

BMF 55 - Nitrosamines and Nitramines

Chiron has built up a strong track record of supplying new reference standards during the past 28 years of operation. We are now proud to offer various nitrosamine and nitramine reference standards.

Our mission is to market highly purified calibrates in crystalline as well as standardized solutions for chemical analysis, including internal standards. Your benefits using our standards include:

- **Fast turnover time due to excellent service.**
- **Guaranteed high and consistent quality.**
- **Bulk quantities available on request.**
- **Custom solutions and custom synthesis on request.**
- **We continuously develop new and innovative products.**



It is well known that **nitrosamines and nitramines** can be dangerous to human health, animals and plant lives. There are several technologies which release them into the environment.

Nitrosamines are a class of chemical compounds that have received much attention since 1956, when two British scientists, John Barnes and Peter Magee, reported that dimethylnitrosamine produced liver tumors in rats. Nitrosamines are formed by reactions of nitrites and secondary amines (e.g. in proteins) under acidic conditions like gastric milieus. Human beings ingest nitrites **from food, esp. fried or grilled meat and vegetables. Disposal of tobacco products** also causes a high intake of nitrosamines (mainly N-Nitrosornicotin).

CO2 capture causes a huge interest in these days. Solvents used for CO2 capture are often a mixture of several amines according to the latest developments in this field. These amine compositions are not always known in detail. However, it is known that the amine blends for CO2 capture are recycled, but as a side reaction/effect a certain percentage of the amines are either degraded or emitted to air. The released amines are often unstable on air, and degrade to toxic substances like nitrosamines and nitramines.

New in our catalog: Nitramines

Product No	Name	Conc.	Solvent	QTY
9813.2-100MG	Dimethylnitramine	2000µg/mL	DCM	1 mL
9812.2-100MG	2-Nitroaminoethanol	neat	neat	100 mg
9820.2-100MG	N-Nitrosodimethylamine (in mix with dimethyl-nitramin)	2000µg/mL	DCM	1 mL
9820.2-1G		neat	neat	1 G
9907.2-100MG	N-Nitro-2-oxazolidone	neat	neat	100 mg

We also offer custom synthesis - Please inquire for price

Native nitrosamines for EPA 621

Product No	Name	Description	Conc.	Solvent	QTY
9004.2-2K-DC	N-Nitrosodimethylamine	NDMA	2000µg/mL	DCM	1mL
9004.2-100MG	N-Nitrosodimethylamine	NDMA	neat	neat	100 mg
9005.3-2K-DC	N-Nitrosomethylethylamine	NMEA	2000µg/mL	DCM	1mL
9005.3-100MG	N-Nitrosomethylethylamine	NMEA	neat	neat	100 mg
9006.4-2K-DC	N-Nitrosodiethylamine	NDEA	2000µg/mL	DCM	1mL
9006.4-100MG	N-Nitrosodiethylamine	NDEA	neat	neat	100 mg
9007.6-2K-DC	N-Nitrosodi-n-propylamine	NDPA	2000µg/mL	DCM	1mL
9007.6-100MG	N-Nitrosodi-n-propylamine	NDPA	neat	neat	100 mg
9008.8-2K-DC	N-Nitrosodi-n-butylamine	NDBA	2000µg/mL	DCM	1mL
9009.4-2K-DC	N-Nitrosopyrrolidine	NPYR	2000µg/mL	DCM	1mL
9009.4-100MG	N-Nitrosopyrrolidine	NPYR	neat	neat	100 mg
9010.5-2K-DC	N-Nitrosopiperidine	NPIP	2000µg/mL	DCM	1mL
9010.5-100MG	N-Nitrosopiperidine	NPIP	neat	neat	100 mg

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Internal standards for EPA 621

Product No	Name	Description	Conc.	Solvent	QTY
9011.2-K-DC	<i>N</i> -Nitrosodimethylamine-d6	NDMA-d6	1000µg/mL	DCM	1mL
9012.3-K-DC	<i>N</i> -Nitrosomethylethylamine-d3	NMEA-d3	1000µg/mL	DCM	1mL
9013.4-K-DC	<i>N</i> -Nitrosodiethylamine-d10	NDEA-d10	1000µg/mL	DCM	1mL
9014.6-K-DC	<i>N</i> -Nitrosodi-n-propylamine-d14	NDPA-d14	1000µg/mL	DCM	1mL
9015.8-K-DC	<i>N</i> -Nitrosodi-n-butylamine-d18	NDBA-d18	1000µg/mL	DCM	1mL
9016.4-K-DC	<i>N</i> -Nitrosopyrrolidine-d8	NPYR-d8	1000µg/mL	DCM	1mL
9017.5-K-DC	<i>N</i> -Nitrosopiperidine-d10	NPIP-d10	1000µg/mL	DCM	1mL

Other nitrosamines

Product No	Name	Description	Conc.	Solvent	QTY
1703.10-K-AN	4-(<i>N</i> -Methyl- <i>N</i> -nitrosamino)-1-(3-pyridyl)-1-butanone		1000µg/mL	acetonitrile	1mL
2743.12-K-IP	<i>N</i> -Nitroso-di-n-hexylamine		1000µg/mL	isopropanol	1mL
9688.8-K-AN	<i>N</i> -Nitroso- <i>N</i> -ethylaniline		1000µg/mL	acetonitrile	1mL
8926.2-K-AN	<i>N</i> -Nitroso- <i>N</i> -methylurea	NMU	1000µg/mL	acetonitrile	1mL
8986.4-K-AN	<i>N</i> -Nitrosopiperazine		1000µg/mL	acetonitrile	1mL
8986.4-100MG	<i>N</i> -Nitrosopiperazine		neat	neat	100mg
9018.7-K-AN	<i>N</i> -Nitrosomethylphenylamine		1000µg/mL	acetonitrile	1mL
9019.4-K-AN	1,4-Dinitrosopiperazine		1000µg/mL	acetonitrile	1mL
9019.4-100MG	1,4-Dinitrosopiperazine		neat	neat	100mg
9326.4-K-AN	<i>N</i> -Nitrosomorpholine		1000µg/mL	acetonitrile	1mL
9326.4-100MG	<i>N</i> -Nitrosomorpholine		neat	neat	100mg
9328.12-K-AN	<i>N</i> -Nitrosodiphenylamine	Ndiphen	1000µg/mL	acetonitrile	1mL
9666.4-K-AN	<i>N</i> -Nitrosodiethanolamine		1000µg/mL	acetonitrile	1mL
9666.4-100MG	<i>N</i> -Nitrosodiethanolamine		neat	neat	100mg
9329.14-K-AN	<i>N</i> -Nitrosodibenzylamine		1000µg/mL	acetonitrile	1mL
9330.8-K-AN	<i>N</i> -Nitrosodiisobutylamine		1000µg/mL	acetonitrile	1mL
9330.8-100MG	<i>N</i> -Nitrosodiisobutylamine		neat	neat	100mg
9331.16-K-AN	<i>N</i> -Nitrosodi-n-octylamine		1000µg/mL	acetonitrile	1mL
9331.16-100MG	<i>N</i> -Nitrosodi-n-octylamine		neat	neat	100mg
9332.16-K-AN	<i>N</i> -Nitrosodiisooctylamine (Di-(2-ethylhexyl) amine)		1000µg/mL	acetonitrile	1mL
9332.16-100MG	<i>N</i> -Nitrosodiisooctylamine (Di-(2-ethylhexyl) amine)		neat	neat	100mg
9861.2-100MG	<i>N</i> -Methyl- <i>N</i> -nitro- <i>N</i> -nitrosoguanidine (wetted with ca. 50% water)	MNNG	neat	neat	100mg

Other nitrosoamine internal standards

Product No	Name	Conc.	Solvent	QTY
9327.4-100-AN	4-Nitrosomorpholine-d8	100µg/mL	acetonitrile	1mL
9022.4-100-AN	1,4-Dinitrosopiperazine-d8	100µg/mL	acetonitrile	1mL
1707.10-K-AN	4-(<i>N</i> -Methyl- <i>N</i> -nitrosamino)-1-(3-pyridyl)-1-butanone-d4	1000µg/mL	acetonitrile	1mL
9840.4-100-AN	<i>N</i> -Nitrosopiperazine-d8	100µg/mL	acetonitrile	1mL

Nicotine nitrosamines including internal standards

Product No	Name	Conc.	Solvent	QTY
1702.9-K-AN	<i>N</i> -Nitrosanornicotine	1000µg/mL	acetonitrile	1mL
1706.9-K-AN	DL- <i>N</i> -Nitrosanornicotine-d4	1000µg/mL	acetonitrile	1mL
1706.9-K-2AN	DL- <i>N</i> -Nitrosanornicotine-d4	1000µg/mL	acetonitrile	2mL
1705.10-K-AN	(<i>RS</i>)- <i>N</i> -Nitrosoanatabine	1000µg/mL	acetonitrile	1mL
1704.10-K-AN	(<i>RS</i>)- <i>N</i> -Nitrosoanabasine	1000µg/mL	acetonitrile	1mL

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