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Technical Data Sheet

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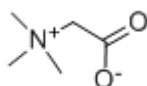
Site: www.tnjchem.com

Betaine Anhydrous

Product Information

Chemical Name	Betaine Anhydrous
CAS #	107-43-7
Formula	C ₅ H ₁₁ NO ₂
Synonym	Glycine betaine, Glycocoll betaine, Lycine, Oxyneuyine

Chemical Structure



Description

Betaine Anhydrous is any neutral chemical compound with a positively charged cationic functional group such as a quaternary ammonium or phosphonium cation (generally: onium ions) which bears no hydrogen atom and with a negatively charged functional group such as a carboxylate group which may not be adjacent to the cationic site. A betaine thus may be a specific type of zwitterion. Historically the term was reserved for TMG (trimethylglycine) only. Biologically, betaine is involved in methylation reactions and detoxification of homocysteine.

Physical Properties

Melting point, °C .	301-305 °C (dec.)
Density @ 20°C, g/cm ³	1.00 g/mL at 20 °C

Specification

Items	Specification	Specification
Characteristics	White or slightly yellow crystal	White or slightly yellow crystal
Assay, %	≥ 96.0	≥ 98.0
Heavy metals (Pb), ppm	≤ 10.0	≤ 10.0
As, ppm	≤ 2.0	≤ 2.0
Residue on Ignition, %	≤ 1.50	≤ 0.5

Safety

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on safety

Applications

The addition of betaine to polymerase chain reactions improves the amplification of DNA by reducing the formation of secondary structure in GC-rich regions. The addition of betaine has been reported to enhance the specificity of the polymerase chain reaction by eliminating the base pair composition dependence of DNA melting.

Packaging

25kg bag packing, 16mt/20"container without pallet, 15mt/20"container with 20pallet

25kg fiber drum packing, 12mt/20"container without pallet, 9mt/20"container with 20pallet

Storage & Handling

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we has been advised of the possibility of such damages.

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