

IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.		DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED.					
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION REMOVE ALL BURRS AND SHARP EDGES.							
ISSUE	ITEM	CHANGED FROM	DATE	CN NO	DRAFTS	CHECKER	ENG APP
0		REL TO PROD	6-7-67		RD		<i>[Signature]</i>

REQ	ITEM	PART NO	DESCRIPTION	SYMBOL
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ENCAPSULANT

3110 RTV Encapsulant; a white, 'low viscosity' silicone rubber base with good deep-section curing characteristics.

3112 RTV Encapsulant; a white, 'medium viscosity' silicone rubber base that cures readily in deep sections to a high durometer, high strength rubber.

3120 RTV Encapsulant; 'a red,' medium viscosity silicone rubber base that cures readily in deep sections to a high durometer, high strength rubber.

CATALYST

RTV catalyst F (fast rate of cure); is a light tan, paste consistency catalyst designed to cure RTV 3110, 3112 and 3120 encapsulant bases in a range from '15 minutes' to 4 hours, depending on catalyst concentration.

RTV catalyst S (standard rate of cure); is a light blue, paste consistency catalyst designed to cure RTV 3110, 3112, and 3120 encapsulant bases in approximately 6 hours.

RTV catalyst H (for heat accelerated cure); is a light yellow, paste consistency catalyst designed to cure RTV 3110, 3112, and 3120 encapsulant bases either at room temperature or by heating.

GENERAL

Each of the three silicone rubber bases can be cured with any of the three catalysts, giving nine different combinations from which to select.

CATALYST SELECTION

RTV catalysts S, F and H are all paste catalysts consisting of an organometallic compound and inert fillers in a silicone polymer.

RTV catalyst S contains dibutyl tin dilaurate as its active ingredient. This is the most widely used catalyst because it permits at least 30 minutes working time. The most frequently used catalyst concentration is 10% by weight of the RTV encapsulant base. Varying the catalyst concentration will change the curing rate as indicated in the table following.

RTV catalyst F contains Stannous Octoate as its active ingredient. Use this catalyst for high speed production.

It is ideally suited for use with automated mixing-dispensing equipment, where the mixing is done in a mixing head immediately prior to being dispensed. Working time with 10% of this catalyst is about 5 minutes. Catalyst F will lose its activity rapidly when exposed to air. Keep catalyst containers tightly closed when not in use.

RTV catalyst H is used where long working time is desired but where fast curing is necessary. With this catalyst thin sections (1/8 inch) of RTV encapsulants can be cured in as little as 5 minutes at 150 C.

These catalysts are formulated to cure in dry atmospheres making it unnecessary to cure the RTV encapsulants in a controlled humidity area.

AVAILABILITY

The encapsulant bases are available in 1, 10, 50 and 450 pound containers. Catalysts are not supplied with encapsulants. They must be ordered separately, RTV catalysts S and H are supplied in 2-ounce tubes, 1, 10, and 45 pound containers. RTV catalyst F is supplied in 2- and 5-ounce tubes, 10 and 45 pound containers.

CURING RATE VS. CATALYST CONCENTRATION

3110 RTV ENCAPSULANT

	Working Time	Pot Life	Cure Time
20% Catalyst F	2 minutes	8 minutes	45 minutes
10% Catalyst F	5 minutes	18 minutes	1 1/2 hours
20% Catalyst S	15 minutes	1 1/2 hours	4 1/2 hours
10% Catalyst S	30 minutes	2 hours	6 hours
5% Catalyst S	45 minutes	3 hours	8 hours
10% Catalyst H	30 minutes	4 1/2 hours	8 hours

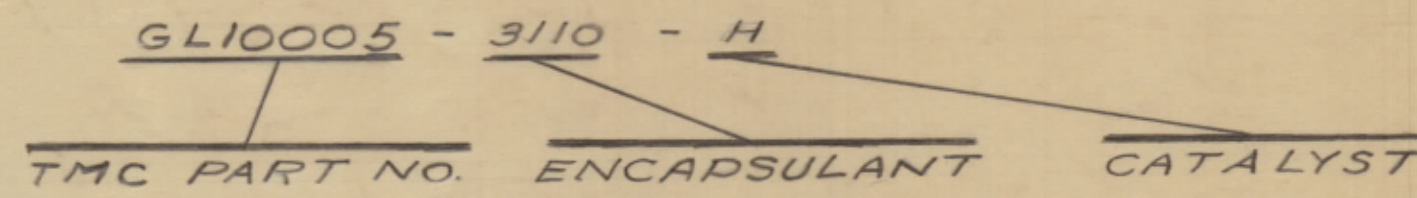
3112 RTV ENCAPSULANT

	Working Time	Pot Life	Cure Time
20% Catalyst F	2 minutes	15 minutes	1 hour
10% Catalyst F	5 minutes	1 hour	4 hours
20% Catalyst S	15 minutes	1 1/2 hours	4 hours
10% Catalyst S	30 minutes	2 1/2 hours	5 1/2 hours
5% Catalyst S	45 minutes	3 hours	8 hours
10% Catalyst H	30 minutes	4 1/2 hours	8 hours

3120 RTV ENCAPSULANT

	Working Time	Pot Life	Cure Time
20% Catalyst F	2 minutes	6 minutes	15 minutes
10% Catalyst F	5 minutes	20 minutes	30 minutes
20% Catalyst S	15 minutes	2 hours	5 1/2 hours
10% Catalyst S	30 minutes	2 1/2 hours	7 hours
5% Catalyst S	45 minutes	4 1/2 hours	8 hours
10% Catalyst H	30 minutes	4 1/2 hours	8 hours

GL10005 ϕ



STANDARD DRAWING

REF: GL10006 - PRIMER
S10149 - SPECIFICATION

STOCK SIZE		TMC (Canada) LIMITED OTTAWA ONTARIO	
MATERIAL		RTV ENCAPSULANT	
WEIGHT PER PC		P.A.M. RD	
TYPE & TEMPER		DRAWN	
HEAT TREAT SPEC		ELEC DES APP	
FINISH & SPEC NO		MECH DES APP	
CHECKED		FINAL APPROVAL	
		GL10005 ϕ	

MODEL	PROJECT NO	ASSY NO	DATE
			6 JULY 67
USED ON			

TOLERANCES		SCALE
ALL DEC DIM	FRAC DIM	ANGULAR DIM
DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.		