IONEX® TYPE Ag400 B3 SAFE HYDROGEN GETTERING SOLUTION



IONEX® TYPE Ag400 B3

Some of the world's biggest brands rely on lonex® Type Ag400 B3 as their safe solution for gettering hydrogen from vacuum spaces of cryogenic apparatus.

High Mn Steel

일신 그린 아이리스 ILSHIN GREEN IRIS

POHANG IMD 9812602

IONEX® TYPE Ag400 B3 THE BENEFITS

HIGH PERFORMANCE

Proven hydrogen gettering solution.

Ionex® Type Ag400 B3 enhances the effective vacuum in cryogenic vessels or transfer lines by efficient removal of hydrogen.

- With a working capacity of 20 to 25 Torr-Litres per gram, Ag400 B3 will remove gaseous hydrogen which slowly outgases from the steel container shell into the vacuum annulus.
- lonex[®] Type Ag400 B3 contains active silver ions which, in the presence of hydrogen, become reduced to free silver. The hydrogen chemically bonds within the crystalline lattice of the zeolite carrier material.
- The ionic silver catalyses the reaction between hydrogen and any oxygen molecules present to form water.

SUPREME SAFETY

Proven safety in hydrogen vacuum break conditions.

When tested under liquid hydrogen cryogenic storage or transfer equipment vacuum break conditions, lonex[®] Type Ag400 B3 hydrogen getter has been proven to be safe.

- When exposed to a hydrogen vacuum break, Ag400 B3 does not cause ignition of hydrogen; it pumps hydrogen until its capacity is reached and then becomes passive.
- With an operating temperature far below the auto-ignition temperature of hydrogen, Ag400 B3 is safe to use as a getter in cryogenic equipment designed for liquid hydrogen storage and transfer applications.
- Unlike palladium oxide, Ag400 B3 will not auto ignite when exposed to hydrogen in the event of a vacuum break.

OUTSTANDING VALUE

A fraction of the cost of palladium oxide.

- Most cost effective way of extending the life of cryogenic tanks.
- In replacing palladium oxide with lonex[®] Type Ag400 B3, seven to ten times more silver zeolite (by weight) is recommended.
- This results in an overall reduction in cost of up to 50-80%, depending on design efficiencies.

IONEX® TYPE Ag400 B3 APPLICATION

ATMOSPHERE (AMBIENT)



OUR EXPERIENCE

Molecular Products manufactures mission critical air purification technologies that protect people, processes and environments. Specialising in highly technical chemical media solutions for the treatment of breathable gases, our global customer base is served from our two primary manufacturing facilities in the US and UK.

DUR CAPABILITY

With the growth of LNG production and use around the world, cryogenic storage and transfer equipment manufacturers rely on our lonex[®] Type Ag400 B3 synthetic silver exchange zeolite as a safer, more cost effective alternative to palladium oxide.

USA

SALESUSA@MOLPROD.COM +1 (303) 666 4400

UK & EUROPE SALES@MOLPROD.COM +44 (0)1279 445111

ASIA SALESASIA@MOLPROD.COM +86 51 085 879 137

INDIA SALESINDIA@MOLPROD.COM +91 887 977 5309

MOLECULARPRODUCTS.COM



CONTACT