality characteristics of hydrogen fuel and to assure uniformity in the final quality of the hydrogen product as produced and distributed for utilization in vehicular, appliance, or other fueling applications

ISO 14687 HISTORY

August 1994 – Work Item Proposed
December 1994 – Work Item Approved

ISO P – members supporting the effort:

Belgium Canada Egypt France
Germany Italy Japan Korea
Russia Switzerland Turkey USA

ISO 14687 HISTORY (cont'd)

USA Membership:

NASA
Wiltec Laboratories
National Hydrogen Association
American Hydrogen Association
Air Products and Chemicals
BOC Gases
Air Liquide
Praxair
University of Miami
YTi

DEVELOPMENT OF WD14687

Based on the following reference specifications:

MIL-P-27201- 1971

CGA G-5.3-1990

JIS K0512-1974

CALIFORNIA 2292.7

SUMMARY APPLICATIONS/CHARACTERISTICS

TYPE l – GASEOUS

GRADE A (98.0) ICE/FUEL CELL/APPLIANCES

GRADE B (99.90) INDUSTRIAL

GRADE C (99.995) AIRCRAFT/SPACE VEHICLE

TYPE ll - LIQUID

TYPE lll - SLUSH

COMMENTS

ISO 14687 released March 1999

Limits of mercury and sulfur were included in view of fuel cell use and hydrogen production using H2S

WG 12 formed in 2003

Type l, grade D added for fuel cell vehicles (isolated from grade A)

Limits of formaldehyde and formic acid included in view of possible hydrogen production from biomass

First formal meeting of WG 12 to be in Japan June 2004