

D.B. WESTERN, INC. - TEXAS

Chemicals and Polymers

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EXHIBIT A1 - FORMALDEHYDE PRODUCTS (Specifications and Physical Properties)

No.	Properties	Products							
1	DBWT Product Code	F50A01	F50A02	F50A03	F50A04	F50A05	F50A06	F52A00	F52A01
2	DBWT MSDS Number								
3	DBWT Product Name	HCHO 50%	HCHO 50%	HCHO 50%	HCHO 50%	HCHO 50%	HCHO 50%	HCHO 52%	HCHO 52%
4	Product Description	50% Formaldehyde Solutions	50% Formaldehyde Solutions	50% Formaldehyde Solutions	50% Formaldehyde Solutions	50% Formaldehyde Solutions	50% Formaldehyde Solutions	52% Formaldehyde Solutions	52% Formaldehyde Solutions
5	Active Product (wt%)								
6	Raw Material (100% Basis) (wt%)								
7	HCHO (wt%)	50.25	50.25	50.50	50.25	50.25	50.25	52.25	52.25
8	HCHO Range (wt%)	±0.25%	±0.25%	±0.50%	±0.25%	±0.25%	±0.25%	±1.75%	±0.25%
9	Methanol (wt%)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
10	Methanol Range (wt%)	1.0% max.	1.0% max.	1.2% max.	1.0% max.	1.0% max.	1.0% max.	1.0% max.	1.5% max.
11	Urea (wt%)								
12	Urea Range (wt%)								
13	Added Raw Material (RM) 1 Name		Namso IV		Namso IV	Methocel	Methocel		
14	Added Raw Material (RM) 1 (wt%)		0.0296		0.002	0.002	0.004		
15	Added Raw Material (RM) 2 Name								
16	Added Raw Material (RM) 2 (wt%)								
17	Added Raw Material (RM) 3 Name								
18	Added Raw Material (RM) 3 (wt%)								
19	Inhibited (Y/N)	N	N	N	N	N	N	N	N
20	Refractive Index (RI)					1.3800	1.3800		
21	Refractive Index Range								
22	Specific Gravity @ 25 °C	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1600	1.1600
23	Sp. Gr. Range @ 25 °C								
24	Density @ 25°C (Lbs/Gal)	9.571	9.571	9.571	9.571	9.571	9.571	9.6 (Avg)	9.6 (Avg)
25	Boiling Point @Sea Level °F(°C)								
26	Freezing Point °F(°C)								
27									
28									
29									
30	Shipping Temperature Range °F(°C)		140-150 (60-66)	Aprox. 140 (60)	140-150 (60-66)	140-150 (60-66)	140-150 (60-66)	131-158	131-158
31	Flash Point °F(°C)	174 (79)	174 (79)	174 (79)	174 (79)	174 (79)	174 (79)	175 (79)	175 (79)
32	pH @ 25°C					~3.90 - 4.00	~3.90 - 4.00		
33	Viscosity @ 25 °C (cps)								
34	Buffer Capacity								
35	% Solids								
36	Acidity (as wt% Formic Acid)	.030 max.	.035 max.	.050 max.	.035 max.	.035 max.	.035 max.	.050 max.	.050 max.
37	Color	10 max.	10 max.	10 max.	10 max.	10 max.	10 max.	10 max.	10 max.
38	Appearance	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
39	Iron (ppm)	0.5 max.	0.5 max.	0.5 max.	0.5 max.	0.5 max.	0.5 max.	0.5 max.	0.5 max.
40	Sodium (ppm)						< 10		
41	Water Blending (X)								
42	Soft Water Blending (X)								
43	R.O. Water Blending (X)								
44	Ion Exchange (X)								
45	Methanol Blending (X)								
46	Special Processing (X)								
47	Hazardous Material (HM)	RQ (Formaldehyde)	RQ (Formaldehyde)	RQ (Formaldehyde)	RQ (Formaldehyde)	RQ (Formaldehyde)	RQ (Formaldehyde)	RQ (Formaldehyde)	RQ (Formaldehyde)
48	Reportable Quantities (RQ)								
49	Proper Shipping Name	formaldehyde, solutions	formaldehyde, solutions	formaldehyde, solutions	formaldehyde, solutions	formaldehyde, solutions	formaldehyde, solutions	formaldehyde, solutions	formaldehyde, solutions
50	Hazard Class	8	8	8	8	8	8	8	8
51	Placard Identification Number	UN 2209	UN 2209	UN 2209	UN 2209	UN 2209	UN 2209	UN 2209	UN 2209
52	Packing Group	III	III	III	III	III	III	III	III
53	Placards/Labels								