

**SAFETY DATA SHEET - CALIBRATION CHECK GAS**

**PRODUCT:**  $\leq 2\%$  HYDROGEN BALANCE AIR **PAGE:** 1/3  
**SDS NO:** 051B **Version:** 5 **Date:** 29<sup>th</sup> October 2008

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**

SDS NO: 051B  
 Product Name:  $\leq 2\%$  Hydrogen Balance Air ( $\geq 17$  litres)  
 Company Identification: See heading and/or footer

**2. HAZARDS IDENTIFICATION**

Hazards identification Compressed gas

**3. COMPOSITION/INFORMATION OF INGREDIENTS**

Substance/Preparation Preparation  
 Composition/Impurities Contains no other components or impurities, which will influence the classification of the product

**4. FIRST AID MEASURES**

Inhalation Not hazardous.  
 Ingestion Ingestion is not considered a potential route of exposure

**5. FIRE-FIGHTING MEASURES**

Fire-fighting measures These containers hold gas under pressure, with no liquid phase. If involved in a major fire, they should be sprayed with water to avoid pressure increases, otherwise pressures will rise and ultimately they may distort or burst to release the contents. The gases will not add significantly to the fire, but containers or fragments may be projected considerable distances - thereby hampering fire-fighting efforts.

**6. ACCIDENTAL RELEASE MEASURES**

Accidental Release Measures In terms of weight, these containers hold very little contents, such that any accidental release by puncturing etc. will be of no practical concern.

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**7. HANDLING AND STORAGE**

Handling and Storage      Suck back of water into the container must be prevented. Do not allow back feed into the container. Use only properly specified equipment, which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.

Cylinders should be stored upright and it is good practice to keep inert, flammables and oxidants apart. All cylinders should be stored with the regulator detached, this provides a very useful safety measure as it prevents accidental high pressure gas discharge. Store either outside or in a well ventilated area, away from ignition sources, ideally in a secure storage area.

High temperatures will cause the gas to expand resulting in a rise in pressure, the upper recommended limit is 45°C or 50°C, however, there is a large safety margin on the burst pressure. Mtech guarantees all mixtures to 0°C.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Personal protection      Ensure adequate ventilation  
 No WEL data available for hydrogen

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Relative density, gas      Lighter or similar to air  
 Solubility mg/l water      Not known  
 Appearance/Colour      Colourless gas  
 Odour      None

**10. STABILITY AND REACTIVITY**

Stability and reactivity      Stable under normal conditions.

**11. TOXICOLOGICAL INFORMATION**

General      No known toxicological effects from this product.

**12. ECOLOGICAL INFORMATION**

General      No ecological damage caused by this product

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**13. DISPOSAL INFORMATION**

Disposal Used containers are acceptable for disposal in the normal waste stream. A recycle tool is available from Mtech to enable a used non-refillable cylinder to be punctured and safely disposed of.

**14. TRANSPORT INFORMATION**

Land transport ADR/RID  
 Sea transport IMDG  
 Air transport ICAO/IATA

UN number:	UN1956
Proper Shipping Name:	Compressed gas n.o.s. (contains air, hydrogen)
Class:	2 (ADR)                      2.2 (IMDG/IATA)
ADR classification code:	1A
Packing Group:	N/A
Marine Pollutant:	N/A

**15. REGULATORY INFORMATION**

Regulatory Information Following the HSE Approved Supply List (L142) and the UK's CHIP (as currently amended) Regulations –  
Classified as non-flammable, non-toxic

**16. OTHER INFORMATION**

S(2)                      Keep out of the reach of children  
 S9                        Keep container in a well-ventilated place

This SDS has been prepared in accordance with the Chemicals (Hazard Information and Packaging for Supply Regulation (as currently amended). The information is based on the best knowledge of Mtech and its advisors and is given in good faith, but we cannot guarantee its accuracy, reliability or completeness and therefore disclaim any liability for loss or damage arising out of use of this data. Since conditions of use are outside the control of the Company and its advisors we disclaim any liability for loss or damage when the product is used for other purposes than it is intended.