

COPPERHEAD CHEMICAL COMPANY

120 RIVER ROAD C TAMAQUA, PA 18252
TEL: (570) 386-6123 C FAX: (570) 386-6158

Product Information Bulletin for:

NITROGLYCERIN (GLYCEROL TRINITRATE)

Copperhead Chemical Company Inc. produces nitroglycerin (NG) for use in propellants and other applications. NG is stabilized and desensitized to meet DOT shipping requirements. Common stabilizers for NG are ethyl centralite and 2NDPA. Typical desensitizers include acetone, ethyl acetate, triacetin, diethylene glycol, and methylene chloride.

Physical Properties

Physical State	Oily Liquid	Detonation Velocity	7600 m/s
Color	Colorless	Heat of Explosion	1600 cal/g
Chemical Formula	$O_2NOCH(CH_2ONO_2)_2$	Heat of Combustion	1616 cal/g
Molecular Weight	227.09	Viscosity @ 20°C	36 cP
Specific Gravity @ 25°C	1.5931	Vapor Pressure @ 20°C	0.00033 mm Hg
Freezing Point	13.2°C	Soluble In	Most organic solvents
Oxygen Balance as CO ₂	+3.5%	Solubility in Water @ 20°C	0.18 g/100g H ₂ O

Sensitivity and Stability

Impact	8 to 10 cm (2 Kast Apparatus)
Friction	100% steel shoe
Explosion Temperature (5 Sec.)	222°C
Decomposition Temperature	145°C

Typical Specifications

Nitrogen	18.4% minimum
Moisture	0.5% maximum
Acidity/Alkalinity	0.002% maximum
KI Stability (82.2°C)	10 minutes minimum
DiNG Content	Meets customer requirements

Please contact us regarding any special requirements.

Shipping Information

Designation	DOT Classification	Composition	Standard Packages
RXL 677	Substances, Explosive, n.o.s., Class 1.1D, UN0475, PGII	50/50 NG / Ethyl Acetate	5 gallon inner packaging with a 1A2 outer packaging.
RXL 688		75/25 NG / Triacetin	
RXL 689		70/30 NG / Methylene Chloride	
X-D-35		50/50 NG / Methylene Chloride	30 gallon inner packaging with a 1A2 outer packaging.
X-E-3		75/25 NG / Diethylene Glycol	
X-E-5	Substances, Explosive, n.o.s., Class 1.3C, UN0477, PGII	60/40 NG / Acetone	Packages authorized under DOT-SP2709.

If you are looking for a responsive, reliable, and cost effective manufacturer, contact us at via telephone at (570) 386-6123 or via email at Sales@CopperheadChemical.com. For additional information and handling instructions, refer to the material safety data sheet.

Rev May 2011

FOR YOUR PROTECTION:

The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning uses or applications are only the opinion of Copperhead Chemical Company Inc. and users should make their own tests to determine the suitability of these products for their own particular purposes. However, because of numerous factors affecting results, Copperhead makes no warranty of any kind, express or implied, including those of merchantability and fitness for particular purpose, other than the material conforms to its applicable current standard specifications. Statements herein, therefore, should not be construed as representations or warranties. The

responsibility of Copperhead for claims arising out of breach of warranty, negligence, strict liability, or otherwise is limited to the purchase price of the material. Copperhead shall, in no event, be liable for special, incidental, or consequential damages, including loss of profits. Statements concerning the use of the products or formulations described herein are not to be construed as recommending the infringement of any patent and seller assumes no liability for infringement arising out of any such use. Standard specifications, although current at the time of publication, are subject to change without notice.