PRODUCT BULLETIN

RESPONSIVE, RELIABLE, AND COST EFFECTIVE MANUFACTURER OF ENERGETIC MATERIALS

120 RIVER ROAD • TAMAQUA, PA 18252 USA • TEL: (570) 386-6123 • WWW.COPPERHEADCHEMICAL.COM

NITROGLYCERIN (GLYCERYL TRINITRATE)

Nitroglycerin (NG) is a nitrate ester used 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
	Color:	Colorless
	Chemical Formula:	O ₂ NOCH(CH ₂ ONO ₂) ₂
	Molecular Weight:	227.09
	Specific Gravity @ 25°C:	1.5931
	Freezing Point:	13.2°C
	Oxygen Balance as CO _{2:}	+3.5%

SENSITIVITY AND STABILITY

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

PHYSICAL PROPERTIES

Detonation Velocity:	7600 m/s
Heat of Explosion:	1600 cal/g
Heat of Combustion:	1616 cal/g
Viscosity @ 20°C:	36 cP
Vapor Pressure @ 20°C:	0.00033 mm Hg
Soluble In:	Most organic solvents
Solubility in Water @ 20°C:	0.18g/100g H ₂ 0

TYPICAL SPECIFIC	ECIFICATIONS	
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	

SHIPPING INFORMATION					
Designation	Composition	DOT Classification	Approved Packaging		
RXL 677	50/50 NG / Ethyl Acetate	UN0475, Substances, Explosive, N.O.S., 1.1D	E gollon or 20 gollon inner		
RXL 688	75/25 NG / Triacetin		5-gallon or 30-gallon inner packaging with a 1A2 outer		
RXL 689	70/30 NG / Methylene Chloride		packaging.		
X-D-35	50/50 NG / Methylene Chloride		 30-gallon 1H1 inner packaging with a 1H2 outer packaging. 		
X-E-3	75/25 NG / Diethylene Glycol		 Packaging as described in the 		
X-E-5	60/40 NG / Acetone		USDOT Special Permit		
RXL 1006	30/70 NG / Acetone	} Pending	Authorization DOT-SP 2709.		

CONTACT US:

Phone: (570) 386-6123

Web: www.copperheadchemical.com Contact us regarding special requirements.

FOR YOUR PROTECTION

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