

COPPERHEAD CHEMICAL COMPANY[®]

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Product Information Bulletin for:

BUTANETRIOL TRINITRATE (BTTN)

1,2,4-Butanetriol Trinitrate is a nitrate ester used as an energetic plasticizer. It is sometimes conitrated or blended with NG or TMETN to form a mixed nitrate ester. The product is desensitized with solvents such as methylene chloride and acetone for shipment. BTTN is typically stabilized with 2NDPA, however, other stabilizers can also be used.

Physical Properties

Physical State	Liquid	Oxygen Balance as CO ₂	-16.6%
Color	Clear yellow	Heat of Explosion	1358 cal/g
Chemical Formula	C ₄ H ₇ N ₃ O ₉	Heat of Combustion	2168 cal/g
Molecular Weight	241.12	Viscosity @ 25°C	59 cP
Specific Gravity @ 20°C	1.52	Soluble In	Acetone, ether, ethanol
Freezing Point	-27°C	Solubility in Water @ 20°C	0.08g/100g H ₂ O

Sensitivity and Stability

Impact	1 Nm
Explosion Temperature (5 Sec.)	230°C

Typical Specifications

Purity	97% minimum
Acidity/Alkalinity	0.002% maximum
Moisture	0.20% maximum
KI Stability (82.2°C)	10 minutes minimum

Shipping Information

Designation	Composition	DOT Classification	Standard Packages
RXL 623	80/20 BTTN / Methylene Chloride	Substances, Explosive, n.o.s., Class 1.1D, UN0475, PGII	5 gallon inner packaging with a 1A2 outer packaging
RXL 1000	60/40 BTTN / Acetone	Substances, Explosive, n.o.s., Class 1.1D, UN0475, PGII	30 gallon inner packaging with a 1A2 outer packaging Palletized drums or desiccators authorized under DOT-SP2709

If you are looking for a responsive, reliable, and cost effective manufacturer, contact us via telephone at (570) 386-6123 or via e-mail at sales@copperheadchemical.com. For additional information and handling instructions, refer to the Safety Data Sheet.

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FOR YOUR PROTECTION:

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