

The following sample(s) and sample information was/were submitted and identified by/on behalf of the client

Sample Name : Silicone grenade bottle

Sample Material : Bottle body: Silicone
Bottle mouth: 304 stainless steel
Bottle cap , suction nozzle: PP

Sample Model : 580ml

Sample Lot : /

Sample Received Date : Sep 12, 2020

Test Completed Date : Sep 19, 2020

Test Method : Refer to US FDA 21 CFR 177.2600 and US FDA 21 CFR and 177.1520 US FDA 21 CFR 175.300

Test Results : Refer to the next page(s).

Test Requested	Conclusion
1.US FDA 21 CFR 177.2600 – Determination of Amount of Extractives	PASS
2.US FDA 21 CFR 177.1520 (Olefin Polymers)	---
– Extractable fraction	PASS
– Soluble fraction	PASS
– Density	PASS
–Melting point	PASS
3.US FDA 21 CFR 175.300 – Determination of Amount of Extractives General Recognized As Safe (GRAS) Specifications for US FDA regulation on stainless steel cutlery—Total chromium	PASS

Reviewed by:



Lab Senior Engineer

Authorized Signature:



Technology Manager

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1.Silicone Material Test Results:

Test Item	Unit	RL	Result	Regulation Limit	Conclusion
			A		
Deionized water extract, reflux temperature in first 7 hours	mg/inch ²	0.1	N.D.	20	PASS
Deionized water extract, in reflux temperature for the succeeding 2 hours after 7 hours	mg/inch ²	0.1	N.D.	1	PASS
N-Hexane extract, reflux temperature in first 7 hours	mg/inch ²	0.1	22.6	175	PASS
N-Hexane extract, in reflux temperature for the succeeding 2 hours after 7 hours	mg/inch ²	0.1	2.5	4	PASS

Note:

- (1) N.D. = Not Detected
- (2) RL = Reporting Limit(Less than RL)
- (3) mg/inch² = milligram per square inch

2.PP Material Test Results:

Test Item	Unit	MDL	Result	Regulation Limit	Conclusion
			B		
Maximum extractable fraction in n-hexane, Reflow, 2 hours	%	0.5	3.0	6.4	PASS
Maximum soluble fraction in xylene Reflux, 25°F, 0.5 hour	%	0.5	2.1	9.8	PASS
Density	g/cm ³	--	0.88	0.88~0.913	PASS
Melting point	°C	--	160	160-180	PASS

Note:

- (1) MDL = Method Detection Limit
- (2) N.D. = Not Detected (less than MDL)
- (3) "--" = Not Regulated

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3. Stainless steel Material Extractives Test Results:

Test Item	MDL (mg/inch ²)	Result (mg/inch ²)	Regulation Limit (mg/inch ²)	Conclusion
Distilled Water extractives (250°F, 2 Hours)	0.1	N.D.	0.5	PASS
8% Alcohol extractives (150°F, 2 Hours)	0.1	N.D.	0.5	PASS
n-Heptane extractives (150°F, 2Hours)	0.1	N.D.	0.5	PASS

Note:

- (1) N.D. = Not Detected (less than MDL)
- (2) MDL = Method Detection Limit
- (3) mg/inch² = milligram per square inch

Stainless steel Material Total chromium Test Results:

Test Item	Result (%)	Limit (%)
Total chromium	18	> 10.5

Remark: The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value and only for reference

Test Part Description:

A: Bottle body: Silicone

B: Bottle cap , suction nozzle: PP

C: Bottle mouth: 304 stainless steel

