

## PRODUCT SPECIFICATION SHEET ACETONE MEETS ASTM D-329

Main Catalog #: 32900ASTM- Size Code\*

## Available in the following sizes:

\*Refer to Master Price List – Individual package sizes have unique size codes

Assay, min (anhydrous basis)  NF  99.0%  99.7%  Appearance  ACS  Clear Liquid with Characteristic Odor  Pass  Identification Test A (IR)  NF  Conforms to Infrared Spectra  Pass  Identification Test B (GC)  NF  Conforms to Reference Chromatogram  Pass  Specific Gravity @ 25°C, max.  NF  0.7890  0.7891  Apparent Specific Gravity  D-329  0.7910 - 0.7930 @20C  0.7885 - 0.7885 @25C  0.7883  Color (APHA), max  ACS  10  1  Color Pt-Co  D-329  5 max.  1  Residue After Evaporation, max  NF  0.004%  Non-Volatile Residue, max  NF  0.004%  Nonvolatile Matter  D-329  NMT 5mg/100mL  41 mg/100mL  Readily Oxidizable Substances  Substances Reducing KMnO4  ACS  Color doesn't completely disappear in 15 min.  Pass Pass  Solubility In Water  ACS  Solution remains clear for 30 min.  Pass  Water Miscibilty  D-329  To Pass Test  Pass  Titrable Acid, max  ACS  0.0002 meq/g  ACS  0.0001 meq/g  Titrable Base, max  ACS  0.0001 meq/g  0.0001 meq/g	TEST	MONO GRAPH	SPECIFICATION	TYPICAL ANALYSIS
ACS Clear Liquid with Characteristic Odor Pass  Identification Test A (IR) NF Conforms to Infrared Spectra Pass  Identification Test B (GC) NF Conforms to Reference Chromatogram Pass  Specific Gravity @ 25°C, max. NF 0.7890 0.7897  Apparent Specific Gravity D-329 0.7910 - 0.7930 @ 20C 0.7885 0.7883  Color (APHA), max ACS 10 1  Color Pt-Co D-329 5 max. 1  Residue After Evaporation, max ACS 10 ppm <10 ppm <10 ppm  Non-Volatile Residue, max NF 0.004% <0.001%  Nonvolatile Matter D-329 NMT 5mg/100mL <1 mg/100mL  Readily Oxidizable Substances Substances Substances Reducing KMnO4 ACS Color doesn't completely disappear in 15 min. Pass Pass  Solubility In Water ACS Solution remains clear for 30 min. Pass  Water Miscibilty D-329 To Pass Test Pass  Titrable Acid, max ACS 0.0003 meq/g 0.0002 meq/g  Acidity (as free acetic acid) D-329 0.002% max. <0.0001 meq/g  Titrable Base, max ACS 0.0001 meq/g	Assay, min (corrected for water)		99.5%	99.9%
Identification Test A (IR)  NF  Conforms to Infrared Spectra  Pass  Identification Test B (GC)  NF  Conforms to Reference Chromatogram  Pass  Specific Gravity @ 25°C, max.  NF  0.7890  0.7910 - 0.7930 @ 20C  0.7922  0.7883  Color (APHA), max  ACS  10  1  Color Pt-Co  D-329  5 max.  1  Residue After Evaporation, max  NF  0.004%  Nonvolatile Residue, max  NF  0.004%  Nonvolatile Matter  D-329  NMT 5mg/100mL  Readily Oxidizable Substances Substances Reducing KMnO4  ACS  Color doesn't completely disappear in 15 min.  Pass Pass  Solubility In Water  ACS  Solution remains clear for 30 min.  Pass  Water Miscibilty  D-329  To Pass Test  Pass  Titrable Acid, max  ACS  0.0002 meq/g  Acidity (as free acetic acid)  D-329  Titrable Base, max  ACS  0.0001 meq/g  Titrable Base, max  ACS  0.0001 meq/g	Assay, min (anhydrous basis)	NF	99.0%	99.7%
Normal   Normal	Appearance	ACS	Clear Liquid with Characteristic Odor	Pass
Specific Gravity @ 25°C, max.         NF         0.7890         0.787           Apparent Specific Gravity         D-329         0.7910 - 0.7930 @20C 0.7865 - 0.7885 @25C         0.7983           Color (APHA), max         ACS         10         1           Color Pt-Co         D-329         5 max.         1           Residue After Evaporation, max         ACS         10 ppm         <10 ppm	Identification Test A (IR)	NF	Conforms to Infrared Spectra	Pass
Apparent Specific Gravity         D-329         0.7910 - 0.7930 @20C 0.7865 - 0.7885 @25C         0.7922 0.7883           Color (APHA), max         ACS         10         1           Color Pt-Co         D-329         5 max.         1           Residue After Evaporation, max         ACS         10 ppm         <10 ppm	Identification Test B (GC)	NF	Conforms to Reference Chromatogram	Pass
D-329	Specific Gravity @ 25°C, max.	NF	0.7890	0.787
Color Pt-Co  D-329  5 max.  1  Residue After Evaporation, max  ACS  10 ppm  < 10 ppm  Non-Volatile Residue, max  NF  0.004%  Nonvolatile Matter  D-329  NMT 5mg/100mL  Color doesn't completely disappear in 15 min.  Pass Pass Substances Reducing KMnO <sub>4</sub> Permanganate Time  D-329  To Pass Test  Pass  Solubility In Water  ACS  Solution remains clear for 30 min.  Pass  Water Miscibilty  D-329  To Pass Test  Pass  Titrable Acid, max  ACS  0.0003 meq/g  Acidity (as free acetic acid)  D-329  Titrable Base, max  ACS  0.0006 meq/g  0.0001 meq/g	Apparent Specific Gravity	D-329		
Residue After Evaporation, max  ACS  10 ppm  Non-Volatile Residue, max NF  0.004%  Nonvolatile Matter  D-329  NMT 5mg/100mL  Readily Oxidizable Substances Substances Reducing KMnO <sub>4</sub> Permanganate Time  D-329  To Pass Test  Pass  Solubility In Water  ACS  Solution remains clear for 30 min.  Pass  Pass  Titrable Acid, max  ACS  O.0003 meq/g  Acidity (as free acetic acid)  D-329  To Pass Test  O.0002 meq/g  Acidity (as free acetic acid)  D-329  O.0006 meq/g  O.0001 meq/g  D.0001 meq/g  O.0001 meq/g	Color (APHA), max	ACS	10	1
Non-Volatile Residue, max  NF  0.004%  Nonvolatile Matter  D-329  NMT 5mg/100mL  Color doesn't completely disappear in 15 min.  Pass Pass Permanganate Time  D-329  To Pass Test  Pass  Solubility In Water  ACS  Solution remains clear for 30 min.  Pass Pass  Titrable Acid, max  ACS  O.0003 meq/g  Acidity (as free acetic acid)  D-329  To Pass Test  O.0002 meq/g  D-329  O.0002 meq/g  O.0001 meq/g	Color Pt-Co	D-329	5 max.	1
Nonvolatile Matter  D-329  NMT 5mg/100mL  Readily Oxidizable Substances Substances Reducing KMnO <sub>4</sub> Permanganate Time  D-329  To Pass Test  Pass  Solution remains clear for 30 min.  Pass  Pass  Pass  Pass  Pass  Pass  Pass  O.0002 meq/g  Acidity (as free acetic acid)  D-329  D-329  D-329  D-329  D-329  D-329  To Pass Test  Pass  O.0003 meq/g  O.0002 meq/g  O.0002 max.  O.0001 meq/g	Residue After Evaporation, max	ACS	10 ppm	<10 ppm
Readily Oxidizable Substances Substances Reducing KMnO <sub>4</sub> Permanganate Time  D-329  To Pass Test  Pass  Solubility In Water  ACS  Solution remains clear for 30 min.  Pass  Pass  To Pass Test  Pass  To Pass Test  Pass  O.0003 meq/g  Acidity (as free acetic acid)  D-329  O.002% max.  ACS  O.0006 meq/g  O.0001 meq/g	Non-Volatile Residue, max	NF	0.004%	<0.001%
Substances Reducing KMnO <sub>4</sub> ACS  Permanganate Time  D-329  To Pass Test  Pass  Solubility In Water  ACS  Solution remains clear for 30 min.  Pass  Water Miscibilty  D-329  To Pass Test  Pass  To Pass Test  Pass  To Pass Test  Pass  O.0002 meq/g  Acidity (as free acetic acid)  D-329  Titrable Base, max  ACS  O.0006 meq/g  O.0001 meq/g	Nonvolatile Matter	D-329	NMT 5mg/100mL	<1 mg/100mL
Solubility In Water ACS Solution remains clear for 30 min. Pass  Water Miscibilty D-329 To Pass Test Pass  Titrable Acid, max ACS 0.0003 meq/g 0.0002 meq/g  Acidity (as free acetic acid) D-329 0.002% max. < 0.002%  Titrable Base, max ACS 0.0006 meq/g 0.0001 meq/g	Readily Oxidizable Substances Substances Reducing KMnO <sub>4</sub>		Color doesn't completely disappear in 15 min.	
Water Miscibilty         D-329         To Pass Test         Pass           Titrable Acid, max         ACS         0.0003 meq/g         0.0002 meq/g           Acidity (as free acetic acid)         D-329         0.002% max.         < 0.002%	Permanganate Time	D-329	To Pass Test	Pass
Titrable Acid, max         ACS         0.0003 meq/g         0.0002 meq/g           Acidity (as free acetic acid)         D-329         0.002% max.         < 0.002%	Solubility In Water	ACS	Solution remains clear for 30 min.	Pass
Acidity (as free acetic acid) D-329 0.002% max. < 0.002%  Titrable Base, max ACS 0.0006 meq/g 0.0001 meq/g	Water Miscibilty	D-329	To Pass Test	Pass
Titrable Base, max  ACS  0.0006 meq/g  0.0001 meq/g	Titrable Acid, max	ACS	0.0003 meq/g	0.0002 meq/g
	Acidity (as free acetic acid)	D-329	0.002% max.	< 0.002%
Alkalinity (as ammonia) D-329 0.001% max. <0.001%	Titrable Base, max	ACS	0.0006 meq/g	0.0001 meq/g
	Alkalinity (as ammonia)	D-329	0.001% max.	<0.001%



TEST	MONO GRAPH	SPECIFICATION	TYPICAL ANALYSIS
Aldehyde (as HCHO), max	ACS	0.002%	<0.002%
Aldehydes	D-329	To Pass Test	Pass
IPA, max	ACS	0.05%	<0.001%
Methanol, max	ACS	0.05%	<0.05%
Water, max	ACS NF D-329	0.5%	0.2%
UV Absorbance @ 400nm 350nm 340nm 330nm	ACS/HPLC	U.A. 0.01 0.02 0.10 1.00	U.A. 0.000 0.000 0.040 0.650
Liquid Chromatography	ACS/HPLC	To Pass Test	Pass
Absorbance	ACS/HPLC	To Pass Test	Pass
Gradient Elution	ACS/HPLC	To Pass Test	Pass
Gradient Analysis at 254nm, Max.	ACS/HPLC	To Pass Test	Pass
Odor	D-329	Nonresidual	Pass
Distillation Range @760 mmHg	D-329	Distills entirely within 1.0C range, including 56.1C	Pass

Form Acetone, ASTM, Rev.1.1, 07/19, PJM

This product is for further commercial manufacturing, laboratory or research use, and may be used as a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.