

**Permawick Company
3110 Permawick Drive
Columbus, IN 47201
United States**

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

**Electric Motor Lubricants
Model/Part No.: PSL, PCL (Ester Series), PCL SHC Series, PFPE Series, LT200, PS207, HT300, AR456, AR465, Syn440, PWS (Silicones), PDM Series, NP, NPW, PP, HH, FHH Mixture
Country of Destination: All**

Sample Received Date: **6/28/2021**

Testing Period: **6/29/2021 – 7/7/2021**

Test Requested : Please refer to the test results.

Test Method & Results : Please refer to next page(s).

Result Summary :

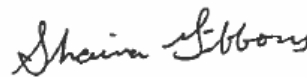
Test Requested	Conclusion
1. RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU	See Test Results
2. Phthalate Content (As requested by Client)	See Test Results

Signed for and on behalf of SGS North America, Inc.



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Senior Manager, Chemistry Laboratory

Prepared By:



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1. RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method: With reference to IEC 62321-8:2017. Analysis was performed by GC-MS.

Phthalates	CAS No.	Results (mg/kg)	Reporting Limit (mg/kg)	Limit (mg/kg)
		1		
Dibutyl Phthalate (DBP)	84-74-2	ND	150	1000
Benzylbutyl Phthalate (BBP)	85-68-7	ND	150	1000
Bis-(2-ethylhexyl) Phthalate (DEHP)	117-81-7	ND	150	1000
Diisobutyl Phthalate (DIBP)	84-69-5	ND	150	1000

Sample Description:

1. Electric Motor Lubricant

Note :

- (a) mg/kg = ppm ; 0.1wt% = 1000ppm
- (b) ND= not detected
- (c) MDL = Method Detection Limit
- (d) - = not regulated
- (e) IEC 62321 series is equivalent to EN 62321 series

http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

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2. Phthalate Content (As requested by Client)

Test Method: With reference to IEC 62321-8:2017. Analysis was performed by GC-MS.

Phthalates	CAS No.	Results (mg/kg)	Reporting Limit (mg/kg)
		1	
Diisononyl Phthalate (DINP)	28553-12-0 / 68515-48-0	ND	150
Di-n-octyl Phthalate (DNOP)	117-84-0	ND	150
Diisodecyl Phthalate (DIDP)	26761-40-0 / 68515-49-1	ND	150
Di-n-hexyl Phthalate (DnHP)	84-75-3	ND	150

Sample Description:

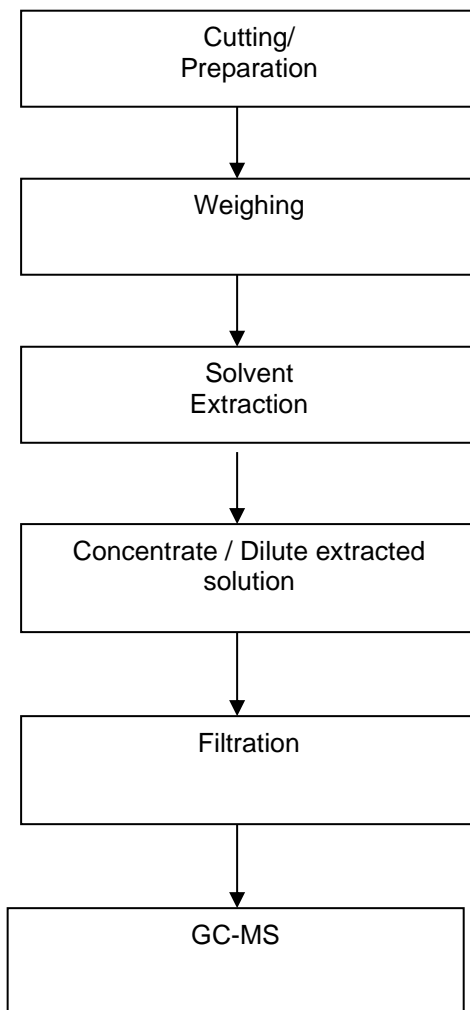
1. Electric Motor Lubricant

Note :

- (a) mg/kg = ppm ; 0.1wt% = 1000ppm
- (b) ND= not detected
- (c) MDL = Method Detection Limit
- (d) - = not regulated

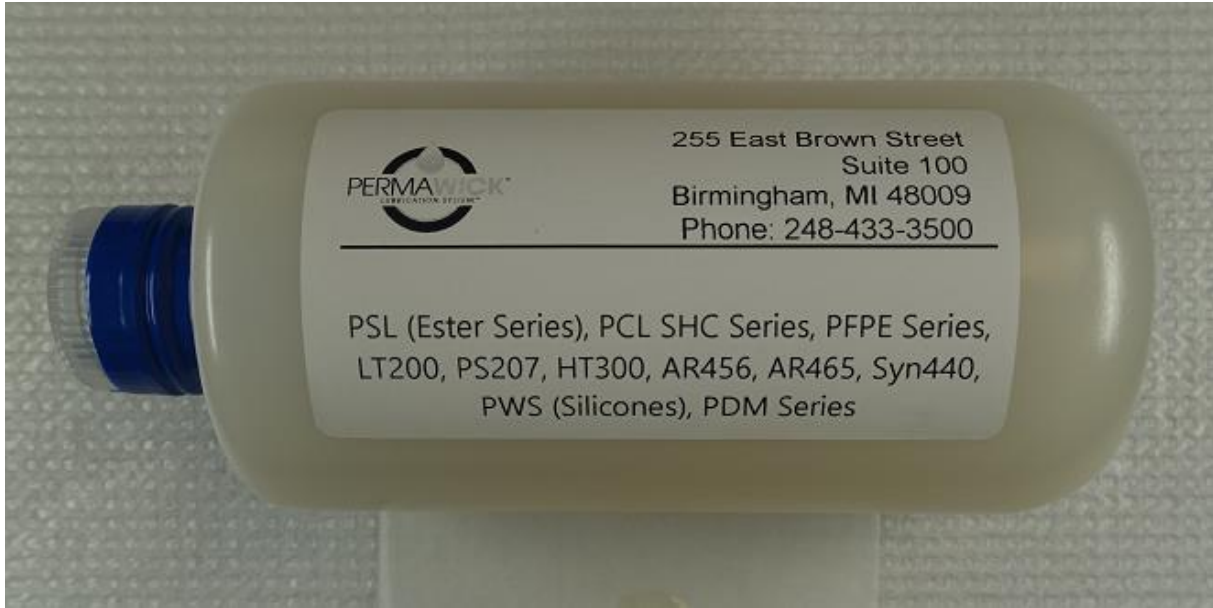
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Flowchart for Phthalates



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Sample Photo:



SGS authenticates the photo on the original report only

*** End of Report ***

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