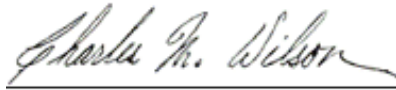


EM SCIENCE

CERTIFICATE OF ANALYSIS

NAME: Glycerol
GR ACS
ITEM NUMBER: GX0185, GX0185/3, GX0185/3, GX0185/30, GX0185/30, GX0185/5,
GX0185/6, GX0185/6, GX0185/6, GX0185/901
LOT NUMBER: 40263151
FORMULA: CH₂OHCHOHCH₂OH
FORMULA WT: 92.09
Meets ACS Specifications
Data Order No: 00056776

PROPERTY	LIMITS		RESULTS	UNITS
	Min.	Max.		
Acrolein and glucose			Passes test	
Assay (GC)	99.5		99.78	%
Chlorinated compounds (as Cl)		0.003	<5	%
Color (APHA)		10	< 10	
Fatty acid esters (as butyric acid)		0.05	<20	%
Form			Liquid	
Heavy metals (as Pb)		2	0.3	ppm
Infrared spectrum			Conforms	
Neutrality			Passes test	
Residue after ignition		0.005	0.005	%
Substances darkened by sulfuric acid			Passes test	
Sulfate (SO ₄)		0.001	< 0.0001	%
Water (H ₂ O)		0.5	0.011	%



Charles M. Wilson,
Quality Assurance Manager
Analysis Date: 9/29/00 6:52:41 AM