

C. Product Categories and Families for Meters

When submitting a meter for evaluation, the manufacturer must specify the product categor(y)(ies) and/or famil(y)(ies) and critical parameters for which the meter is being submitted.

Product Category

A group of products that share similar characteristics.

Note: Under certain Test Requirements, product coverage is indicated by reference to the "Product Category," while under other Test Requirements, product coverage is indicated by "Product Family."

Product Family

A group of products, sometimes including multiple Product Categories, which share a common Test Requirement.

Note: Coverage of different products by a certificate may be indicated using references to either "Product Categories" or "Product Families," as indicated in the Test Requirement for that Product Family.

The product family and the specific product subgroup covered by the Certificate are to be identified on page one (1) of the Certificate of Conformance. More detailed information, including the typical product types found in the subgroup, is to be included in the application section of the Certificate.

Mass Meter Product Category and Test Requirements			Magnetic Flow Meter Product Category and Test Requirements			Positive Displacement Flow Meter Product Category and Test Requirements		Turbine Flow Meter Product Category and Test Requirements	
<p>Test B To cover a range of the following products, test with one product having a low specific gravity and test with a second product having a high specific gravity. The Certificate of Conformance will cover all products in all product categories listed in the table under Test B within the specific gravity range tested.</p> <ul style="list-style-type: none"> Test B does not apply to product categories of liquefied gases, compressed liquids, cryogenic liquids or heated products. <p><i>Note: Product categories under Test B were formerly referred to collectively as "Normal Liquids."</i></p> <p><i>Note: Product categories under Test B were formerly referred to collectively as "Normal Liquids."</i></p>			<p>Test F To cover a range of the following products, test with one product having a specified conductivity. The Certificate of Conformance will cover all products with conductivity equal to or above the conductivity of the tested liquid.</p> <ul style="list-style-type: none"> Test F does not apply to product categories of potable water, non-potable water, tap water, water mixes of alcohols and glycols, fertilizers, suspension fertilizers, liquid feeds, clear liquid fertilizers, chemicals or crop chemicals A, B, C, or D. Test F does not apply to product categories of liquefied gases, or compressed liquids. 			<p>Test C To cover a range of products within each product category, test with one product having a low viscosity and test with a second product having a high viscosity within each category. The Certificate of Conformance will cover all products in the product category within the viscosity range tested.</p>		<p>Test E To cover a range of products within each product category, test with one product having a low kinematic viscosity and test with a second product having a high kinematic viscosity within each category. The Certificate of Conformance will cover all products in the product category within the kinematic viscosity range tested.¹</p>	
						<p>Product Category: Alcohols, Glycols and Water Mixes Thereof (Alc Gly)</p>		<p>Product Category: Alcohols, Glycols and Water Mixes Thereof (Alc Gly)</p>	
Typical Products	Specific Gravity ² (60 °F)	Product Category	Typical Products	Conductivity (micro-siemens/centimeter)	Product Category	Typical Products	Reference Viscosity ¹ (60 °F) Centipoise centipoise (cP)	Typical Products	Reference Kinematic Viscosity ¹ (60 °F) Centistokes (cSt) centistokes (cPcSt)
Butanol	0.81	Alc Gly	Butanol		Alc Gly	Butanol	3.34	Butanol	3.344.13
Ethanol	0.79	Alc Gly	Ethanol	0.0013	Alc Gly	Ethanol	1.29	Ethanol	1.291.64
Ethylene Glycol	1.19	Alc Gly	Ethylene Glycol		Alc Gly	Ethylene Glycol	25.5	Ethylene Glycol	25.521.5
Isobutyl	0.81	Alc Gly	Isobutyl	0.02	Alc Gly	Isobutyl	4.54	Isobutyl	4.545.62
Isopropyl	0.79	Alc Gly	Isopropyl	3.5	Alc Gly	Isopropyl	2.78	Isopropyl	2.783.53
Methanol	0.80	Alc Gly	Methanol	0.44	Alc Gly	Methanol	0.64	Methanol	0.640.80
Propylene Glycol	1.04	Alc Gly	Propylene Glycol		Alc Gly	Propylene Glycol	54	Propylene Glycol	5452
Banvel	0.7 – 1.2	CC-A	6 Oil (#5, #6)		FL&O	<p>Test C Product Category: Crop Chemicals (Type A) (CC-A)</p>		<p>Test E Product Category: Compressed Liquids, Fuels and Refrigerants NH₃ (Comp liq)</p>	
Herbicides	0.7 – 1.2	CC-A	Asphalt		FL&O	Typical	Reference Viscosity ¹	Typical	Reference Kinematic

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¹ Viscosity (dynamic) is measured in centipoise. Kinematic viscosity is measured in centistokes. Source for some of the viscosity value information is in the Industry Canada – Measurement Canada "Liquid Products Group, Bulletin V-16-E (rev.1), August 3, 1999."

$$\text{Centistokes (m}^2\text{/s)} = \frac{\text{Centipoise (kg/m s)}}{\text{density (kg/m}^3\text{)}} \quad \text{centistokes (10}^{-6}\text{ m}^2\text{/s)} = \text{centipoise (10}^{-3}\text{ kg/m}\cdot\text{s)} \div \text{density (kg/m}^3\text{)} \quad \text{OR} \quad \text{centistokes (cSt)} = 1.002 \times \text{centipoise (cP)} \div \text{density (SG)}$$

² The specific gravity of a liquid is the ratio of its density to that of water at standard conditions, usually 4 °C (or 40 °F) and 1 atmosphere. The density of water at standard conditions is approximately 1000 kg/m³ (or 998 kg/m³). The specific gravity of a gas is the ratio of its density to that of air at standard conditions, usually 4 °C (or 40 °F) and 1 atmosphere.

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Mass Meter Product Category and Test Requirements			Magnetic Flow Meter Product Category and Test Requirements			Positive Displacement Flow Meter Product Category and Test Requirements		Turbine Flow Meter Product Category and Test Requirements	
						Products	(60 °F) Centipoise centipoise (cP)	Products	Viscosity ¹ (60 °F) Centipoise centistokes (cPcSt)
Paraquat	0.7 – 1.2	CC-A	Avgas		FL&O	Banvel	4 – 400	Anhydrous Ammonia	0-1880.31
Typical Products	Specific Gravity ² (60 °F)	Product Category	Typical Products	Conductivity (micro- siemens/centimeter)	Product Category	Test C Product Category: Crop Chemicals (Type A) (CC-A) continued		Test E Product Category: Compressed Liquids, Fuels and Refrigerants NH ₃ (Comp liq) continued	
Prowl	0.7 – 1.2	CC-A	Biodiesel above B20		FL&O	Typical Products	Reference Viscosity ¹ (60 °F) Centipoise centipoise (cP)	Typical Products	Reference Kinematic Viscosity ¹ (60 °F) Centipoise centistokes (cPcSt)
Round-up	0.7 – 1.2	CC-A	Bunker Oil		FL&O	Herbicides	4 – 400	Butane	0-190.32
Touchdown	0.7 – 1.2	CC-A	Cooking Oils		FL&O	Paraquat	4 – 400	Ethane	
Treflan	0.7 – 1.2	CC-A	Corn Oil		FL&O	Prowl	4 – 400	Freon 11	0-3130.21
Adjuvants	0.7 – 1.2	CC-B	Crude Oil		FL&O	Round-up	4 – 400	Freon 12	0-3590.27
Fumigants	0.7 – 1.2	CC-B	Diesel Fuel ³		FL&O	Touchdown	4 – 400	Freon 22	1-991.46
Fungicides	0.7 – 1.2	CC-B	Fuel Oil (#1, #2, #3, #4)	0	FL&O	Treflan	4 – 400	Propane	0-0980.195
Insecticides	0.7 – 1.2	CC-B	Gasoline ⁴		FL&O	Test C Product Category: Crop Chemicals (Type B) (CC-B)		Test E Product Category: Fuels, Lubricants, Industrial and Food Grade Liquid oils (FL&O)	
Fungicides	1 – 1.2	CC-C	Jet A		FL&O	Typical Products	Reference Viscosity ¹ (60 °F) Centipoise centipoise (cP)	Typical Products	Reference Kinematic Viscosity ¹ (60 °F) Centipoise centistokes (cPcSt)
Micronutrients	0.9 – 1.65	CC-D	Jet A-1		FL&O	Adjuvants	0.7 – 100	6 Oil (#5, #6)	66-73 – 13,00014,500
Hydrochloric Acid	1.1	Chem	Jet B		FL&O	Fumigants	0.7 – 100	Asphalt	100 – 5000
Phosphoric Acid	1.87	Chem	JP4		FL&O	Fungicides	0.7 – 100	Avgas	1.5 – 6
Sulfuric Acid	1.83	Chem	JP5		FL&O	Insecticides	0.7 – 100	Biodiesel above B20	10-1211.8
3-10-30	0.9 – 1.65	Fert	JP7 and JP8		FL&O	Test C Product Category: Crop Chemicals (Type C) (CC-C)		Bunker Oil	11,20011,300
4-4-27	0.9 – 1.65	Fert	Kerosene		FL&O	Typical Products	Reference Viscosity ¹ (60 °F) Centipoise centipoise (cP)	Cooking Oils	9-9310.8
9-18-9	1.32	Fert	Light Oil		FL&O	Fungicides	20 – 900	Corn Oil	44.4
10-34-0	1.39	Fert	Lubricating Oils		FL&O	Test C Product Category:		Crude Oil	3 – 17832260

³ Diesel fuel blends (biodiesel with up to 20% vegetable or animal fat/oil.)⁴ Gasoline includes oxygenated fuel blends with up to 15% oxygenate.

Mass Meter Product Category and Test Requirements			Magnetic Flow Meter Product Category and Test Requirements			Positive Displacement Flow Meter Product Category and Test Requirements		Turbine Flow Meter Product Category and Test Requirements	
						Crop Chemicals (Type D) (CC-D)			
20% Aqua-Ammonia	0.89	Fert	Olive Oil		FL&O	Typical Products	Reference Viscosity ¹ (60 °F) Centipoise centipoise (cP)	Diesel Fuel ³	4012
28%, 30% or 32%	1.28 – 1.32	Fert	Peanut Oil		FL&O	Micronutrients	20 – 1000	Fuel Oil (#1, #2, #3, #4)	89 – 8898

Typical Products	Specific Gravity ² (60 °F)	Product Category	Typical Products	Conductivity (micro-siemens/centimeter)	Product Category	Test C Product Category: Chemicals (Chem)		Test E Product Category: Fuels, Lubricants, Industrial and Food Grade Liquid oils (FL&O) continued	
						Typical Products	Reference Viscosity ¹ (60 °F) Centipoise centipoise (cP)	Typical Products	Reference Kinematic Viscosity ¹ (60 °F) centistokes Centipoise (cSt/cP)
Ammonia Nitrate	1.16 – 1.37	Fert	SAE Grades		FL&O	Typical Products	Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)	Typical Products	Reference Kinematic Viscosity¹ (60 °F) centistokes Centipoise (cSt/cP)
Clear Liquid Fertilizer	1.17 – 1.44	Fert	Soy Oil	0	FL&O	Hydrochloric Acid	0.80 – 1.0	Gasoline ⁴	0.280.39
Nitrogen Solution	1.17 – 1.44	Fert	Spindle Oil		FL&O	Phosphoric Acid	161	Jet A	1.5–6
N-P-K Solutions	1.2 – 1.4	Fert	Sunflower Oil		FL&O	Sulfuric Acid	1.49	Jet A-1	1.361.8
Urea	1.89	Fert	Vegetable Oil	0	FL&O	Test C Product Category: Compressed Liquids, Fuels and Refrigerants (Comp liq)		Jet B	1.5–6
6 Oil (#5, #6)	0.9	FL&O	Asphalt		Heated	Typical Products	Reference Viscosity ¹ (60 °F) Centipoise centipoise (cP)	JP4	1.021.34
Asphalt		FL&O	Bunker C		Heated	Anhydrous Ammonia	0.188	JP5	1.942.56
Avgas		FL&O	Carbon Tetra-Chloride		Solv Cl	Butane	0.19	JP7 and JP8	1.822.4
Biodiesel above B20	0.86	FL&O	Methylene-Chloride		Solv Cl	Ethane		Kerosene	1.942.6
Bunker Oil	0.99	FL&O	Perchloro-Ethylene		Solv Cl	Freon 11	0.313	Light Oil	1.34715.7
Cooking Oils	0.92	FL&O	Trichloro-Ethylene		Solv Cl	Freon 12	0.359	Lubricating Oils	20.22 – 10001250
Corn Oil	0.91	FL&O	Acetates		Solv Gen	Freon 22	1.99	Olive Oil	116.8127
Crude Oil	0.79 – 0.97	FL&O	Acetone	.02	Solv Gen	Propane	0.098	Peanut Oil	11 – 110122
Diesel Fuel ³	0.84	FL&O	Ethylacetate	0.00001	Solv Gen	Test C Product Category: Clear Liquid Fertilizers (Fert)		SAE Grades	192.214 – 36264037
Fuel Oil (#1, #2, #3, #4)	0.9	FL&O	Hexane	0	Solv Gen	Typical Products	Reference Viscosity ¹ (60 °F) Centipoise	Soy Oil	90.697.6

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Mass Meter Product Category and Test Requirements			Magnetic Flow Meter Product Category and Test Requirements			Positive Displacement Flow Meter Product Category and Test Requirements		Turbine Flow Meter Product Category and Test Requirements	
							<u>centipoise (cP)</u>		
Gasoline ⁴	0.72	FL&O	MEK	0.1	Solv Gen	9-18-0		Spindle Oil	
Jet A		FL&O	Toluene	0	Solv Gen	10-34-0	48	Sunflower Oil	<u>90.197.1</u>
Jet A-1	0.76	FL&O	Xylene	0	Solv Gen	20% Aqua- Ammonia	1.1 – 1.3	Vegetable Oil	<u>133.145</u>
Jet B		FL&O	Deionized		Water	28%, 30% or 32%	31 – 110	Test E Product Category: Solvents General (Solv Gen)	
JP4	0.76	FL&O	Demineralized		Water	Ammonia Nitrate	11.22	Typical Products	Reference <u>Kinematic</u> Viscosity¹ (60 °F) <u>centistokesCentipoise</u> (cSt(cP))
JP5	0.76	FL&O				Clear Liquid Fertilizer	31 – 110	Acetates	<u>0.440.47</u>
JP7 and JP8	0.76	FL&O				Nitrogen Solution	31 – 110	Acetone	<u>0.340.43</u>

Typical Products	Specific Gravity ² (60 °F)	Product Category	Test D To obtain coverage for a product category, test with one product in the product category. The Certificate of Conformance will cover all products in the category. • Test D does not apply to product categories of pure alcohols, pure glycol, pure water, solvents chlorinated, solvents general, fuels, lubricants, industrial and food grade liquid oils. • Test D does not apply to product categories of liquefied gases, compressed liquids or heated products.			Test C Product Category: Clear Liquid Fertilizers (Fert) continued		Test E Product Category: Solvents General (Solv Gen) continued	
			Typical Products	Conductivity (micro- siemens/centimeter)	Product Category	Typical Products	Reference Viscosity ¹ (60 °F) <u>Centipoise</u> <u>centipoise (cP)</u>	Typical Products	Reference <u>Kinematic</u> Viscosity ¹ (60 °F) <u>centistokesCentipoise</u> (cP(cSt))
Kerosene	0.75	FL&O							
Light Oil	0.86	FL&O	Water Mixes of Alcohols and Glycols		Alc Gly	N-P-K Solution		Ethylacetate	<u>1.361.42</u>
Lubricating Oils	0.80 – 0.90	FL&O	Banvel		CC-A	Urea	1	Hexane	<u>0.340.52</u>
Olive Oil	0.92	FL&O	Herbicides		CC-A	Test C Product Category: Fuels, Lubricants, Industrial and Food Grade Liquid Oils (FL&O)		MEK	<u>0.450.56</u>
Peanut Oil	0.9 – 1.0	FL&O	Paraquat		CC-A	Typical Products	Reference Viscosity¹ (60 °F) <u>Centipoise</u> <u>centipoise (cP)</u>	Toluene	<u>0.620.71</u>
SAE Grades	0.9	FL&O	Prowl		CC-A	6 Oil (#5, #6)	66 – 13,000	Xylene	<u>0.860.97</u>
Soy Oil	0.93	FL&O	Round-up		CC-A	Asphalt	100 – 5000	Test A The following products must be individually	

Mass Meter Product Category and Test Requirements			Magnetic Flow Meter Product Category and Test Requirements			Positive Displacement Flow Meter Product Category and Test Requirements		Turbine Flow Meter Product Category and Test Requirements	
								tested and noted on the Certificate of Conformance.	
Spindle Oil		FL&O	Touchdown		CC-A	Avgas	1.5 – 6	Typical Products	Product Category
Sunflower Oil	0.93	FL&O	Treflan		CC-A	Biodiesel above B20	10.12	Banvel	CC-A
Vegetable Oil	0.92	FL&O	Adjuvants		CC-B	Bunker Oil	11,200	Herbicides	CC-A
Liquid Molasses	1.25	Liq Feed	Fumigants		CC-B	Cooking Oils	9.93	Paraquat	CC-A
Molasses Plus Phos Acid and/or Urea (TreaChle)	1.1 – 1.3	Liq Feed	Fungicides		CC-B	Corn Oil	4	Prowl	CC-A
Carbon Tetra- Chloride	1.6	Solv Cl	Insecticides		CC-B	Crude Oil	3-1783	Round-up	CC-A
Methylene- Chloride	1.34	Solv Cl	Fungicides		CC-C	Diesel Fuel ³	10	Touchdown	CC-A
Perchloro- Ethylene	1.6	Solv Cl	Micronutrients		CC-D	Fuel Oil (#1, #2, #3, #4)	8 to 88	Treflan	CC-A
Trichloro- Ethylene	1.47	Solv Cl	Hydrochloric Acid	395000	Chem	Gasoline ⁴	0.28	Adjuvants	CC-B
Acetates	0.93	Solv Gen	Phosphoric Acid	56600	Chem	Jet A	1.5 – 6	Fumigants	CC-B
Typical Products	Specific Gravity² (60 °F)	Product Category	Typical Products	Conductivity (micro- siemens/centimeter)	Product Category	Test C Product Category: Fuels, Lubricants, Industrial and Food Grade Liquid Oils (FL&O) continued		Typical Products	Product Category
Acetone	0.8	Solv Gen	Sulfuric Acid	209000	Chem	Typical Products	Reference Viscosity¹ (60 °F) Centipoise¹ <u>centipoise (cP)</u>	Fungicides	CC-C
Ethylacetate	0.96	Solv Gen	9-18-0		Fert	Jet A-1	1.36	Insecticides	CC-B
Hexane	0.66	Solv Gen	10-34-0		Fert	Jet B	1.5 – 6	Fungicides	CC-C
MEK	0.81	Solv Gen	20% Aqua- Ammonia		Fert	JP4	1.02	Micronutrients	CC-D
Toluene	0.87	Solv Gen	28%, 30% or 32%		Fert	JP5	1.94	Hydrochloric Acid	Chem
Xylene	0.89	Solv Gen	Ammonia Nitrate		Fert	JP7 and JP8	1.82	Phosphoric Acid	Chem
Beverages	1.0	Water	Clear Liquid Fertilizer		Fert	Kerosene	1.94	Sulfuric Acid	Chem
Deionized	1.0	Water	Nitrogen Solution		Fert	Light Oil	13.47	NH ₃	Comp Liq
Demineralized	1.0	Water	N-P-K Solutions		Fert	Lubricating Oils	20 – 1000	20% Aqua- Ammonia	Fert
Juices	1.0	Water	Urea	5000	Fert	Olive Oil	116.8	28%, 30% or 32%	Fert
Milk	1.0	Water	Liquid Molasses	300	Liq Feed	Peanut Oil	11 – 110	9-18-0	Fert
Nonpotable	1.0	Water	Molasses Plus Phos Acid and/or Urea		Liq Feed	SAE Grades	192 – 3626	10-34-0	Fert

Mass Meter Product Category and Test Requirements			Magnetic Flow Meter Product Category and Test Requirements			Positive Displacement Flow Meter Product Category and Test Requirements		Turbine Flow Meter Product Category and Test Requirements	
			(TreaChle)						
Potable	1.0	Water	3-10-30		Sus Fert	Spindle Oil		Ammonia Nitrate	Fert
Tap Water	1.0	Water	4-4-27		Sus Fert	Soy Oil	90.6	Clear Liquid Fertilizer	Fert
Test D To obtain coverage for each of the following product categories, test with one product in each product category. The Certificate of Conformance will cover the products in the product category in which a product was tested.									
			Beverages		Water	Sunflower Oil	90.1	Nitrogen Solution	Fert
Typical Products	Specific Gravity² (60 °F)	Product Category	Juices		Water	Vegetable Oil	133	N-P-K Solutions	Fert
Compressed Natural Gas (CNG)	0.6 – 0.8 (1=Air)	Comp gas	Nonpotable	72 ⁵	Water			Urea	Fert
Anhydrous Ammonia	0.61	Comp liq	Potable	72 ⁵	Water			Bicep	Flow
Butane	0.595	Comp liq	Tap Water	72 ⁵	Water			Broadstrike	Flow
Typical Products	Specific Gravity² (60 °F)	Product Category				Test C Product Category: Flowables (Flow)		Typical Products	Product Category
Ethane		Comp liq				Typical Products	Reference Viscosity¹ (60 °F) Centipoise (cP)	Doubleplay	Flow
Freon 11	1.49	Comp liq				Bicep	20 – 900	Dual	Flow
Freon 12	1.33	Comp liq				Broadstrike	20 – 900	Guardsman	Flow
Freon 22	1.37	Comp liq				Doubleplay	20 – 900	Harness	Flow
Propane	0.504	Comp liq				Dual	20 – 900	Marksman	Flow
Liquefied Natural Gas		Cryo LNG				Guardsman	20 – 900	Topnotch	Flow
Liquefied Oxygen	0.66	Cryo LNG				Harness	20 – 900	Asphalt	Heated
Nitrogen	0.31	Cryo LNG				Marksman	20 – 900	Bunker C	Heated
Asphalt		Heated				Topnotch	20 – 900	Liquid Molasses	Liq Feed
Bunker C	1.1	Heated				Test C Product Category: Heated (Heated)		Molasses plus Phos Acid and/or Urea (TreaChle)	Liq Feed
Test A The following products must be individually tested and noted on the Certificate of						Typical Products	Reference Viscosity¹ (60 °F) Centipoise (cP)	Carbon Tetra-Chloride	Solv Cl

⁵ This data point is suspected to be lower than that of normal tap water supplied for residential consumption.

Mass Meter Product Category and Test Requirements			Magnetic Flow Meter Product Category and Test Requirements		Positive Displacement Flow Meter Product Category and Test Requirements		Turbine Flow Meter Product Category and Test Requirements	
Conformance.								
Typical Products	Specific Gravity ² (60 °F)	Product Category						
Compressed Hydrogen Gas (H or H2)	0.07 (1=Air)	Comp H2			Asphalt 100 – 5000		Methylene-Chloride Solv Cl	
Liquid Carbon Dioxide	1.12 (-40 °F)	Liq CO2			Bunker C 11,200		Perchloro-Ethylene Solv Cl	
					Test C Product Category: Liquid Feed (Liq Feed)		Trichloro-Ethylene Solv Cl	
					Typical Products Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)		Typical Products Product Category	
					Liquid Molasses 8640		3-10-30 Sus Fert	
					Molasses Plus Phos Acid and/or Urea (TreaChle) 2882		4-4-27 Sus Fert	
							Compressed Hydrogen Gas (H or H2) Comp H2	
							Liquid Carbon Dioxide Liq CO2	

				Test C Product Category: Solvents Chlorinated (Solv Cl)		Test D To obtain coverage for a product category, test with one product in the product category. The Certificate of Conformance will cover all products in the category.	
Typical Products		Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)		Typical Products		Product Category	
Carbon Tetra-Chloride		0.99		Liquefied Natural Gas		Cryo LNG	
				Test C Product Category: Solvents Chlorinated (Solv Cl) continued		Liquefied Oxygen Cryo LNG	
Typical Products		Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)		Typical Products		Product Category	
Methylene-Chloride		0.46		Nitrogen		Cry LNG	
Perchloro-Ethylene		1		Beverages		Water	
Trichloro-Ethylene		0.6		Deionized		Water	
				Test C Product Category:		Demineralized Water	
						Juices Water	

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		Solvents General (Solv Gen)		
		Typical Products	Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)	Milk Water
		Acetates	0.44	Nonpotable Water
		Acetone	0.34	Potable Water
		Ethylacetate	1.36	Tap Water Water
		Hexane	0.34	
		MEK	0.45	
		Toluene	0.62	
		Xylene	0.86	
		Test C		
		Product Category: Suspension Fertilizers (Sus Fert)		
		Typical Products	Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)	
		3-10-30	100 – 1000	
		4-4-27	20 – 215	

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	Test D To obtain coverage for a product category, test with one product in the product category. The Certificate of Conformance will cover all products in the category.	
	Product Category: Water (Water)	
	Typical Products	Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)
	Beverages	1.0
	Deionized	1.0
	Demineralized	1.0
	Juices	1.0
	Milk	1.0
	Nonpotable	1.0
	Potable	1.0
	Test D	
	Product Category:	

Mass Meter Product Category and Test Requirements	Magnetic Flow Meter Product Category and Test Requirements	Positive Displacement Flow Meter Product Category and Test Requirements	Turbine Flow Meter Product Category and Test Requirements																
		<p>Water (Water) continued</p> <table border="1"> <tr> <td>Typical Products</td> <td>Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)</td> </tr> <tr> <td>Tap Water</td> <td>1.0</td> </tr> </table> <p>Test A The following products must be individually tested and noted on the Certificate of Conformance.</p> <p>Product Category: Cryogenic Liquids and Liquefied Natural Gas (Cryo LNG)</p> <table border="1"> <tr> <td>Typical Products</td> <td>Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)</td> </tr> <tr> <td>Liquefied Natural Gas</td> <td></td> </tr> <tr> <td>Liquefied Oxygen</td> <td>0.038</td> </tr> <tr> <td>Nitrogen</td> <td>1.07</td> </tr> </table> <p>Test A The following products must be individually tested and noted on the Certificate of Conformance.</p> <p>Product Category: Compressed Hydrogen Gas (Comp H2)</p> <table border="1"> <tr> <td>Typical Products</td> <td>Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)</td> </tr> <tr> <td>Compressed Hydrogen Gas (H or H2)</td> <td>0.0097</td> </tr> </table>	Typical Products	Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)	Tap Water	1.0	Typical Products	Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)	Liquefied Natural Gas		Liquefied Oxygen	0.038	Nitrogen	1.07	Typical Products	Reference Viscosity¹ (60 °F) Centipoise centipoise (cP)	Compressed Hydrogen Gas (H or H2)	0.0097	
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Product Category Table – Category Abbreviations

Abbreviation	Product Category	Abbreviation	Product Category
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Alc Gly	Alcohols, Glycols and Water Mixes Thereof	Fert	Fertilizers
CC-A	Crop Chemicals (Type A)	FL&O	Fuels, Lubricants, Industrial and Food Grade Liquid Oils
CC-B	Crop Chemicals (Type B)	Flow	Flowables
CC-C	Crop Chemicals (Type C)	Heated	Heated Products (Above 50 °C)
CC-D	Crop Chemicals (Type D)	Liq Feed	Liquid Feeds
Chem	Chemicals	Liq CO2	Liquid Carbon Dioxide
Comp gas	Compressed Gases	Solv Chl	Solvents Chlorinated
Comp H2	Compressed Hydrogen Gas	Solv Gen	Solvents General
Comp liq	Compressed Liquids (Fuels and Refrigerants, NH₃)	Sus Fert	Suspension Fertilizers
Cryo LNG	Cryogenic Liquids and Liquefied Natural Gas	Water	Water

Note: The Typical Products listed in this table are not limiting or all-inclusive; there may be other products and product trade names, which fall into a product family. Water and a product such as stoddard solvent or mineral spirits may be used as test products in the fuels, lubricants, industrial, and food- grade liquid oils product family.

