## **Nitrosamine Standards**

Nitrosamines are products that are formed by the chemical reaction of amines and nitrogen containing agents such as nitrates, nitrogen oxides or nitrous acids. The products can be detected in air, water, soil, beverages, milk, cosmetics and in the alimentary tract of both humans and animals. Nitrosamines are now classified as known carcinogens and much attention in particular is being paid to the presence of a substance called N-Nitrosodi-Methylamine (NDMA) and several other nitrosamines in drinking water. This substance is accidently produced during a process called chloramination which is used in water treatment plants to reduce or eliminate trihalomethane levels in drinking water.

The occurrence of several nitrosamines including NDMA has been documented in recycled water, effluent, industrial waste water discharges and sewage sludge. All of these are sources of groundwater contamination and all have the potential to move from groundwater into the potable water system. NDMA is now considered a priority pollutant and a number of local, national and international authorities have set regulatory guidelines for this and other nitrosamines in drinking water. Apart from NDMA, N-Nitrosomethyethylamine (NMEA), N-Nitrosodiethylamine (NDEA), N-Nitrosopyrollidine (NPYR), N-Nitrososodi-N-Propylamine (NDPA), N-Nitrosopiperidine (NPIP) and N-Nitrosodi-N-Buthylamine (NDBA) are all considered significant.

Since nitrosamines may only be present in various matrices in ppb of ppt levels a high degree of sensitivity in sample management is necessary to monitor their presence. High quality, pure and well characterised standards are an imperative for successful qualitative and quantitative detection and measurement. Reagecon offers neat, single and multi component Standards for Nitrosamine analysis. These Standards are characterised and screened for identity, purity, stability and homogeneity. The products are prepared and certified gravimetrically and verified using GC-MS.

Product No.	Analyte	Concentration & Matrix	Pack Size
RENIT001	N-Nitrosodiethylamine	1000µg/ml in Purge & Trap Methanol	1ml
RENIT002	N-Nitrosodiethylamine	2000µg/ml in Purge & Trap Methanol	1ml
RENIT003	N-Nitrosodimethylamine	1000µg/ml in Purge & Trap Methanol	1ml
RENIT004	N-Nitrosodimethylamine	2000µg/ml in Purge & Trap Methanol	1ml
RENIT005	N-Nitrosodi-n-propylamine	1000µg/ml in Methylene Chloride	1ml
RENIT006	N-Nitrosodi-n-propylamine	2000µg/ml in Methylene Chloride	1ml
RENIT007	N-Nitrosodiphenylamine	1000µg/ml in Methylene Chloride	1ml
RENIT008	N-Nitrosodiphenylamine	2000µg/ml in Methylene Chloride	1ml
RENIT009	N-Nitrosomethylethylamine	1000µg/ml in Purge & Trap Methanol	1ml
RENIT010	N-Nitrosomethylethylamine	2000µg/ml in Purge & Trap Methanol	1ml
RENIT011	N-Nitrosomorpholine	1000µg/ml in Purge & Trap Methanol	1ml
RENIT012	N-Nitrosomorpholine	2000µg/ml in Purge & Trap Methanol	1ml
RENIT013	N-Nitrosopiperidine	1000µg/ml in Purge & Trap Methanol	1ml
RENIT014	N-Nitrosopiperidine	2000µg/ml in Purge & Trap Methanol	1ml
RENIT015	N-Nitrosopyrrolidine	1000µg/ml in Purge & Trap Methanol	1ml
RENIT016	N-Nitrosopyrrolidine	2000µg/ml in Purge & Trap Methanol	1ml

As for all of Reagecon's Standards and Certified Reference Materials (CRM's), the company can produce customised Standards and Private Label options in our Global Metrology Centre in Shannon.

