

POLAR SEAL TOP SECURITY®

BASIC DATA:

TYPE OF RESINS _____ ACRYLIC LATEX
 COLOR _____ TITANIUM WHITE
 VINYL CONTENT _____ NONE
 PLASTICIZER CONTENT _____ NONE
 SOLIDS _____ 65%
 MILDEW RESISTANCE _____ EXCELLENT
 VISCOSITY _____ 102-104 KEBS UNITS (KU)
 WEIGHT PER GALLON _____ 12.4LBS
 PIGMENT VOLUME CONCENTRATION (PVC) _____ 48%
 % SOLIDS, WEIGHT _____ 73.1

THE FOLLOWING INFORMATION IS BASED ON A 20 MIL DRY MEMBRANE THAT WAS APPLIED IN TWO COATS. THE FIRST MEMBRANE APPLICATION WAS ALLOWED TO DRY 4 HOURS BEFORE THE SECOND COAT WAS APPLIED. THE COMPLETED MEMBRANE WAS ALLOWED TO CURE 7 DAYS AT ROOM TEMPERATURE OF 70 DEGREES AND 40% RELATIVE HUMIDITY.

EFFECTS OF EXTERIOR EXPOSURE ON MECHANICAL PROPERTIES AND OTHER PROPERTIES AS LISTED:

LOW TEMPERATURE FLEXIBILITY

	<u>14 DAYS</u>	<u>24 MONTHS</u>	<u>110 MONTHS</u>
% ELONGATION AT MAXIMUM STRESS	174	160	187
% ELONGATION AT BREAK	300	203	233
TENSILE STRENGTH (PSI)	140	190	122
% RECOVER AFTER 25% ELONGATION	60	64	60
MINUS 15 DEGREE F. (180 DEGREE BEND)	PASS	PASS	PASS
MINUS 34 DEGREE F. (180 DEGREE BEND)	PASS	PASS	PASS

APPLICATION METHODS

APPLY AS PACKAGED.

STIR IN ANY OIL FORMATION THAT MIGHT ACCUMULATE AT TOP OF CONTAINER, IF IT HAS REMAINED IN STORAGE FOR A LONG PERIOD OF TIME. **DO NOT THIN WITH ANY LIQUID.**

TOP SECURITY IS AN ELASTOMERIC ACRYLIC FLUID THAT CAN BE APPLIED BY:

- (1) BRUSH (TAMPICO OR NATURAL BRISTLE).
- (2) PAINT ROLLER (PROFESSIONAL QUALITY, 1¼" TO 1½" NAP ONLY).
- (3) AIRLESS BRUSH SPRAYER - HIGH VOLUME - 2000# PRESSURE: (UP TO G.P.M. CAPACITY USE .031 FAN SPRAY TIP & OVER 3 G.P.M. CAPACITY, USE .034 OR SPRAY TIP) - 36" POLE GUN RECOMMENDED FOR ROOF APPLICATIONS.

DRYING TIME:

FIRST COAT: 20 TO 30 MINUTES WHEN APPLIED ON A WARM SURFACE, WARM AMBIENT AIR TEMPERATURE, AND 60% OR LESS RELATIVE HUMIDITY (THIS WILL BE A TENDER MEMBRANE)

ADDITIONAL COATS: PREVIOUS COAT (S) WILL REDUCE SURFACE TEMPERATURE SIGNIFICANTLY; THEREFORE, DRYING TIME MAY BE EXTENDED TO 1 OR 2 HOURS WITH WARM TEMPERATURES AND LOW HUMIDITY, AND 3 TO 4 HOURS OR MORE WITH COOL TEMPERATURES AND HIGH HUMIDITY.

PRODUCT FEATURES:

HIGH TITANIUM DIOXIDE CONTENT PROVIDES SUPERIOR WHITE REFLECTIVE HEAT SHIELD, EXCELLENT LONG TERM WEATHER RESISTANCE, NON-HARDENING, CHIP AND CRACK RESISTANCE. RETAINS ELONGATION PROPERTIES IN HIGH AND LOW TEMPERATURE ENVIRONMENT, HOMOGENEOUSLY BONDS TO ITSELF AND OTHER POLAR SEAL PRODUCTS.

ENVIRONMENTAL IMPACT:

TOXIC EMISSIONS DURING APPLICATION _____ NO TOXIC RESIDUE
 FROM PRODUCT IN SURFACE WATER RUN OFF _____ NONE

DIRT PICK UP EFFECT AND REFLECTIVE PROPERTIES AFTER EXTERIOR EXPOSURE:

POLAR SEAL TOP SECURITY POSSESSES AN EXCLUSIVE "SELF-CLEANING" ACTION. THIS IS ACCOMPLISHED WITHOUT ANY CHALKING.

DIRT PICK UP RESISTANCE

INITIAL

12 MONTHS

4 MONTHS

DIRT PICK UP

REFELCTIVE PROPERTIES

SURFACE TEMP. (DEGREES F)

AIR TEMP. 85°F.

AIR TEMP. 83°F

NO MILDEW WAS PRESENT ON TEST SAMPLE "A" OR "B".

POLAR SEAL

TOP SECURITY "A"

EXCELLENT

VERY GOOD

VERY GOOD

VERY SLIGHT

VERY GOOD

105°F

98°F

BRAND "B"

EXCELLENT

FAIR

POOR

SEVERE

POOR

125°F

120°F

- SURFACE TEMPERATURES WERE MEASURED BY USE OF A MODEL 10-D MIKRON INFRARED THERMOMETER.

GLOSS:

20° - 3.1 60° - 27.1 85° - 20.5 ASTM D 523-67 **UV BARRIER**
(AFTER 201 ARC HOURS WEATHEROMETER TEST) 20° - 1.75 60° - 27.1 85° - 20.5 ASTM D 862. G 5377

RESISTANCE TO CHEMICALS AND SUBSTANCES:

TOP SECURITY IS FORMULATED WITH A WATER INSOLUBLE MILDEWCIDE TO PROVIDE LONG TERM PROTECTION AGAINST MILDEW AND FUNGUS ATTACKS ON THE MEMBRANE. LONG TERM EXPOSURE (15 YEARS) TO ACID RAIN AND OZONE HAS NOT HAD A MEASURABLE EFFECT ON THE MEMBRANE SERVICE.

NOTE: WE HAVE DISCOVERED THAT LARGE QUANTITIES OF PIGEON MANURE THAT ACCUMULATES IN SHELTERED AREAS, THAT ARE NOT EXPOSED TO NORMAL RAINFALL OR SUNLIGHT, WILL ALLOW MICROSCOPIC MITES TO GROW, THAT MAY BORE HOLES THROUGH THE MEMBRANE AND CAUSE DAMAGE IN THE POLAR SEAL SYSTEM, WITHIN TWO TO THREE YEARS.

ADHESION QUALITIES:

TOP SECURITY PROVIDES EXCELLENT ADHESION TO MOST COMMON CONSTRUCTION MATERIALS INCLUDING, BUT NOT LIMITED TO:

1. WOOD
2. MASONITE
3. CANVAS
4. STYROFOAM
5. ASPHALT ROLLED ROOFING
6. BRICK
7. BEADBOARD
8. ASPHALT COATINGS
9. TILE
10. ASBESTOS PRODUCTS
11. CONCRETE MORTAR
12. GALVANIZED STEEL PVC
13. ALUMINUM
14. CLOTH
15. SLATE

NOTE: SLIGHT DISCOLORATION MAY OCCUR IN THE FIRST COAT OF APPLICATION IS APPLIED ON A SURFACE THAT HAS NOT BEEN PRIMED, WHERE OIL MIGRATION OCCURS.

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