Starting Formulation

SF 2500

Clear Bake Coating
EPI-REZ™ Resin 3522-W-60

Formula	Material	Supplier	Pounds	Gallons
	EPI-REZ Resin 3522-W-60	Hexion	637.50	69.29
	Thoroughly pre-mix the following and add to the above under gentle agitation.			
	Cymel 324	Cytec Industries	53.1	5.71
	Butyl OXITOL™ Glycol Ether	Shell Chemical Co.	22.5	3.00
	2-Propoxyethanol		40.2	5.00
	BYK-301 Anti-cratering agent	BYK-Chemie USA	2.0	0.25
	Nacure XP333 (catalyst)	King Industries	2.75	0.37
	Blend thoroughly.			
	Dissolve following by warming to 150 °Fthen add to above under agitation before allowing to cool.			
	Dicyandiamide	Cytec Industries	13.5	0.41
	Deionized water		133.0	15.97
		Total Formulation	904.55	100.00

Mixing Instructions

	Pounds	Gallons
Total Formulation	904.55	100.00

Typical Formulation Properties — Table 1 / Formulation Properties

	Units	Value
Nonvolatile content by weight	%	48.5
Nonvolatile content by volume	%	43.2
Weight per gallon	lb/gal	9.05
pH		7.0
Viscosity @ 25°C		
Total Formulation	KU	57
Water	lb/gal	388.0/46.5
Organics	lb/gal	62.7/8.00
	lb/gal	450.7/54.5
Volatile Organic Compounds (VOC)		

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Pounds/Gallon	lb/gal	1.46
Grams/Liter	g/L	175

Typical Flim Properties

Table 2 / Film Performance Properties [1]

	Units	A	B	C	D
Cure Schedule	min./°F	5/450	30/400	15/400	30/350
Reverse Impact	in.•lbs	160	160	160	160
Direct Impact	in.•lbs	160	160	160	160
MEK Rubs [2]		100 = HB	100 = 3H	100 = 2B	100 = 6B
Pencil Hardness		4H	5H	5H	4H
Adhesion		Excellent	Excellent	Excellent	Excellent

[1] Films cast #42 Myra Bar (0.75 mil.) on Bonderite 1000; 10 min. flash.

[2] Those greater than 400 °F recover loss rapidly; those under 400 °F do not.

Films are subject to flash rusting at intrinsic pH. To avoid flash rusting pH may be adjusted to either 6.0 by addition of glacial acetic acid or to 9.0 by addition of dimethylethanolamine. [1]

Films will appear “seedy” after flashing and prior to baking.

[1] Supplied by Union Carbide Corp.

Table 3 / Stability Information

Conditions	Coating	pH	Films
1 week at 75 °F	Settles	7.2	OK
1 week at 125 °F	Settles	9.5	OK
2 weeks at 75 °F	Settles	7.8	OK
2 weeks at 125 °F	Settles	9.0	Unstable
Freeze / Thaw	4 cycles	7.0	OK

Storage

Recommendations regarding storage conditions can be obtained by visiting our web site at www.hexion.com

General Information

These are starting formulations and are not proven in the user’s particular application but are simply meant to demonstrate the efficacy of the products and to assist in the development of the user’s own formulation. It is the user’s responsibility to fully-test and qualify the formulation, along with the ingredients, methods, applications or equipment identified herein (“Information”), by the user’s knowledgeable formulator or scientist, and to determine the appropriate use conditions and legal restrictions, prior to use of any Information.

Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet

(MSDS) for these and all other products being used are understood by all persons who will work with them. Questions and requests for information on Hexion, Inc. ("Hexion") products should be directed to your Hexion sales representative, or the nearest Hexion sales office. Information and MSDSs on non-Hexion products should be obtained from the respective manufacturer.

Contact Information

For product prices, availability, or order placement, please contact customer service:

www.hexion.com/Contacts/

For literature and technical assistance, visit our website at www.hexion.com