

To: Ms. Noreen Bianca Lanado - FDT Purchasing

Supplier Control No.: 19-006

Date: 2/18/2019

Supplier: SPPI

CC: _____

CC: _____

☐ Support for the RoHS

S U P P L I E R	Section	PMC
	Person in charge	<i>[Signature]</i> SILVAN
	Approval	<i>[Signature]</i> Di de Justo

4 M Change notification (変更通知書)

Part number	KD04072-Y290	Part name	SIDE GUIDE L1
Model	G960	Presence of attached datum and sample	Appending - unappending
Content of change			
<input checked="" type="checkbox"/> Man (Worker's change) <u>CHANGE OF TRIAL IN-CHARGE</u>			
<input type="checkbox"/> Machine (Equipment change) <u>FROM AB MOULD INJECT TO SPPI INJECT</u>			
<input type="checkbox"/> Material (Division of material change)			
<input type="checkbox"/> Support for the RoHS			
(Certificate with a data must be attached) [Cr(VI) , Cd, Hg, Pb, PBB, PBDE]			
<input type="checkbox"/> Material change			
<input type="checkbox"/> End of life (EOL)			
<input type="checkbox"/> Method (Work method change)			
<input type="checkbox"/> Others ()			
Change reason <u>Mold was fabricated in AB MOULD PHILS., transferred to SPPI for mass production.</u>			
		F D T P	Purchasing Section
			Control Number <u>PR-EX-19-4M-DD15</u>
			Person in charge <u>N.B. Lanado</u>
			Approval <u>M.A. GARRIN</u>
[Change time]		Evaluation result before hand	
		Appending - unappending	

FDTP Evaluation and Result

FDTP QC Control No.: _____

Date: _____

Section	FDTP QC/QA
Person in charge	
Approval	

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Section	FDTP PE
Person in charge	
Approval	

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Section	FTEC PE/QA
Person in charge	
Approval	

4 M Change answer**[Conclusion] Judgment : 4 M Content of change request**☐ Acceptable☐ Not acceptable**[Matters in request]**

[Opinion and evaluation result]

To be filled by supplier 依頼元記入欄

Requesting Supplier
依頼元名

Date 18 February, 2019

SPPI

QUALIFICATION APPROVAL INSPECTION REQUEST FOR PLASTIC MOLDING
DIE AND THE FIRST LOT PARTS

モールド型適用品・初回品 検査依頼票 兼 サンプル送付票

Part No. 図番	KD04072-Y290		Part Name 品名	SIDE GUIDE L1	Rev. 版数	0 版数	Rev. 版数	09 版数	P.O. number 型組工製番	
Molding die classification 区分	New <input checked="" type="checkbox"/> DIE MAKE 新規 <input type="checkbox"/> 2ND DIE	or Revision up 改版	Transfer 移管, 転注	or Others () その他()	No. of cavity キャビティ数	1		※The number of samples to be submitted must be 5pcs. or more every each cavity. ※各キャビティ毎に5ヶ以上提出の事		

Application description at the inspection request

検定依頼時の申請内容

① The purpose of inspection request 検定依頼目的		fill out from the 2nd trial TRY2以降について記入	
② location of the die remodeling 型改造箇所		fill out a detail for die remodeling location 型工事箇所を具体的に記入 SAMPLE FOR APPROVAL-T1 IN SPPI TRANSFFRED MOULD FROM JZT (CHINA)	
③ Number of the samples サンプル数		6 pcs. 個	If lacking of samples, fill out its reason 不足の場合理由を記入
self check	④ Attached inspection data 自主検査データ添付	Yes <input checked="" type="checkbox"/> 有り or No <input type="checkbox"/> 無し	If there is no a data, fill out its reason データ未添付の理由を記入
	⑤ Measurement environment 測定環境	Temperature 温度	25 °C Humidity 湿度 %
	⑥ Change of the molding condition 成形条件変更有無	Yes <input type="checkbox"/> 有り or No <input checked="" type="checkbox"/> 無し	⑦ additional working/remedy 追加加工/矯正有無
	⑧ Molding condition slip 成形条件票添付	Yes <input checked="" type="checkbox"/> 有り or No <input type="checkbox"/> 無し	⑨ remarks 備考

※ If the Qualification Approval Request Form have incomplete data, the trial sample will not be accepted/inspected.

To be filled by FDTP FDTP記入欄

<input type="radio"/> FDTP) PURCHASE SEC.MANAGER <input type="radio"/> FDTP) TOOL&DIE DEPT. MANAGER <input type="radio"/> FDTP) MECHANICAL MANUFACTURING DEPT. MANAGER <input type="radio"/> FDTP) INSPECTION SEC.MANAGER		QUALIFICATION APPROVAL INSPECTION RESULT FOR PLASTIC MOLDING DIE AND THE FIRST LOT PARTS モールド型適用品・初回品 検査結果連絡票								FDTP) INSPECTION SECTION	
Part No. 図番					Rev. 版数			Supplier 依頼元			
Part name 品名							Attached data マークデータ	Yes <input type="checkbox"/> 有り or No <input type="checkbox"/> 無し			
Die classification 区分	New <input type="checkbox"/> DIE MAKE 新規 <input type="checkbox"/> 2ND DIE	or Revision up 改版	or Transfer 移管, 転注	or Others () その他()		Molding condition slip 成形条件票		Yes <input type="checkbox"/> 有り or No <input type="checkbox"/> 無し			
TRY No.	Inspection date 検査年月日	Judgement 判定	Defective part 不良箇所		Remarks 備考		Inspector 検査担当	Checked 調査	Approved 承認		
1st trial 第1回トライ		GOOD 合格	Dimension 寸法不良	location 箇所							
		NO GOOD 不合格	Appearance 外観不良								
		others その他									
2nd trial 第2回トライ		GOOD 合格	Dimension 寸法不良	location 箇所							
		NO GOOD 不合格	Appearance 外観不良								
		others その他									
3rd trial 第3回トライ		GOOD 合格	Dimension 寸法不良	location 箇所							
		NO GOOD 不合格	Appearance 外観不良								
		others その他									
4th trial 第4回トライ		GOOD 合格	Dimension 寸法不良	location 箇所							
		NO GOOD 不合格	Appearance 外観不良								
		others その他									

Article 記事

Unit Name 機種名	measurement instrument 測定器	
P.O. Number 型組工製番	1. Digital calipers デジタルノギス 2. Digital Micrometer デジタルマイクロメーター 3. Digital height gauge デジタルハイトゲージ 4. Pin gauge ピンゲージ 5. Screw gauge ネジゲージ 6. R gauge Rゲージ	7. Block gauge ブロックゲージ 8. Protractor プロトラクター 9. Projector 工具顕微鏡 10. CMM 三次元測定器 11. Gear rolling tester 歯合い試験機 12. Laser scan micrometer レーザーマイクロメーター

OPERATIONS DIVISION
 QUALITY CONTROL DEPARTMENT

Part Name : **SIDE GUIDE L1**
 Part Number: **KD04072-Y290**
 Model:
 Material Name: **ABS TORAY 100G10 BLACK**

Ink Name: **N/A**
 Trial Date: **12-Feb-2019**
 Evaluation Date: **13-Feb-2019**
 PTS # / Sample #: **19-0014-FDT**

☒ Injection

☐ Printing

☐ Shafting

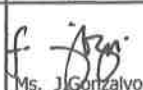

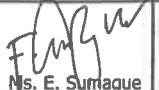
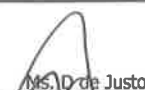
MARK	COORDINATES	Standard	Tolerance	Sample No./Cavity No.			IMTE USED	JUDGEMENT	REMARKS
				1	2	3			
GO	2/D	3.00	±0.1	3.00	3.00	3.00	C	OK	
STOP				3.09	3.09	3.09			
GO	3/D	Ø4.2	+0.1/-0	4.21	4.21	4.21	C	OK	
STOP				4.27	4.27	4.27			
	3/E,F	99.50	±0.7	99.45	99.43	99.50	E	OK	
	4/E	4.40	+0/-0.2	4.22	4.22	4.21	E	OK	
	8/E	115.50	±0.7	115.57	115.54	115.62	E	OK	
	9/G	39.10	±0.5	38.90-39.14	38.89-39.23	38.89-39.11	E	OK	
GO	8/B	3.10	+0.1/-0	3.14	3.14	3.14	C	OK	
STOP				3.17	3.17	3.17			
	10/E	115.50	±0.7	115.55	115.51	115.60	E	OK	
ROOT	10/D	11.60	+0.35/-0.50	11.62-11.75	11.81-11.89	11.78-11.87	E	OK	
TIP				11.55-11.59	11.75-11.83	11.69-11.72			
GO	11/D	3-Ø4.00	+0.1/-0	4.00	4.00	4.00	C	OK	WITH HINSEI +0.20
STOP				4.11	4.11	4.11			
GO				4.00	4.00	4.00			
STOP				4.11	4.11	4.11			
GO				4.00	4.00	4.00			
STOP				4.11	4.11	4.11			
A	11/D	6.30	±0.1	6.29	6.27	6.25	E	OK	
B				6.38	6.38	6.37	GB	OK	
GO	12/D	6.20	±0.1	6.13	6.13	6.13			
STOP				6.23	6.23	6.23	E	OK	
	11,12/G	42.50	±0.5	42.43-42.57	42.44-42.68	42.51-42.69			
GO	11/D	3-Ø4.00	+0.1/-0	4.00	4.00	4.00	C	OK	WITH HINSEI +0.20
STOP				4.07	4.07	4.07			
GO				4.00	4.00	4.00			
STOP				4.07	4.07	4.07			
GO				4.00	4.00	4.00			
STOP				4.07	4.07	4.07			
	15/E,F	99.50	±0.7	99.50	99.47	99.56	E	OK	
GO	2/D	3.00	±0.1	3.00	3.00	3.00	C	OK	
STOP				3.09	3.09	3.09			

Product Trial Schedule versus Product Drawing

☒ Part Number
☒ Part Name/Revision Number
☒ Material Name

Revision number in PO-
 Revision number in DRAWING- 09
 Revision number in actual- 09

IMTE	CALIPER	A	P.PROJECTOR	F	Remarks: SAMPLE FOR APPROVAL-T1 IN SPPI TRANSFERRED MOULD FROM JZT (CHINA)
	CMM	B	R.TESTER	G	
	PIN GAUGE	C	PUSH/PULL	H	
	MICROMETER	D	GAUGE		
	H.GAUGE	E	OTHER/VMM	I	

Overall Judgement	Injection Development		QC Department		Customer Approval
	Inspected	Checked	Checked	Noted	
FOR APPROVAL	 Ms. J. Gorzálvo	 Mr. A. Punongpayan	 Ms. E. Surague	 Ms. D. de Justo	

Part Name : **SIDE GUIDE L1**
 Part Number: **KD04072-Y290**
 Model:
 Material Name: **ABS TORAY 100G10 BLACK**

Ink Name: N/A
Trial Date: 12-Feb-2019
Evaluation Date: 13-Feb-2019
PTS # / Sample #: 19-0014-FDT

■ Injection

 **Printing**




Shafting

[illegible]

Product Trial Schedule versus Product Drawing

Part Number
Part Name/Revision Number
Material Name

Revision number in PO-	
Revision number in DRAWING-	09
Revision number in actual-	09

IMTE	CALIPER	A	P.PROJECTOR	F	Remarks: SAMPLE FOR APPROVAL-T1 IN SPPI TRANSFERRED MOULD FROM JZT (CHINA)
	CMM	B	R.TESTER	G	
	PIN GAUGE	C	PUSH/PULL	H	
	MICROMETER	D	GAUGE		
	H.GAUGE	E	OTHER		
Overall Judgement	Injection Development		QC Department		Customer Approval
	Inspected	Checked	Checked	Noted	
FOR APPROVAL	 Ms. J. Gonzales	 Mr. A. Punongbayan	 Ms. E. Sumague	Ms. D de Justo	

SANYO PLASTIC PHILS. INC.

110 East Main Ave. SEPZ., L.T.I.

Biflan, Laguna, Philippines

SUMITOMO DEMAG INJECTION MACHINE SET UP SHEET										CAPACITY : 100 TONS		M/C. NO. 44			
CONTROL NO.		FDTF-569-44-01		CONTROL NO.		FDTF-569-44-01		CONTROL NO.		FDTF-569-44-01		CONTROL NO.			
PART NAME		SIDE GUIDE LI		PART NAME		SIDE GUIDE LI		PART NAME		SIDE GUIDE LI		PART NAME			
PART NUMBER		KD04072-Y290		PART NUMBER		KD04072-Y290		PART NUMBER		KD04072-Y290		PART NUMBER			
CUSTOMER		FDTF		CUSTOMER		FDTF		CUSTOMER		FDTF		CUSTOMER			
CAVITY AMOUNT		1		CAVITY AMOUNT		1		CAVITY AMOUNT		1		CAVITY AMOUNT			
WEIGHT PER PIECE				WEIGHT PER PIECE				WEIGHT PER PIECE				WEIGHT PER PIECE			
SET UP BY:		J. ARANGUREN		SET UP BY:		J. ARANGUREN		SET UP BY:		J. ARANGUREN		SET UP BY:			
SET UP DATE:		12-Feb-19		SET UP DATE:		12-Feb-19		SET UP DATE:		12-Feb-19		SET UP DATE:			
EVALUATED BY:		J. GALICIA		EVALUATED BY:		J. GALICIA		EVALUATED BY:		J. GALICIA		EVALUATED BY:			
NOTED:				NOTED:				NOTED:				NOTED:			
APPROVED:				APPROVED:				APPROVED:				APPROVED:			
CLAMP CONDITION				CLAMP CONDITION				CLAMP CONDITION				CLAMP CONDITION			
APPLIED CLAMPING FORCE 50				APPLIED CLAMPING FORCE				APPLIED CLAMPING FORCE				APPLIED CLAMPING FORCE			
OPEN/ CLOSE SPEED				OPEN/ CLOSE SPEED				OPEN/ CLOSE SPEED				OPEN/ CLOSE SPEED			
MOLD OPEN				MOLD OPEN				MOLD OPEN				MOLD OPEN			
POSITION		VELOCITY		POSITION		VELOCITY		POSITION		VELOCITY		POSITION		VELOCITY	
LIMIT	210	VLIMIT	25	LIMIT	210	VLIMIT	25	LIMIT	210	VLIMIT	25	LIMIT	210	VLIMIT	25
2ND	170	2ND	30	2ND	170	2ND	30	2ND	170	2ND	30	2ND	170	2ND	30
1ST	90	1ST	20	1ST	90	1ST	20	1ST	90	1ST	20	1ST	90	1ST	20
MOLD CLOSE				MOLD CLOSE				MOLD CLOSE				MOLD CLOSE			
CHANGE PARAG				CHANGE PARAG				CHANGE PARAG				CHANGE PARAG			
POSITION		VELOCITY		POSITION		VELOCITY		POSITION		VELOCITY		POSITION		VELOCITY	
1ST OFF	3RD 80	1ST 0	3RD 20	1ST OFF	3RD 80	1ST 0	3RD 20	1ST OFF	3RD 80	1ST 0	3RD 20	1ST OFF	3RD 80	1ST 0	3RD 20
2ND 150	4TH 30	2ND 25	4TH 10	2ND 150	4TH 30	2ND 25	4TH 10	2ND 150	4TH 30	2ND 25	4TH 10	2ND 150	4TH 30	2ND 25	4TH 10
MLD.CLMP	1.08	VCLAMP	15	MLD.CLMP	1.08	VCLAMP	15	MLD.CLMP	1.08	VCLAMP	15	MLD.CLMP	1.08	VCLAMP	15
POS.	35	LW PRES	15	POS.	35	LW PRES	15	POS.	35	LW PRES	15	POS.	35	LW PRES	15
EJECTOR SETTLING				EJECTOR SETTLING				EJECTOR SETTLING				EJECTOR SETTLING			
RETRACT		FORWARD		RETRACT		FORWARD		RETRACT		FORWARD		RETRACT		FORWARD	
1ST		1ST		1ST		1ST		1ST		1ST		1ST		1ST	
POS.	0	POS.	0	POS.	0	POS.	0	POS.	0	POS.	0	POS.	0	POS.	0
VEL.	30	VEL.	0	VEL.	30	VEL.	0	VEL.	30	VEL.	0	VEL.	30	VEL.	0
PRES.	30	PRES.	0	PRES.	30	PRES.	0	PRES.	30	PRES.	0	PRES.	30	PRES.	0
MODE NORMAL				MODE NORMAL				MODE NORMAL				MODE NORMAL			
TIMER CONT.		TIMER CONT.		TIMER CONT.		TIMER CONT.		TIMER CONT.		TIMER CONT.		TIMER CONT.		TIMER CONT.	
EJ.COUNT	1	EJ.KEEP	0.8	EJ.COUNT	1	EJ.KEEP	0.8	EJ.COUNT	1	EJ.KEEP	0.8	EJ.COUNT	1	EJ.KEEP	0.8
EJ.START	PEN LIM	RET.KEEP	0	EJ.START	PEN LIM	RET.KEEP	0	EJ.START	PEN LIM	RET.KEEP	0	EJ.START	PEN LIM	RET.KEEP	0
DELAY	0	RE-EJ.KEEP	0	DELAY	0	RE-EJ.KEEP	0	DELAY	0	RE-EJ.KEEP	0	DELAY	0	RE-EJ.KEEP	0
INJECTION CONDITION				INJECTION CONDITION				INJECTION CONDITION				INJECTION CONDITION			
HOLDING/ PACKING				HOLDING/ PACKING				HOLDING/ PACKING				HOLDING/ PACKING			
HOLD PRESS. VEL 20				HOLD PRESS. VEL				HOLD PRESS. VEL				HOLD PRESS. VEL			
NO. OF STAGES 3				NO. OF STAGES				NO. OF STAGES				NO. OF STAGES			
TIME		PRESSURE		TIME		PRESSURE		TIME		PRESSURE		TIME		PRESSURE	
4TH	1	4TH	400	4TH	1	4TH	400	4TH	1	4TH	400	4TH	1	4TH	400
3RD	1	3RD	1100	3RD	1	3RD	1100	3RD	1	3RD	1100	3RD	1	3RD	1100
2ND	1	2ND	650	2ND	1	2ND	650	2ND	1	2ND	650	2ND	1	2ND	650
1ST	1	1ST		1ST	1	1ST		1ST	1	1ST		1ST	1	1ST	
INJECTION/ FILLING				INJECTION/ FILLING				INJECTION/ FILLING				INJECTION/ FILLING			
FILL TIME 1				FILL TIME				FILL TIME				FILL TIME			
FILL PRESSURE 1200				FILL PRESSURE				FILL PRESSURE				FILL PRESSURE			
POSITION		VELOCITY		POSITION		VELOCITY		POSITION		VELOCITY		POSITION		VELOCITY	
5TH	8	5TH	70	5TH	8	5TH	70	5TH	8	5TH	70	5TH	8	5TH	70
4TH	15	4TH	100	4TH	15	4TH	100	4TH	15	4TH	100	4TH	15	4TH	100
3RD	23	3RD	120	3RD	23	3RD	120	3RD	23	3RD	120	3RD	23	3RD	120
2ND	OFF	2ND		2ND	OFF	2ND		2ND	OFF	2ND		2ND	OFF	2ND	
1ST	OFF	1ST		1ST	OFF	1ST		1ST	OFF	1ST		1ST	OFF	1ST	
COOLING 14				COOLING				COOLING				COOLING			
FILLING		FILLING		FILLING		FILLING		FILLING		FILLING		FILLING		FILLING	
HOLD		HOLD		HOLD		HOLD		HOLD		HOLD		HOLD		HOLD	
OPERATION		OPERATION		OPERATION		OPERATION		OPERATION		OPERATION		OPERATION		OPERATION	
STD		STD		STD		STD		STD		STD		STD		STD	
V-P PRES		V-P PRES		V-P PRES		V-P PRES		V-P PRES		V-P PRES		V-P PRES		V-P PRES	
DOSE MODE		DOSE MODE		DOSE MODE		DOSE MODE		DOSE MODE		DOSE MODE		DOSE MODE		DOSE MODE	
DECLARATING		DECLARATING		DECLARATING		DECLARATING		DECLARATING		DECLARATING		DECLARATING		DECLARATING	
PATTERN		PATTERN		PATTERN		PATTERN		PATTERN		PATTERN		PATTERN		PATTERN	
EXTRUDER SETTING				EXTRUDER SETTING				EXTRUDER SETTING				EXTRUDER SETTING			
PULL BACK - BEFORE				PULL BACK - BEFORE				PULL BACK - BEFORE				PULL BACK - BEFORE			
POS 0		mm VEL 25		POS		mm VEL		POS		mm VEL		POS		mm VEL	
1ST		2ND		1ST		2ND		1ST		2ND		1ST		2ND	
OFF		35		OFF		35		OFF		35		OFF		35	
BCK PRES		80		BCK PRES		80		BCK PRES		80		BCK PRES		80	
REV		70		REV		70		REV		70		REV		70	
OFF		60		OFF		60		OFF		60		OFF		60	
PULL BACK - AFTER				PULL BACK - AFTER				PULL BACK - AFTER				PULL BACK - AFTER			
POS 3		mm VEL 25		POS		mm VEL		POS		mm VEL		POS		mm VEL	
1ST		2ND		1ST		2ND		1ST		2ND		1ST		2ND	
OFF		35		OFF		35		OFF		35		OFF		35	
BCK PRES		80		BCK PRES		80		BCK PRES		80		BCK PRES		80	
REV		70		REV		70		REV		70		REV		70	
OFF		60		OFF		60		OFF		60		OFF		60	
MATERIAL NAME ABS TORAY				MATERIAL NAME				MATERIAL NAME				MATERIAL NAME			
GRADE 100 G10				GRADE				GRADE				GRADE			
COLOR BLACK				COLOR				COLOR				COLOR			
BARREL TEMP.				BARREL TEMP.				BARREL TEMP.				BARREL TEMP.			
T1 245		T4 230		T1		T4		T1		T4		T1		T4	
T2 240		T5 225		T2		T5		T2		T5		T2		T5	
T3 235				T3				T3				T3			
MOLD TEMP. SETTING				MOLD TEMP. SETTING				MOLD TEMP. SETTING				MOLD TEMP. SETTING			
CONTROLLER TYPE MTC				CONTROLLER TYPE				CONTROLLER TYPE				CONTROLLER TYPE			
CORE		CAVITY		CORE		CAVITY		CORE		CAVITY		CORE		CAVITY	
SET 65		SET 65		SET		SET		SET		SET		SET		SET	
ACTUAL		ACTUAL		ACTUAL		ACTUAL		ACTUAL		ACTUAL		ACTUAL		ACTUAL	
ACTUAL MONITORING				ACTUAL MONITORING				ACTUAL MONITORING				ACTUAL MONITORING			
FILL START 39.98		FILL PEAK 1191		FILL START		FILL PEAK		FILL START		FILL PEAK		FILL START		FILL PEAK	
V-P SWITCH 8		CYCLE 30.9		V-P SWITCH		CYCLE		V-P SWITCH		CYCLE		V-P SWITCH		CYCLE	
CUSHION 4.7		FILLTIME 0.307		CUSHION		FILLTIME		CUSHION		FILLTIME		CUSHION		FILLTIME	
HOLD END 6.77		PLAST TM 8.24		HOLD END		PLAST TM		HOLD END		PLAST TM		HOLD END		PLAST TM	
REMARKS				REMARKS				REMARKS				REMARKS			
~ 15 0014 FDT > MOLD FABRICATED IN J2T > ZERO SET = TIME > FLASH=0.03 > VIRGIN MATERIAL > ± 10 % ON PRESSURE, VELOCITY, TIME AND POSITION > ± 10 % ON TEMPERATURE															

EXCISE
holders from applying
(c) to this part.

Part Parts

he
1.0mm

2019
TRANSFERRED MODEL FROM J21 (CHINA)

15 SPEN 16
UNCONTROLLED
Sign: *h* 13/1/19

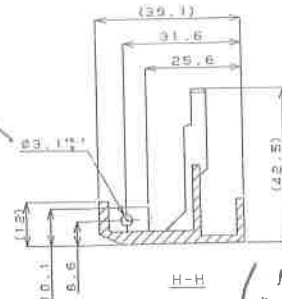
60 STOP
3.00 - 3.09
3.00 - 3.09
3.00 - 3.09

60 STOP
4.21 - 4.27
4.21 - 4.27
4.21 - 4.27

Side view

この範囲バリ・カエリ等ひっかり除去こと⑤しを除去
In this designated area,
it must be free of burrs/
projections except on PL.

60 STOP
3.14 - 3.17
3.14 - 3.17
3.14 - 3.17



H-H

ROOT
11.62 - 11.75
11.81 - 11.89
11.78 - 11.87

TIP
11.55 - 11.59
11.75 - 11.83
11.69 - 11.72

A B
6.29 / 6.38
6.27 / 6.38
6.25 / 6.37

81. P2. B3
60 STOP
4.00 / 4.11
4.00 / 4.11
4.00 / 4.11

6.13 - 6.23
6.13 - 6.23
6.13 - 6.23

60 STOP
3.00 - 3.09
3.00 - 3.09
3.00 - 3.09

60 STOP
4.23 - 4.27
4.23 - 4.27
4.23 - 4.27

99.50
99.47
99.56

E-E

F Side view

38.90 - 39.14
38.89 - 39.23
38.89 - 39.11

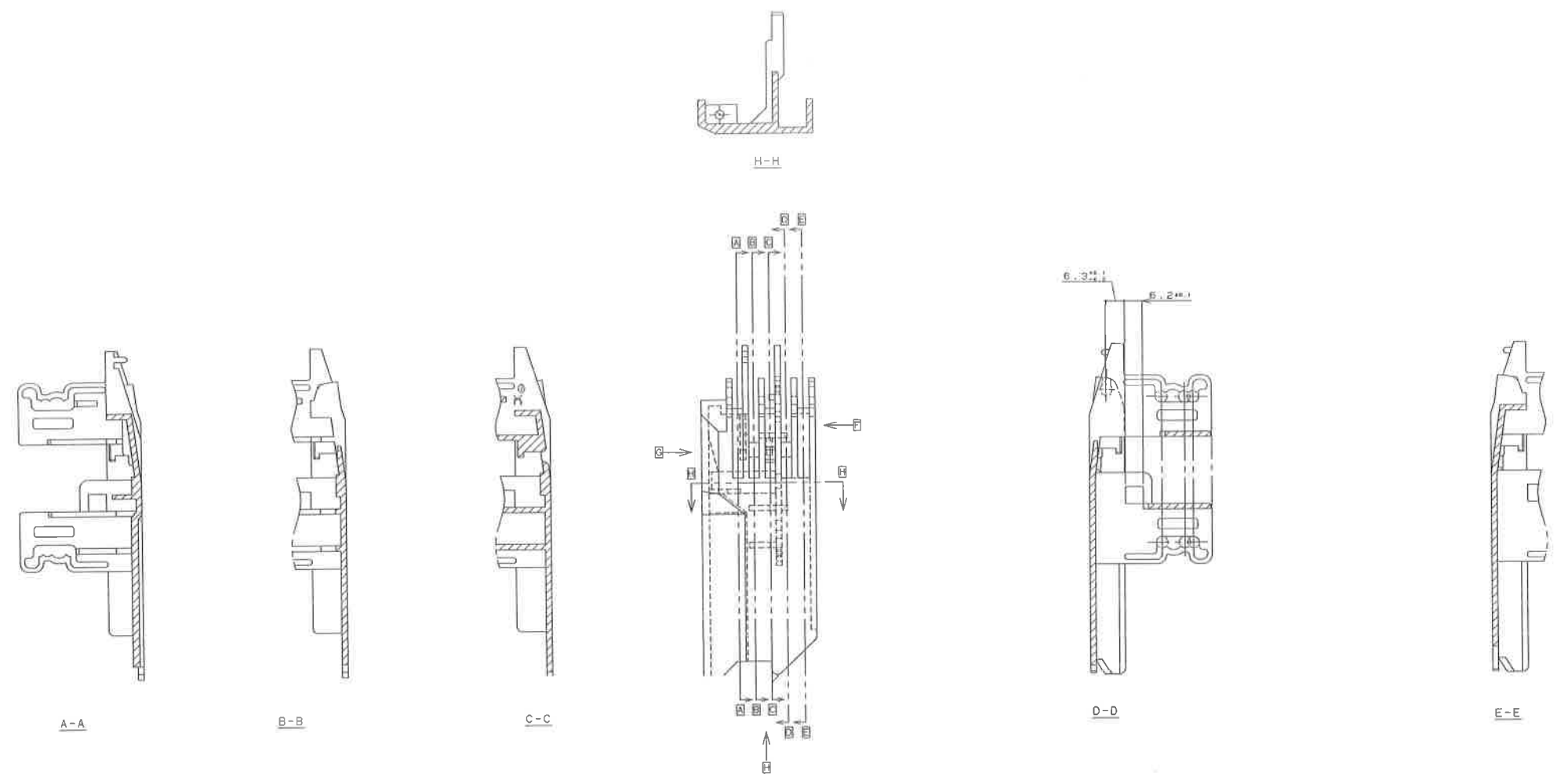
42.43 - 42.57
42.44 - 42.68
42.51 - 42.69

41. A1. A3
60 STOP
4.00 - 4.07
4.00 - 4.07
4.00 - 4.07

重要数値寸法/指示図 Important control dimensions and instructions drawing.
本ページに記入されている全ての寸法および指示は重要管理項目とする
All dimensions and all instructions in this page are important control items.

UNICO
Sign: 1/31/19

FUJITSU CONFIDENTIAL
DATE DOCUMENT CONTROL SECTION



REVIEWED
Fujitsu Frontech prohibits manufacturers from applying the RoHS Exemptions 6(a), 6(b), 6(c) to this part.

MASTER COPY

Commercial Tolerances												
Item	Dimension	Class ()										
		05-1020	05-1021	05-1022	05-1023	05-1024	05-1025	05-1026	05-1027	05-1028	05-1029	
F811-1-12 Sheet metal work	Center distance (pitch)	0.01	0.015	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
	Center distance (width)	0.01	0.015	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
	General dimensions (width)	0.01	0.015	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
	General dimensions (height)	0.01	0.015	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
	Assembly dimensions	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
	RoHS dimensions	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
	RoHS dimensions 30% at least	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	

PARTS				SCALE		TITLE	DESCRIPTION
DATE	DATE	DATE	DATE	1:1	1:1		
09180313	N. TAKAHASHI	F. TANAKA	This page addition (MINSEI) K0218A00227			SIDE GUIDE L1	
DATE	DATE	DATE	DATE	1:1	1:1	0244-00	
160331	N. NISHIDA	Y. NAKAYAMA	FUJITSU FRONTTECH LIMITED			X0KD04072-Y290	
DATE	DATE	DATE	DATE	1:1	1:1	002/2	

UNIT IS MM.

SPPI
Sanyo Plastic Philippines, Inc.

TO: Fujitsu Die Tech Corp. of the Phils.

CERTIFICATE FOR MATERIAL USED

D.R./P.O. No. : _____ QUANTITY : 6

PART NUMBER : KD04072-Y290

PART NAME : SIDE GUIDE L1

MATERIAL USED

MATERIAL GENERIC NAME : PC

MATERIAL DESIGNATION : NX86K-15

MANUFACTURE OF MATERIAL : TORAY INDUSTRIES INC.

UL94 FLAME CLASS : 94V-0

UL FILE No. : E41797

The amount of this product of the regrind materials used is weight ratio 25% or less according to UL 746 regulations.

We certify the above description.

DATE 18-Feb-19

COMPANY NAME : SANYO PLASTIC PHILS.,INC

SIGN : MS.M.HERNANDEZ

Supervisor or Manager
(Signature over printed name)

Note: PART NAME can be written as per the drawing
MATERIAL USED shall be stated as per the "UL Online Certification Directory"

Revision 03

8/14/2015

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

1.1 Product name

TOYOLAC Glass Fiber Reinforced ABS Resin (TOYOLAC 100G)

1.2 Recommended use of the chemical and restrictions on use

Recommended Use : For household appliances, electronic materials and industrial materials.
Use Restriction : Do not use for an internal implantation.

For use of the product for medical purpose or food containers, please kindly contact us in advance on the specific usage.

1.3 Supplier's detail

Name of Supplier : Toray Plastics (Malaysia) Sdn. Bhd.
Address : 2826 MK 1, SPT., Lorong Perusahaan 4, Prai Free Industrial Zone, 13600 Prai, Penang, Malaysia
Telephone No : +60-4-3988-088
Fax No : +60-4-3988-975, +60-4-3977-264

Sales
Department : Sales & Marketing Department
Manager : General Manager

Technical
Department : Technology Centre
Manager : Technology Centre Manager

1.4 Emergency phone number

+60-4-3988-085

2. Hazards Identification

2.1 GHS classification

Health Hazards:

Acute toxicity (Oral)	: Not classified
Acute toxicity (Dermal)	: Classification not possible
Acute toxicity (Inhalation)	: Classification not possible
Skin corrosion / Irritation	: Classification not possible
Serious eye damage / eye irritation	: Classification not possible
Respiratory sensitization	: Classification not possible
Skin sensitization	: Classification not possible
Germ cell mutagenicity	: Not classified
Cardiogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ / systemic toxicity (Single exposure)	: Not classified
Specific target organ / systemic toxicity (Repeated exposure)	: Not classified
Aspiration hazards	: Classification not possible

Environmental Hazards:

Aquatic environmental hazards	: Not classified
Chronic environmental hazards	: Not classified

2.2 Other hazards which are not covered by GHS

This product may release small amount of volatile gases which may cause irritation to eyes, nose and throat. Use adequate local exhaust ventilation during drying and molding of the product. Sweep up and dispose any spilled product to eliminate slipping hazards. Do not pile up the product too high to avoid any injuries caused by falling of the product.

MATERIAL SAFETY DATA SHEET

3. Composition / Information on Ingredients

Substance / Mixture : Mixture
Chemical Name : Mixture of Acrylonitrile-Butadiene-Styrene Copolymers and Additives
Synonyms : Glass Fiber Reinforced ABS Resin

	Common chemical name	Chemical formula	CAS No.	ENCS No.	ISHL No.	TSCA	Composition
1	Acrylonitrile-Butadiene-Styrene Copolymer (or Mixture of A, B and / or C)	—	Regd.	Regd.	Existing	Regd.	60% or more
A	Acrylonitrile-Butadiene-Styrene Copolymer	—[(C ₆ H ₅)C(C ₃ H ₃ N)(C ₄ H ₆ m)]—	9003-56-9	6-178	Existing	Regd.	—
B	Acrylonitrile-Styrene Copolymer	—[(C ₆ H ₅)C(C ₃ H ₃ N)(H)]—	9003-54-7	6-128	Existing	Regd.	—
C	Copolymer of Acrylonitrile, Styrene and other component (other component: 0-10%)	—	Regd.	Regd.	Existing	Regd.	—
2	Glass Fiber	SiO ₂ .Al ₂ O ₃ .(Ca,Mg)O.B ₂ O ₃ .(Na,K) ₂ O	66987-17-3	Regd.	—	Regd.	35% or less
3	Additives	—	Regd.	Regd.	Existing	Regd.	5% or less
4	Styrene (impurities which contribute to GHS classification)	C ₆ H ₆	106-42-5	3-4	—	—	0.05-0.2%

4. First-Aid Measures

4.1 Inhalation

S45—In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S83—In case of accident or if you feel unwell, remove casualty to fresh air and keep at rest.
It is not likely for the resin pellets to be inhaled. In case of inhalation of gases and fumes from melting resin, remove casualty to fresh air. If the casualty has difficulties in breathing or coughing, seek medical assistance immediately.

4.2 Skin contact

S45—In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Wash skin thoroughly with water and mild soap. In case of contact with melting resin, cool rapidly with water and seek medical assistance immediately. In case of contact with fume condensate from melting resin, wash thoroughly the affected area with water and soap. Seek medical assistance immediately if irritation develops.

4.3 Eye contact

Gently rinse the affected eyes with clean water for at least 15 minutes. If the casualty wears contact lenses, have them removed and continue rinsing. Avoid the casualty from rubbing eyes. Transport casualty to the nearest medical facilities for treatment as soon as possible.

4.4 Ingestion

S45—In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

4.5 Protective measures for a first-aid person

Wear protective gloves when removing melting polymer or high temperature polymer.

5. Fire-Fighting Measures

5.1 Extinguishing media

S43—In case of fire, use water mist, water jet, foam, dry powder or carbon dioxide.

MATERIAL SAFETY DATA SHEET

9. Physical and Chemical Properties

Appearance	: Pellet shaped solid
Color	: Light yellow
Odor	: None
pH	: N/A
Boiling point	: N/A
Boiling range (Mixture)	: N/A
Melting point	: This product softens gradually over a broad temperature range (130~150°C)
Decomposition temperature	: N/A
Flash point	: N/A
Ignition temperature	: About 405°C
Explosion limit (Upper)	: N/A
Explosion limit (Lower)	: 60g/m ³ (particle size < 0.2mm)
Relative density	: 1.10-1.45
Vapor pressure	: N/A
Vapor density	: N/A
Solubility	: Insoluble in water. Partly soluble in organic solvent.
Octanol / water partition coefficient	: N/A

10. Stability and Reactivity

10.1 Stability

This product is considered a stable material under normal and anticipated storage and handling conditions.

10.2 Possibility of hazardous reactions

This product is considered a stable material under normal and anticipated storage and handling conditions.

10.3 Conditions to avoid

Direct sunlight, fire, sources of heat etc.

10.4 Incompatible materials

None

10.5 Decomposition products

Black smoke, carbon monoxide, carbon dioxide, nitrogen oxides and etc maybe generated in the case combustion of this product.

11. Toxicological Information

Acute toxicity	: Not classified
Skin corrosion / irritation	: Classification not possible. (N/A)
Serious eye damage / eye irritation	: Classification not possible. (N/A)
Respiratory or skin sensitization	: Classification not possible. (N/A)
Germ cell mutagenicity	: Not classified
Carcinogenic effects	: Not classified
Toxicity for reproduction	: Not classified
Specific target organ / systemic toxicity (Single exposure)	: Not classified
Specific target organ / systemic toxicity (Repeated exposure)	: Not classified
Aspiration hazards	: Classification not possible. (N/A)

This product is classified into the above classifications based on judgment theory of a mixture.

MATERIAL SAFETY DATA SHEET

12. Ecological Information

Ecological toxicity	: Classification not possible (N/A)
Biodegradability	: Classification not possible (N/A)
Bioaccumulation	: Classification not possible (N/A)
Mobility in soil	: Classification not possible (N/A)

Other adverse effects:

Hazardous to the aquatic environment (Acute)	: Not classified
Hazardous to the aquatic environment (Chronic)	: Not classified

This product is classified into the above classifications based on judgment theory of a mixture.

13. Disposal Consideration

Dump the waste matters following law, rules and regulations.

14. Transport Information

UN No. / Packaging group	: N/A
Marine pollutant	: N/A
Regulation in Japan	: N/A

Specific safety measures and conditions on transport:

Avoid wetting or rough handling so that the packaging will not be damaged. In case the bags are damaged and the pellets are scattered, pay attention so that no one will slip and fall. All of the spilled product should be collected immediately and placed in proper labeled container for dispose or recovery. Take precautionary measures against static discharges when using pneumatic transportation.

15. Regulatory Information

Other regulatory information:

We are not able to check up the regulatory information in regard to the substances in your country or region. Therefore, we request this matter would be filled by your responsibility. Regulatory information with regard to this product in your country or in your region should be examined by your own responsibility. Ensure this product in compliance with federal requirements and ensure conformity to local regulations.

16. Other Information / References

Other information:

The information relates to this specific material. It may not be valid for this material, if used in combination with any other materials or in any process. It is the user's responsibility to satisfy himself as to the suitability and completeness of this information for his own particular use. The information herein is given in good faith, but no warranty, express or implied, is made. Please consult us for further information. To the best of our knowledge, the information contained herein is accurate. However, we assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of user. All materials may present unknown hazards and should be used in caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It is advised to make their own tests to determine the safety and suitability of each such product or combination for their own purposes.

Test Report

No. CRSSA/26768-1/16
CRS Ref. CRSSA/16/3013/Toray

Date : 04/01/2017

Page: 1 of 5

TORAY PLASTICS (MALAYSIA) SDN BHD
2628, MK 1, SPT., LORONG PERUSAHAAN 4
PRAI FREE INDUSTRIAL ZONE
13600 PRAI, PENANG, MALAYSIA

The following merchandise was (were) submitted and identified by the client as:

Sample Description : TOYOLAC™ ABSG 100G-10
TOYOLAC™ ABSG 100G-20
TOYOLAC™ ABSG 100G-30

Sample Receiving Date : 28/12/2016
Testing Period : 28/12/2016 to 04/01/2017

Test Requested : Selected test(s) as requested by client

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

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

Analysts : Tan Mei Ann & Shirley Then

SGS (MALAYSIA) SDN. BHD.


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Test Report

No. CRSSA/26768-1/16
CRS Ref. CRSSA/16/3013/Toray

Date : 04/01/2017

Page: 2 of 5

Test results:

Test Part Description :

Sample Description : As per page 1 & 4

RoHS Directive 2011/65/EU Annex II

Test Item(s):	Unit	Test Method	Results	MDL	Limit
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5:2013 (Determination of Cd by ICP-OES)	N.D.	2	100
Lead (Pb)	mg/kg	With reference to IEC 62321-5:2013 (Determination of Pb by ICP-OES)	N.D.	2	1000
Mercury (Hg)	mg/kg	With reference to IEC 62321-4:2013 (Determination of Hg by ICP-OES)	N.D.	2	1000
Hexavalent Chromium (CrVI)	mg/kg	With reference to IEC 62321:2008 (Determination of CrVI by UV-Vis)	N.D.	2	1000
Sum of PBBs	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	-	1000
Monobromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Dibromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Tribromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Pentabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Hexabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Heptabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Octabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Nonabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-
Decabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	N.D.	5	-

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Sum of PBDEs	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	-	1000
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Dibromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Tri bromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Hexabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Heptabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Octabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Nonabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-
Decabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	N.D.	5	-

Note : (a) mg/kg = ppm ; (0.1wt% = 1000ppm)

(b) N.D. = Not Detected

(c) MDL = Method Detection Limit

(d) - = Not regulated

(e) The below information of raw materials or ingredients was provided by the client. SGS has no liability in verifying the authenticity of such information. The testing was carried out using the sample submitted as shown in the photo in page 4.

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Test Report

No. CRSSA/26768-1/16
CRS Ref. CRSSA/16/3013/Toray

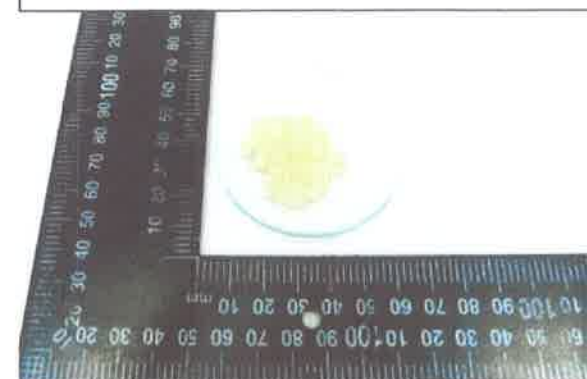
Date : 04/01/2017

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Test Part Description :

Sample Description : TOYOLAC™ ABSG 100G-10
TOYOLAC™ ABSG 100G-20
TOYOLAC™ ABSG 100G-30

TORAY PLASTICS (MALAYSIA) SDN BHD
CRSSA/26768-1/16



SGS authenticate the photo on original report only

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Test Report

No. CRSSA/26768-1/16
CRS Ref. CRSSA/16/3013/Toray

Date : 04/01/2017

Page: 5 of 5

**1. DETERMINATION OF CADMIUM CONTENT BY
IEC 62321-5 2013**

Sample Receiving and Registration
↓
Cut sample in small pieces
↓
Weight sample (0.2-0.5g) into digestion vessel
↓
Acid digestion (Microwave)
↓
"Totally Dissolved"
↓
Filtration
↓
Analyses by ICP

**2. DETERMINATION OF LEAD CONTENT BY
IEC 62321-5 2013**

Sample Receiving and Registration
↓
Cut sample in small pieces
↓
Weight sample (0.2-0.5g) into digestion vessel
↓
Acid digestion (Microwave)
↓
"Totally Dissolved"
↓
Filtration
↓
Analyses by ICP

**3. DETERMINATION OF MERCURY CONTENT BY
IEC 62321-4 2013**

Sample Receiving and Registration
↓
Cut sample in small pieces
↓
Weight sample (0.1-0.5g) into digestion vessel
↓
Acid digestion (Microwave)
↓
"Totally Dissolved"
↓
Filtration
↓
Analyses by ICP

**4. DETERMINATION OF HEXAVALENT CHROMIUM
BY IEC 62321 2008**

Sample Preparation
↓
Add colour-developing reagent
↓
Acidify with H₂SO₄
↓
Let stand for 5-10 min
↓
Analyses by UV- Spectrophotometer (540 nm)

**5. DETERMINATION OF PBB/PBDE WITH GC-MS
BY IEC 62321-6 2015**

Cut sample in small pieces
↓
Weight sample (0.5-4.0g) into extraction thimble
↓
Soxhlet Extraction with Toluene
↓
Filter through 0.45 µm membrane filter
↓
Analyses by GC-MS (with appropriate dilution)

*** End of Report ***

SGS (MALAYSIA) SDN. BHD.



TAY SIAM PINE
B.Sc.(HONS) MMIC
TECHNICAL MANAGER

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TORAY PLASTICS (MALAYSIA) SDN BHD
2628, MK. 1, SPT., LORONG PERUSAHAAN 4
PRAI FREE INDUSTRIAL ZONE
13600 PRAI, PENANG, MALAYSIA

The following merchandise was (were) submitted and identified by the client as:

Sample Description : TOYOLAC™ ABSG 100G-10
TOYOLAC™ ABSG 100G-20
TOYOLAC™ ABSG 100G-30
Sample Receiving Date : 28/12/2016
Testing Period : 28/12/2016 to 04/01/2017

Test Requested : Selected test(s) as requested by client
Test Method : Please refer to next page(s).
Test Results : Please refer to next page(s).
Analyst : Shirley Then

SGS (MALAYSIA) SDN. BHD.



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Test Report

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Test result:

Test Part Description :

Sample Description : TOYOLAC™ ABSG 100G-10
TOYOLAC™ ABSG 100G-20
TOYOLAC™ ABSG 100G-30

Optional: RoHS Directive 2011/65/EU, priority substances

Test Item(s):	Unit	Test Method	Results	MDL	Limit
Hexabromocyclododecane (HBCDD) (Cas#25637-99-4 & 3194-55-6)	mg/kg	Based on IEC 62321:2008 (Determination of HBCDD by GC-MS)	N.D.	10	-

Note:

- (a) Reference Information: Directive 2011/65/EU recasting RoHS directive 2002/95/EC: Hexabromocyclododecane (HBCDD), Bis (2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP) and Dibutyl phthalate (DBP) are considered as a priority for risk evaluation and substance restriction.
- (b) - = not regulated
- (c) N.D. = Not Detected
- (d) The below information of raw materials or ingredients was provided by the client. SGS has no liability in verifying the authenticity of such information. The testing was carried out using the sample submitted as shown in the photo in page 4.

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No. CRSSA/26768-2/16
CRS Ref. CRSSA/16/3013/Toray

Date : 04/01/2017

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Test result:

Test Part Description :

Sample Description : TOYOLAC™ ABSG 100G-10
TOYOLAC™ ABSG 100G-20
TOYOLAC™ ABSG 100G-30

RoHS Directive 2011/65/EU Annex II (amended by Directive (EU) 2015/863)

Test Item(s):	Unit	Test Method	Results	MDL	Limit
Bis (2-ethylhexyl) phthalate (DEHP) (CAS No. 117-81-7)	mg/kg	Based on EN 14372:2004 (Determination of DEHP by GC-MS)	N.D.	30	1000
Butyl benzyl phthalate (BBP) (CAS No. 85-68-7)	mg/kg	Based on EN 14372:2004 (Determination of BBP by GC-MS)	N.D.	30	1000
Dibutyl phthalate (DBP) (CAS No. 84-74-2)	mg/kg	Based on EN 14372:2004 (Determination of DBP by GC-MS)	N.D.	30	1000
Diisobutyl phthalate (DIBP) (CAS No. 84-69-5)	mg/kg	Based on EN 14372:2004 (Determination of DIBP by GC-MS)	N.D.	30	1000

- Note : (a) mg/kg = ppm ; (0.1wt% = 1000ppm)
(b) N.D. = Not Detected
(c) MDL = Method Detection Limit
(d) - = Not regulated

(e) The below information of raw materials or ingredients was provided by the client. SGS has no liability in verifying the authenticity of such information. The testing was carried out using the sample submitted as shown in the photo in page 4.

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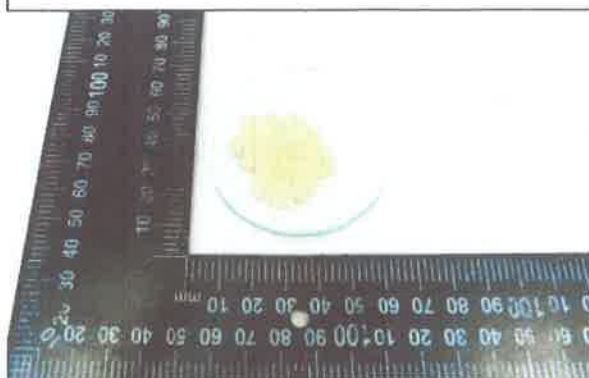
Date : 04/01/2017

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Test Part Description :

Sample Description : TOYOLAC™ ABSG 100G-10
TOYOLAC™ ABSG 100G-20
TOYOLAC™ ABSG 100G-30

TORAY PLASTICS (MALAYSIA) SDN BHD
CRSSA/26768-2/16



SGS authenticate the photo on original report only

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DETERMINATION OF HBCDD CONTENT

Cut sample in small pieces
↓
Weight sample (0.5-4.0g) into extraction thimble
↓
Soxhlet Extraction with Toluene
↓
Filter through 0.45 um membrane filter
↓
Analyses by GC-MS (with appropriate dilution)

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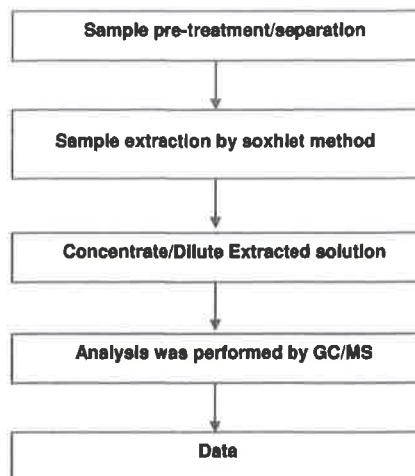
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Analytical flow chart of Phthalates Content



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