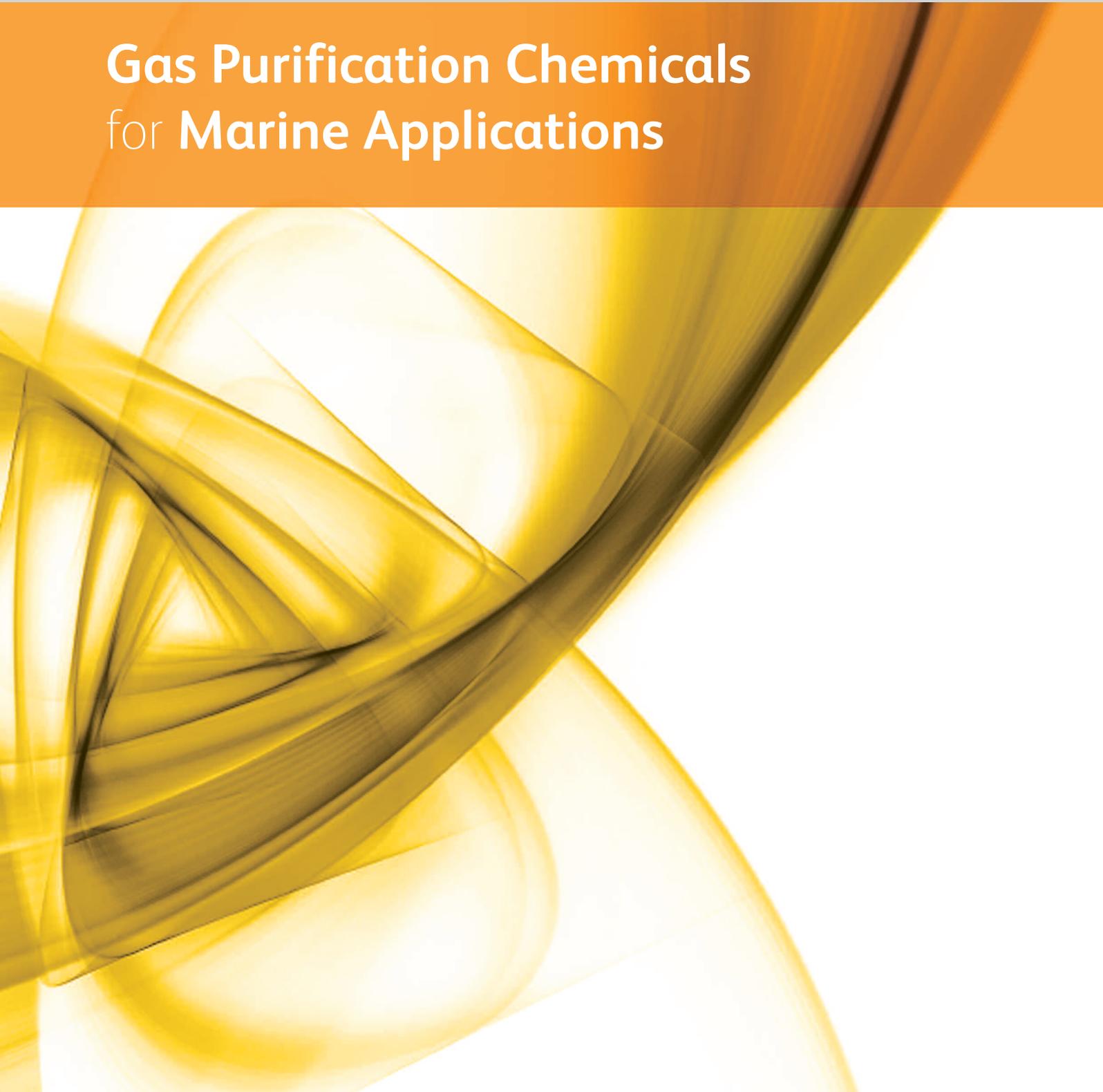




Premier Chemicals

Gas Purification Chemicals for Marine Applications



Premier Chemicals is a global supplier of chemicals for Marine applications.

Whether it's for safety critical applications such as saturation diving or for environmental protection for marine SCR systems, Premier Chemicals has the knowledge, expertise and global reach to supply our customers requirements.

DIVING GAS CONDITIONING

We supply a range of diving gas conditioning chemicals for removal of carbon dioxide, carbon monoxide, moisture and acid gases in saturation diving and subsea welding activities.

MARINE UREA

With our network of partners around the world, we can supply Marine Urea in bulk, for use on board vessels with SCR systems. All of our Marine Urea is supplied to the AUS32 and AUS40 quality standards, ensuring compatibility with SCR NOx emission control systems.



Diving Gas Conditioning Chemicals for Saturation Diving

Premier Chemicals is a world leader in the supply of diving gas conditioning chemicals for use on board Dive Support Vessels (DSV's) during saturation diving activities. Our industry experience and REACH ready status provide our customers with the level of assurance required to ensure safe diving operations.

Our recently launched Intersorb® Subsea product for Carbon Dioxide (CO₂) removal in Saturation Diving Chambers has been specifically designed for this application and demonstrates significant performance advantages over competitor products.

Other gas conditioning products supplied include; NanAuCat™ oxidation catalysts used for safe Carbon Monoxide (CO) removal, Molecular Sieve for water (H₂O) removal, Activated Carbon for volatile organic compound (VOC) removal and, Potassium Permanganate Impregnated Media for Sulphur and other odorous compounds removal.

Weblink – <http://www.premchemltd.com/applications/diving-gas-conditioning-chemicals/saturation/>

Main Products

SODA LIME – INTERSORB® SUBSEA

Premier Chemicals is the global distributor of Intersorb® soda lime products for the removal of Carbon Dioxide (CO₂), and other acid gases, in diving and industrial applications.

Intersorb® Subsea (2-5mm particle size) is manufactured in the UK by Intersurgical Ltd, a global supplier of medical consumables for respiratory care. Intersorb® Subsea is a soda lime absorbant used within saturation diving chambers on board DSV's, to prevent build up of expired CO₂ within the chamber. Intersorb® Subsea chemically converts gaseous carbon dioxide (CO₂) to solid calcium carbonate (CaCO₃) which is retained within the absorbant, thereby removing carbon dioxide from the diving gas.

Intersorb® Subsea has been specifically developed for use in saturation diving chambers, where it has demonstrated superior performance compared with other commercially available soda lime products.

In addition, where a smaller particle size product is required, for use in bail out rescuers or in diver gas recovery systems, Premier Chemicals can offer Intersorb® 812 (1 to 2.5mm particle size).

PURAFIL® SELECT MEDIA

Premier Chemicals supplies Purafil® select Media which removes sulphur oxides and other odorous pollutants from breathable air.

Purafil® Select consists of manufactured, generally spherical, porous pellets. Pellets are formed from a combination of activated alumina and other binders, suitably impregnated with potassium permanganate to provide optimum adsorption, absorption and oxidation of a wide variety of gaseous contaminants.

The potassium permanganate is applied during pellet formation, such that the impregnant is uniformly distributed throughout the pellet volume and is totally available for reaction.

The Purafil® chemisorptive process removes contaminant gases by means of adsorption, absorption, and chemical reaction. Gases are trapped within the pellet where oxidation changes the gases into harmless solids, eliminating the possibility of desorption.

CARBON MONOXIDE CATALYST – NANAUCAAT™

Premier Chemicals supplies NanAuCat™ oxidation catalyst for the removal of carbon monoxide (CO).

NanAuCat™ is a highly active gold based oxidation catalyst which oxidises harmful carbon monoxide (CO) to the less harmful carbon dioxide (CO₂). NanAuCat™ gold based oxidation catalyst is used in hyperbaric welding operations, to remove CO from the welding fume to prevent excessive build up of CO within the welding chamber.

In addition, NanAuCat™ gold based oxidation catalyst can be used within the saturation diving chamber to prevent build up of low levels of CO within the chamber, ensuring that subsea contractors meet the NORSOK standard for manned underwater operations.

Compared with other precious metal catalysts currently available, NanAuCat™ has demonstrated significantly higher catalytic activity, with lower precious metal content, thereby making it a much more cost-effective CO removal technology than traditional Platinum based catalysts.

Supporting Products

In addition to the core diving gas conditioning products above, Premier Chemicals supplies activated carbon, molecular sieve and other chemical consumables which may be required for commercial diving and subsea operations.



Marine Urea (AUS 40) for SCR NOx Emissions Control Systems

Premier Chemicals is a global supplier of AUS 40 grade marine urea for use in marine SCR systems.

With diesel engine marine vessels contributing significantly to environmental pollution, the use of NOx Emissions Control Systems such as SCR (Selective Catalytic Reduction) are becoming more and more important for improvements to air quality.

AUS 40 grade marine urea is a NOx reduction agent that has been specifically developed for use with SCR systems in marine applications. Marine urea which meets the AUS 40 grade is manufactured to rigorous quality standards specified by ISO 18611-1:2014, and will aid the longevity of the catalyst in the SCR system.

IMO Tier III Regulations will come into force in 2016. The regulations mean that Tier III standards must be met for marine vessels constructed after 1st January 2016 and which will be operated within IMO emission control areas (ECA's). Premier Chemicals' AUS 40 Grade Marine Urea will ensure your SCR system operates efficiently and effectively to meet these new regulations.



Premier Chemicals

About us

Based in the UK, Premier Chemicals are a customer focused business in our core business areas – Gas Purification and Specialty Chemical Sourcing. We are committed to improving service standards to our clients through our knowledge of leading technologies, flexible packaging solutions and our customer focus.

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