INTERPOLYMER
Creative Polymer Solutions

SYNTRAN® 1921

ENVIRONMENTALLY FRIENDLY

Polymer for Floor Finishes

Until Now . . .

- "**Green**" floor finishes have been defined by chemical composition, not cost performance.

- It has been difficult to balance meeting established composition standards for "**Green**" finishes and the need for a highly durable, high performance product.

- The formulator had limited options with existing "**Green**" polymers to create true competitive differentiation and customer excitement.

Now . . .

- **SYNTRAN 1921** has simplified the design of high performance, environmentally friendly floor finishes.

SYNTRAN 1921 based floor finishes are also recommended for use in institutions. Interpolymer's F-52-086-02 is a low-odor floor finish, ideal for application in hospitals, nursing homes and extended care facilities where the resident population could be sensitive to the typical odors of conventional floor polishes. Its high gloss but non-wet look is ideal for use where a wet-look gloss could create the appearance of a slippery floor.

Interpolymer's new **SYNTRAN 1921** is an environmentally friendly acrylic copolymer that offers the cost performance of the best conventional floor finish polymers. **SYNTRAN 1921**'s proprietary cross-linking technology was engineered to build floor finishes with high gloss, very low odor, excellent durability and detergent resistance. Finishes based on SYNTRAN 1921 can be formulated as a dry brite or for high speed burnishing, depending on the end user's maintenance requirements.

Finally, there exists
a High-Performance
Acrylic Polymer that Meets
"Green" Compositional Standards!

Interpolymer Corporation • 200 Dan Road Canton, MA 02021 • TEL: 800.262.1281 • FAX: 781.821.2485 • www.Interpolymer.com

INTERPOLYMER
Creative Polymer Solutions

SYNTRAN® 1921

ENVIRONMENTALLY FRIENDLY
Polymer for Floor Finishes

APPLICATIONS TESTING:
Extensive laboratory and floor testing was conducted to evaluate and determine the performance characteristics of Formulation F-52-086-02, based on Syntran 1921, versus two leading nationally branded "green" floor finishes.

Materials:
1. Interpolymer Formulation F-52-086-02.
2. Leading National Brand 1 (NB #1)
3. Leading National Brand 2 (NB #2)

Bench Test Results:
Formulation F-52-086-02 showed the highest 60° specular gloss value on each coat of application, as well as the highest total gloss value at 365 compared to 341 and 336 for the national brands.

The F-52-086-02 finish has excellent leveling and recoatability, whereas the NB #1 finish has very good recoatability, but marginal leveling on each coat of application. The NB #2 finish has very good leveling, but has recoat attack on the last three coats of application.

The detergent resistance for the F-52-086-02 finish is excellent compared to very good for the NB #2 finish and a poor rating for NB #1.

Rubber heel mark resistance is excellent on the F-52-086-02 finish, while both NB#1 and NB#2 show more scuffing marks.

Complete bench test results can be seen in Table 1.1.

INTERPOLYMER
Creative Polymer Solutions

SYNTRAN® 1921

ENVIRONMENTALLY FRIENDLY
Polymer for Floor Finishes

Bench Test Results Table 1.1

TEST SAMPLES	F-52-086-02 BASED ON SYNTRAN 1921	NATIONAL BRAND #1	NATIONAL BRAND #2
60° Specular Gloss ASTM D14365 Five Coats on BVT ° Denotes recoat issue	36,66,84,89,90	27,60,78,85,86	30,60,81°,85°,85°
Total Gloss Value Sum of the five coats	365	336	341
Powder Resistance ASTM D 2048	Excellent	Excellent	Excellent
Crazing	Excellent	Excellent	Excellent
Leveling Initial ASTM D1436 Final	Very Good Very Good	Poor Poor	Very Good Very Good
Recoatability Initial ASTM D3153 Final	Very Good Very Good	Very Good Very Good	Very Good Poor
Rubber Heel Mark Resistance ASTM D 3714	Excellent 1.01	Very Good 1.03	Very Good 1.03
Water Spot Resistance Initial ASTM D1793 Final	Excellent Excellent	Excellent Excellent	Excellent Excellent
Detergent Resistance ASTM D3207	Excellent	Poor	Very Good
Removability ASTM D1792	Excellent	Excellent	Excellent
Slip Index ASTM D2047	0.6	0.6	0.6
Sward Rocker Hardness ASTM D 2134	18	23	23
Non-Volatile Content ASTM D2834	19.8	18.7	20.1
Viscosity LVF (cps)	5.6	5.5	5.1
pH ASTM E70-77	8.0	8.0	8.0

INTERPOLYMER
Creative Polymer Solutions

SYNTRAN® 1921

ENVIRONMENTALLY FRIENDLY
Polymer for Floor Finishes

FLOOR FINISH BASED ON **SYNTRAN® 1921**

Formulation F-52-086-02 @ 20% N.V.

Mix in Order Listed:

	Pounds	Weight %
Water	405.60	47.20
Bactericide	q.s.	q.s.
Premixed Plasticizers:		
Tributoxyethyl Phosphate	28.70	3.30
Diethylene Glycol Ethyl Ether	38.20	4.40
1% Active Zonyl FSA	3.80	0.40
Tomadol 23-3	4.80	0.60
SYNTRAN 1921 @ 38% N.V.	339.50	39.50
SYNTRAN 6160 @ 35% N.V.	20.50	2.40
SYNTRAN PA-1465 @ 38% N.V.	18.90	2.20
Defoamer	q.s.	q.s.
YIELD:	860.00	100.00%

pH: 8.0± 0.2
Polymer/Resin/Wax Ratio: 90 / 0 / 10

8/2006

INTERPOLYMER
Creative Polymer Solutions

SYNTRAN® 1921

ENVIRONMENTALLY FRIENDLY

Interpolymer Corp. is pleased to introduce **NEW, PROPRIETARY** Acrylic co-polymer technology for the expanding "Green" marketplace.

SYNTRAN 1921 is a zinc and other heavy metal, ammonia and APE surfactant free acrylic co-polymer.

SYNTRAN 1921's proprietary cross-linking system will add extended life to green floor polishes.

Typical Properties of Emulsion

POLYMER TYPE	Acrylate Copolymer
TOTAL SOLIDS	38%
PH @ 22°C	8.0
SPECIFIC GRAVITY @ 22°C	1.054
VISCOSITY @ 22°C	60 cps (Brookfield)
MINIMUM FILM FORMATION TEMPERATURE	75° C
CHARGE OF EMULSION PARTICLE	Negative
HEAT STABILITY @ 52°C	Unchanged after 30 days
FREEZE-THAW STABILITY	Protect from Freezing

03/06 wft

Interpolymer Corporation • 200 Dan Road Canton, MA 02021 • TEL: 800.262.1281 • FAX: 781.821.2485 • www.Interpolymer.com