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Subject: Notification of Potting Material Change from Henkel Stycast 4952 Potting Material to Henkel Stycast 4350 Potting Material

Background:

Henkel, one of Honeywell Sensing and Control's suppliers of epoxies and adhesives, has notified us that they have discontinued Stycast 4952, a thermally conductive RTV silicone encapsulant or potting material that we use in a number of our aerospace sensors and switches. A list of the affected Honeywell products is provided in Table 1.

As a replacement for its Stycast 4952, Henkel has recommended its Stycast 4350. Honeywell has placed a last time buy for the current Stycast 4952 to support our production until we qualify the proposed Stycast 4350 by manufacturing trials and evaluation testing. Estimated timing for our qualification of Stycast 4350 is by or before December 2014.

Discussion:

Attached below are the technical data sheets published by Henkel for both materials. In our testing, we have found the physical, thermal, and electrical properties of both the current Stycast 4952 and proposed Stycast 4350 materials to be similar and have found that the proposed material met or exceeded the specs for the current material as they relate to adhesion and tear resistance.


stycast 4952
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STYCAST
4350-EN.pdf

During our manufacturing trials, flow properties and curing characteristics were confirmed to be the same for both the current and proposed materials. Adhesion of the proposed material to metal substrates and wire insulation was also confirmed to be the same as the current material. Tear resistance of the proposed material meets or exceeds the specs of the current material. Resistance of the proposed material to various fluxes that may be used in soldering operations also meets or exceeds the resistance specs of the current material.

Representative switches and sensors have been built using proposed Stycast 4350 and will undergo product level testing per the attached test plans. Samples are available upon request. Honeywell

expects the representative switches and sensors built using the proposed material will pass the planned validation testing.



HM_Silicone_Testing.pdf



FW_Silicone_Testing.pdf

Next Steps:

As stated above, Honeywell placed a last time buy for the current Stycast 4952 and this will support on-going production through December 2014. Phase in of the proposed Stycast 4350 is planned to begin with December 2014 / January 2015 shipments once validation testing is complete. Our next communication will be in the 4th quarter 2014 to communicate completion of the validation testing and to provide updated changeover date expectations.

Best Regards,

A handwritten signature in black ink, appearing to read 'James Norman', followed by a long horizontal line.

James Norman
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Table 1
PRODUCT

103FW12-R1	5HM1	18HM50
103FW12-R3	6HM1-1	18HM52-1
103FW41-R1	6HM1-16	19HM1
103FW5-4	6HM1-2	19HM1
112FW12-4	6HM1-3	20HM1-1
112FW127-R1S	6HM1-6	20HM11-2
112FW12-R1	6HM2-1	20HM12-2
112FW312-R1	6HM3-1	20HM13-2
114FW128-4	6HM4	20HM2-1
122FW12-4	6HM4	20HM23-1
122FW12-4S	6HM42-1	20HM24-1
122FW12-R1	6HM4-3	20HM27-2
122FW12-R1A	6HM47-1	20HM27-3
124FW12-4	6HM48-1	20HM3-1
172FW121-R3	6HM5-2	20HM4-1
172FW121-R4	6HM7-3	20HM6-1
21FW-74	6HM7-30	38HM4
21FW-R1	6HM7-6	38HM9
23FW-R2	6HM82	38HM10
726328	6HM89	38HM30
726328	8HM102	38HM33
12HR25-14B	8HM103	38HM36
12HR34-1B	8HM1-1	38HM53
2HT15-6	15HM2	38HM54
4TF2-2	16HM1-1	38HM61
4TF3-2	16HM1-1	38HM62
701PB542	16HM14	38HM68
701PB542-OY	16HM32	38HM69
701PB542-RG	16HM4	38HM73
701PB542-WOG	16HM44-3	38HM79
701PB580	16HM44-6	38HM80
701PB583	16HM45-6	38HM81
701PB584	16HM5	38HM82
701PB585	18HM1-1	38HM90
701PB586	18HM11-2	38HM91
701PB587	18HM1-2	39HM1
701PB590	18HM12-2	39HM2
701PB592	18HM13-2	120HM23-1
702PB121	18HM14-2	120HM5-1
702PB503	18HM15-2	
702PB507	18HM20	
702PB542	18HM3-1	
702PB542-WBW	18HM49	