



**R.E.A.L. SEAL CO.**  
**MATERIAL DATA SHEET**  
**COMPOUND # 9475**

<u>ORIGINAL PHYSICAL PROPERTIES</u>	<u>SPEC</u>	<u>9475</u>
HARDNESS, SHORE A PTS	75 +/-5	75
ULTIMATE TENSILE STRENGTH, PSI	1450 MIN	2750
ULTIMATE ELONGATION, %	100 MIN	130
MODULUS @ 100%, PSI	----	1600

HEAT RESISTANCE (ASTM D 573)

70 HRS @ 232 C

CHANGE IN HARDNESS, PTS	+/- 5	NC
CHANGE IN TENSILE, %	-15 MAX	-6
CHANGE IN ELONGATION, %	-15 MAX	-5
CHANGE IN WEIGHT, %	REPORT	-0.17

HEAT RESISTANCE (ASTM D 573)

70 HRS @ 270 C

CHANGE IN HARDNESS, PTS	+/-5	+2
CHANGE IN TENSILE, %	-65 MAX	-25
CHANGE IN ELONGATION, %	-65 MAX	+60
CHANGE IN WEIGHT, %	REPORT	-2.30

HEAT RESISTANCE (ASTM D 573)

70 HRS @ 290 C

CHANGE IN HARDNESS, PTS	----	-7
CHANGE IN TENSILE, %	----	-64
CHANGE IN ELONGATION, %	----	+197
CHANGE IN WEIGHT, %	----	-3.00

HEAT RESISTANCE (ASTM D 573)

168 HRS @ 230 C

CHANGE IN HARDNESS, PTS	----	-1
CHANGE IN TENSILE, %	----	+1
CHANGE IN ELONGATION, %	----	+4
CHANGE IN WEIGHT, %	----	-0.31

HEAT RESISTANCE (ASTM D 573)

720 HRS @ 230 C

CHANGE IN HARDNESS, PTS	----	-3
CHANGE IN TENSILE, %	----	-34
CHANGE IN ELONGATION, %	----	+55

<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN GLACIAL ACETIC ACID @ 40 C</u>		
CHANGE IN DURO, PTS	-10 MAX	+1
CHANGE IN VOLUME, %	+10 MAX	+2
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN 10% ACETIC ACID @ 40 C REFLUX</u>		
CHANGE IN DURO, PTS	-10 MAX	NC
CHANGE IN VOLUME, %	+10 MAX	+1
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN ACETIC ANHYDRIDE @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	+1
CHANGE IN VOLUME, %	+10 MAX	-0.2
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN ACETONE @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-1
CHANGE IN VOLUME, %	+10 MAX	-0.2
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN BUTYL ACETATE @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-1
CHANGE IN VOLUME, %	+10 MAX	-0.5
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN CYCLOHEXANONE @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-2
CHANGE IN VOLUME, %	+10 MAX	-0.7
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN DMF @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	NC
CHANGE IN VOLUME, %	+10 MAX	NC
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN ETHANOLAMINE @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-2
CHANGE IN VOLUME, %	+10 MAX	-0.7
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN ETHYL ACETATE @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-1
CHANGE IN VOLUME, %	+10 MAX	+0.4
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN FREON 134A @ 23 C</u>		
CHANGE IN DURO, PTS	-15 MAX	-10
CHANGE IN VOLUME, %	+20 MAX	+15

FLUID RESISTANCE (ASTM D 471)

168 HRS IN FREON 134A @ 100 C

CHANGE IN DURO, PTS

-25 MAX

-15

CHANGE IN VOLUME, %

+25 MAX

+23

FLUID RESISTANCE (ASTM D 471)

168 HRS IN HEXANE @ 23 C

CHANGE IN DURO, PTS

-10 MAX

+1

CHANGE IN VOLUME, %

+10 MAX

+0.7

FLUID RESISTANCE (ASTM D 471)

168 HRS IN 10% HCL @ 23 C

CHANGE IN DURO, PTS

-10 MAX

-1

CHANGE IN VOLUME, %

+10 MAX

+0.4

FLUID RESISTANCE (ASTM D 471)

168 HRS IN HF, 60% @ 23 C

CHANGE IN DURO, PTS

-10 MAX

+1

CHANGE IN VOLUME, %

+10 MAX

+1.24

FLUID RESISTANCE (ASTM D 471)

70 HRS IN IRM 903 @ 230 C

CHANGE IN DURO, PTS

-10 MAX

-1

CHANGE IN VOLUME, %

+10 MAX

+2

FLUID RESISTANCE (ASTM D 471)

168 HRS IN METHANOL @ 23 C

CHANGE IN DURO, PTS

-10 MAX

NC

CHANGE IN VOLUME, %

+10 MAX

-0.6

FLUID RESISTANCE (ASTM D 471)

70 HRS IN MEK @ 23 C

CHANGE IN DURO, PTS

-10 MAX

-1

CHANGE IN VOLUME, %

+10 MAX

-0.2

FLUID RESISTANCE (ASTM D 471)

168 HRS IN MIBK @ 23 C

CHANGE IN DURO, PTS

-10 MAX

NC

CHANGE IN VOLUME, %

+10 MAX

-0.3

FLUID RESISTANCE (ASTM D 471)

168 HRS IN MTBE @ 23 C

CHANGE IN DURO, PTS

-10 MAX

NC

CHANGE IN VOLUME, %

+10 MAX

-0.6

FLUID RESISTANCE (ASTM D 471)

70 HRS IN MOBILE OIL #254 @ 200 C

CHANGE IN DURO, PTS

-10 MAX

-1

CHANGE IN VOLUME, %

+10 MAX

+2

<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>250 HRS IN MOBILE OIL #254 @ 200 C</u>		
CHANGE IN DURO, PTS	-10 MAX	NC
CHANGE IN VOLUME, %	+10 MAX	+9
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN NITRIC ACID, 70% @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-3
CHANGE IN VOLUME, %	+10 MAX	+6.14
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN PYRIDINE @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-1
CHANGE IN VOLUME, %	+10 MAX	-0.4
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN SKYDROL 500 @ 121 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-2
CHANGE IN VOLUME, %	+10 MAX	+3.4
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>70 HRS IN SKYDROL 500 @ 121 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-2
CHANGE IN VOLUME, %	+10 MAX	+3.5
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN SODIUM HYDROXIDE @ 23 C</u>		
CHANGE IN DURO, PTS	-10 MAX	-1
CHANGE IN VOLUME, %	+10 MAX	+0.5
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN SODIUM HYDROXIDE @ 100 C</u>		
CHANGE IN DURO, PTS	-10 MAX	NC
CHANGE IN VOLUME, %	+10 MAX	+0.8
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>70 HRS IN SATURATED STEAM @ 222 C</u>		
CHANGE IN DURO, PTS	-10 MAX	NC
CHANGE IN VOLUME, %	+10 MAX	+0.3
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN SATURATED STEAM @ 160 C</u>		
CHANGE IN DURO, PTS	-15 MAX	-3
CHANGE IN VOLUME, %	+15 MAX	+9
<u>FLUID RESISTANCE (ASTM D 471)</u>		
<u>168 HRS IN SATURATED STEAM @ 232 C</u>		
CHANGE IN DURO, PTS	-----	-7
CHANGE IN VOLUME, %	-----	+44.70

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN SATURATED STEAM @ 250 C  
CHANGE IN DURO, PTS ----- -16  
CHANGE IN VOLUME, % ----- +22.60

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN STYRENE @ 23 C  
CHANGE IN DURO, PTS -10 MAX +1  
CHANGE IN VOLUME, % +10 MAX -0.15

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN SULFURIC ACID, CONCENTRATED @ 40 C  
CHANGE IN DURO, PTS -10 MAX -1  
CHANGE IN VOLUME, % +10 MAX +0.4

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN SULFURIC ACID, CONCENTRATED @ 120 C  
CHANGE IN DURO, PTS -10 MAX -3  
CHANGE IN VOLUME, % +10 MAX +3.11

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN THF @ 23 C  
CHANGE IN DURO, PTS -10 MAX -3  
CHANGE IN VOLUME, % +10 MAX +0.75

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN THF @ 40 C  
CHANGE IN DURO, PTS -10 MAX -2  
CHANGE IN VOLUME, % +10 MAX +2.00

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN TOLUENE @ 23 C  
CHANGE IN DURO, PTS -10 MAX NC  
CHANGE IN VOLUME, % +10 MAX -0.80

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN TOLUENE @ 40 C  
CHANGE IN DURO, PTS -10 MAX -1  
CHANGE IN VOLUME, % +10 MAX +1.03

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN TRIETHANOLAMINE @ 23 C  
CHANGE IN DURO, PTS -10 MAX -1  
CHANGE IN VOLUME, % +10 MAX +0.28

FLUID RESISTANCE (ASTM D 471)  
168 HRS IN WAGNER 21B BRAKE FLUID @ 23 C  
CHANGE IN DURO, PTS -10 MAX +1  
CHANGE IN VOLUME, % +10 MAX +0.45

FLUID RESISTANCE (ASTM D 471)

168 HRS IN WATER @ 160 C

CHANGE IN DURO, PTS	-15 MAX	-3
CHANGE IN VOLUME, %	+15 MAX	+11.70

FLUID RESISTANCE (ASTM D 471)

168 HRS IN WATER @ 232 C

CHANGE IN DURO, PTS	-15 MAX	-4
CHANGE IN VOLUME, %	+15 MAX	+11.80

FLUID RESISTANCE (ASTM D 471)

168 HRS IN WATER @ 250 C

CHANGE IN DURO, PTS	-----	-32
CHANGE IN VOLUME, %	-----	+34.90

FLUID RESISTANCE (ASTM D 471)

168 HRS IN XYLENE @ 23 C

CHANGE IN DURO, PTS	-10 MAX	-1
CHANGE IN VOLUME, %	+10 MAX	+0.10

COMPRESSION SET (ASTM D 395B)

70 HRS @ 200 C

% SET	25 MAX	17
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COMPRESSION SET (ASTM D 395B)

168 HRS @ 200 C

% SET	30 MAX	21
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COMPRESSION SET (ASTM D 395B)

720 HRS @ 200 C

% SET	35 MAX	30
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COMPRESSION SET (ASTM D 395B)

70 HRS @ 232 C

% SET	35 MAX	28
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COMPRESSION SET (ASTM D 395B)

168 HRS @ 232 C

% SET	50 MAX	42
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COMPRESSION SET (ASTM D 395B)

720 HRS @ 200 C

% SET	-----	56
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COMPRESSION SET (ASTM D 395B)

70 HRS @ 260 C

% SET	-----	57
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COMPRESSION SET (ASTM D 395B)

168 HRS @ 260 C

% SET	-----	79
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COLOR

REPORT

BLACK