

**Test Report** Page: 1 of 7 No.: KA/2019/10364 Date: 2019/01/11

GRAND PACIFIC PETROCHEMICAL CORPORATION 10 FL., NO. 1, SEC. 4, NANJING E. ROAD, TAIPEI, TAIWAN R.O.C

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

Sample Submitted By : GRAND PACIFIC PETROCHEMICAL CORP.

Sample Description : ABS Style/Item No. : D-120S Sample Receiving Date 2019/01/07

**Testing Period** 2019/01/07 to 2019/01/11

**Test Requested** : As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive

(EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP,

DEHP, DIBP contents in the submitted sample.

Test Result(s) : Please refer to next page(s).

Conclusion Based on the performed tests on submitted samples, the test results of Cadmium, Lead,

Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by

RoHS and amending Directive (EU) 2015/863.

Ray Chang Ph.D. / Mar Signed for and on beh

**SGS Taiwan Limited** 

**Chemical Laboratory-Kao** 

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company,除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms.and.conditions.htm">www.sgs.com/terms.and.conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms.e-document.htm">www.sgs.com/terms.e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or the transaction documents. This document carmon be reproduced assessment of the law.

SGS Taiwan Ltd. 1 No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



**Test Report** Page: 2 of 7 No.: KA/2019/10364 Date: 2019/01/11

GRAND PACIFIC PETROCHEMICAL CORPORATION 10 FL., NO. 1, SEC. 4, NANJING E. ROAD, TAIPEI, TAIWAN R.O.C

# Test Result(s)

PART NAME No.1 : WHITE PELLETS

Test Item(s)	Unit	Method	MDL	Result No.1	Limit
	Onit				
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.	100
Lead (Pb)	mg/kg	With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.	1000
Mercury (Hg)	mg/kg	With reference to IEC 62321-4: 2013 and performed by ICP-AES.	2	n.d.	1000
Hexavalent Chromium Cr(VI)	mg/kg	With reference to IEC 62321-7- 2:2017 and performed by UV-VIS.	8	n.d.	1000
Sum of PBBs		With reference to IEC 62321-6: 2015 and performed by GC/MS.	-	n.d.	1000
Monobromobiphenyl			5	n.d.	-
Dibromobiphenyl			5	n.d.	-
Tribromobiphenyl			5	n.d.	-
Tetrabromobiphenyl			5	n.d.	-
Pentabromobiphenyl	mg/kg		5	n.d.	-
Hexabromobiphenyl			5	n.d.	-
Heptabromobiphenyl			5	n.d.	-
Octabromobiphenyl			5	n.d.	-
Nonabromobiphenyl			5	n.d.	-
Decabromobiphenyl			5	n.d.	-
Sum of PBDEs		With reference to IEC 62321-6: 2015 and performed by GC/MS.	-	n.d.	1000
Monobromodiphenyl ether			5	n.d.	-
Dibromodiphenyl ether			5	n.d.	-
Tribromodiphenyl ether			5	n.d.	-
Tetrabromodiphenyl ether			5	n.d.	-
Pentabromodiphenyl ether	mg/kg		5	n.d.	-
Hexabromodiphenyl ether			5	n.d.	-
Heptabromodiphenyl ether			5	n.d.	-
Octabromodiphenyl ether			5	n.d.	-
Nonabromodiphenyl ether			5	n.d.	-
Decabromodiphenyl ether			5	n.d.	-

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms-and-conditions.htm">www.sgs.com/terms-and-conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



**Test Report** Page: 3 of 7 No.: KA/2019/10364 Date: 2019/01/11

GRAND PACIFIC PETROCHEMICAL CORPORATION 10 FL., NO. 1, SEC. 4, NANJING E. ROAD, TAIPEI, TAIWAN R.O.C

Test Item(s)	Unit	Method	MDL	Result	Limit
				No.1	
DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5)	mg/kg	With reference to IEC 62321-8:2017. Analysis was performed by GC/MS.	50	n.d.	1000
DBP (Dibutyl phthalate) (CAS No.: 84-74-2)	mg/kg	With reference to IEC 62321-8:2017. Analysis was performed by GC/MS.	50	n.d.	1000
BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)	mg/kg	With reference to IEC 62321-8:2017. Analysis was performed by GC/MS.	50	n.d.	1000
DEHP (Di- (2-ethylhexyl) phthalate) (CAS No.: 117-81-7)	mg/kg	With reference to IEC 62321-8:2017. Analysis was performed by GC/MS.	50	n.d.	1000

#### Note:

1. mg/kg = ppm; 0.1wt% = 1000ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. " - " = Not Regulated

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



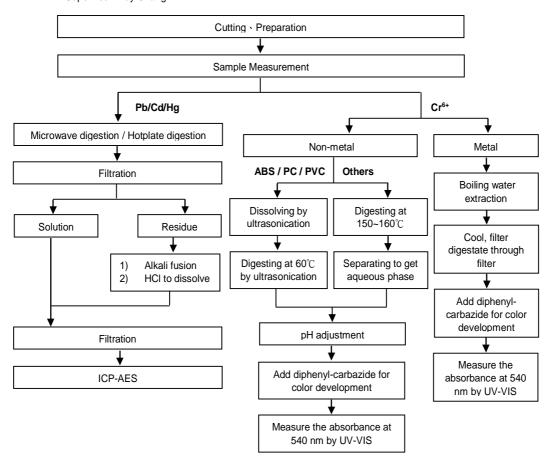
**Test Report** Page: 4 of 7 No.: KA/2019/10364 Date: 2019/01/11

GRAND PACIFIC PETROCHEMICAL CORPORATION 10 FL., NO. 1, SEC. 4, NANJING E. ROAD, TAIPEI, TAIWAN R.O.C

#### **Analytical flow chart of Heavy Metal**

These samples were dissolved totally by pre-conditioning method according to below flow chart. ( $Cr^{6+}$  test method excluded)

Technician: Jony Liu Supervisor: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or the transaction documents. This document cannot be reproduced each of the fullest extent of the law.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 www.tw.sgs.com

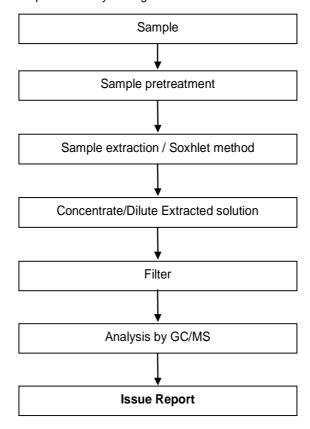


**Test Report** Page: 5 of 7 Date: 2019/01/11 No.: KA/2019/10364

GRAND PACIFIC PETROCHEMICAL CORPORATION 10 FL., NO. 1, SEC. 4, NANJING E. ROAD, TAIPEI, TAIWAN R.O.C

### PBB/PBDE analytical FLOW CHART

Technician: Dorothy Chen Supervisor: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to Its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written permission of the Company. Any unauthorized alteration, forger or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

10. 61, Kai-Fa Road, Nanzin Export Processing Zone, Kaehsiung, Taiwan | Sa# Taiwan Ltd.

11. 0. 61, Kai-Fa Road, Nanzin Export Processing Zone, Kaehsiung, Taiwan | Sa# Taiwan Ltd.

12. 0. 61, Kai-Fa Road, Nanzin Export Processing Zone, Kaehsiung, Taiwan | Sa# Taiwan Ltd.

13. 0. 61, Kai-Fa Road, Nanzin Export Processing Zone, Kaehsiung, Taiwan | Sa# Taiwan Ltd.

14. 0. 60, Kai-Fa Road, Nanzin Export Processing Zone, Kaehsiung, Taiwan | Sa# Taiwan Ltd.

15. 0. 61, Kai-Fa Road, Nanzin Export Processing Zone, Kaehsiung, Taiwan | Sa# Taiwan Ltd.

16. 0. 61, Kai-Fa Road, Nanzin Export Processing Zon



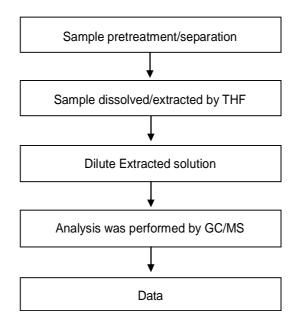
**Test Report** Page: 6 of 7 Date: 2019/01/11 No.: KA/2019/10364

GRAND PACIFIC PETROCHEMICAL CORPORATION 10 FL., NO. 1, SEC. 4, NANJING E. ROAD, TAIPEI, TAIWAN R.O.C

#### Analytical flow chart of phthalate content

Technician: Dorothy Chen Supervisor: Ray Chang

[Test method: IEC 62321-8]



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



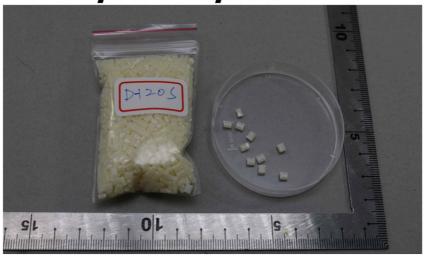
**Test Report** 

No.: KA/2019/10364 Date: 2019/01/11

GRAND PACIFIC PETROCHEMICAL CORPORATION 10 FL., NO. 1, SEC. 4, NANJING E. ROAD, TAIPEI, TAIWAN R.O.C

\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

# KA/2019/10364



\*\* End of Report \*\*

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 高雄市楠梓加工出口區開發路61號 www.tw.sgs.com

Page: 7 of 7