

Dichloromethane (Methylene Chloride)

World/GMP. WORLD Grade®

Stabilized with Amylene

Grade: World/GMP, WORLD Grade®

Catalog number: 313WORLD

Test	Mono-graph	Specification	Typical Result
Identification A - Infrared Absorption	NF	Conforms to Reference Spectrum	Pass
Identification C - Infrared Absorption	EP	Conforms to Reference Spectrum	Pass
Specific Gravity	NF	1.318 - 1.322 @ 25°C	1.320
Identification A - Relative Density	EP	1.320 - 1.332 @ 20°C	1.329
Identification B - Refractive Index	EP	1.423 - 1.425 @ 20°C	1.424
Identification D	EP	A violet color is produced	Pass
Identification E	EP	Filtrate from Test D gives the reaction of Chlorides	Pass
Assay (corrected for water)	NF	99.0% min.	100.00 %
Assay (corrected for water)	ACS	99.5% min	100.00 %
Limit of Nonvolatile Residue	NF	0.002% max.	0.001 %
Residue on Evaporation	EP	20ppm max.	10 ppm
Residue after Evaporation	ACS	0.002% max.	0.001 %
Limit of Hydrogen Chloride	NF	0.001% max.	LT 0.001%
Water Determination	NF	0.02% max.	0.01 %
Water	EP	0.02% max.	0.01 %
Water	ACS	0.02% max.	0.01 %

Test	Mono-graph	Specification	Typical Result
Free Chlorine	NF	The lower layer does not show violet tint	Pass
Free Chlorine	EP	No blue color develops	Pass
Free Halogens	ACS	The lower layer does not show violet tint	Pass
Appearance	EP	Clear and colorless	Pass
Solubility	EP	Sparingly soluble in water, miscible with Ethanol	Pass
Color (APHA)	ACS	10 max.	10
Ethanol	EP	2.0% max.	0.010 %
2-methylbut-2-ene	EP	300ppm, max.	70 ppm
Volatile Impurities - Impurity A - Carbon Tetrachloride	EP	10ppm max.	LT 10 ppm
Volatile Impurities - Impurity B - Chloroform	EP	50ppm max.	50 ppm
Volatile Impurities-Total Impurities other than Stabilizer	EP	0.1% max.	0.100
Volatile Impurities-Reporting Threshold	EP	50 ppm min.	Conforms
Acidity	EP	NMT 0.15 mL of 0.1 M NaOH required	0.04 mL
Titration Acid	ACS	0.0003 meq/g max	0.0001 meq/g
Ag (Silver)	USP<232>	Lot Analysis	0.00 ppm
As (Arsenic)	USP<232>	Lot Analysis	0.00 ppm
Au (Gold)	USP<232>	Lot Analysis	0.00 ppm
Ba (Barium)	USP<232>	Lot Analysis	0.00 ppm
Cd (Cadmium)	USP<232>	Lot Analysis	0.00 ppm
Co (Cobalt)	USP<232>	Lot Analysis	0.00 ppm

Test	Mono-graph	Specification	Typical Result
Cr (Chromium)	USP<232>	Lot Analysis	0.00 ppm
Cu (Copper)	USP<232>	Lot Analysis	0.00 ppm
Hg (Mercury)	USP<232>	Lot Analysis	0.00 ppm
Ir (Iridium)	USP<232>	Lot Analysis	0.00 ppm
Li (Lithium)	USP<232>	Lot Analysis	0.00 ppm
Mo (Molybdenum)	USP<232>	Lot Analysis	0.00 ppm
Ni (Nickel)	USP<232>	Lot Analysis	0.00 ppm
Os (Osmium)	USP<232>	Lot Analysis	0.00 ppm
Pb (Lead)	USP<232>	Lot Analysis	0.00 ppm
Pd (Palladium)	USP<232>	Lot Analysis	0.00 ppm
Pt (Platinum)	USP<232>	Lot Analysis	0.00 ppm
Rh (Rhodium)	USP<232>	Lot Analysis	0.00 ppm
Ru (Ruthenium)	USP<232>	Lot Analysis	0.00 ppm
Sb (Antimony)	USP<232>	Lot Analysis	0.00 ppm
Se (Selenium)	USP<232>	Lot Analysis	0.00 ppm
Sn (Tin)	USP<232>	Lot Analysis	0.00 ppm
Tl (Thallium)	USP<232>	Lot Analysis	0.00 ppm
V (Vanadium)	USP<232>	Lot Analysis	0.00 ppm

Certification and Compliance Statements

This product complies with all of the current requirements listed in the National Formulary, European Pharmacopeia, and American Chemical Society monographs.

This product is processed and packaged using applicable Good Manufacturing Practices.

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

Greenfield products are for further commercial manufacturing, laboratory use, or research. Greenfield is not registered with the United States Food and Drug Administration (FDA) as a drug manufacturing facility. Greenfield products are not registered with the FDA as active pharmaceutical ingredients in drug manufacturing.

Appropriate/legal use of all products are the responsibility of the user and subject to applicable local laws and regulations.