

To: Ms. Noreen Bianca Lanado - FDT Purchasing

Supplier Control No.: 19-004

Date: 2/11/2019

CC: _____

Supplier: SPPI

CC: _____

☐ Support for the RoHS

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

4 M Change notification (変更通知書)

Part number	KD04093-Y147	Part name	PANEL
Model	G960	Presence of attached datum and sample	<u>Appending</u> unappending
Content of change			
<input checked="" type="checkbox"/> Man (Worker's change) CHANGE OF TRIAL IN-CHARGE			
<input checked="" type="checkbox"/> Machine (Equipment change) FROM AB MOULD INJECT TO SPPI INJECT			
<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 Mold was fabricated in AB MOULD PHILS., transferred to SPPI for mass production.			
		Purchasing Section	
		Control Number	PAR-EX-19-4M-004
		Person in charge	N.B. Lanado
		Approval	<i>[Signature]</i> M.A. CHAN-087
[Change time]		Evaluation result before hand	
		<u>Appending</u> 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]

SANYO PLASTIC PHILS. INC.

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

Bifan, Laguna, Philippines

SUMITOMO DEMAG INJECTION MACHINE SET UP SHEET										CAPACITY : 100 TONS		M/C. NO. 45			
CONTROL NO.		FDTP-564-45-01		CONTROL NO.				CONTROL NO.							
PART NAME		PANEL R		PART NAME				PART NAME							
PART NUMBER		KD04093-Y147		PART NUMBER				PART NUMBER							
CUSTOMER		FDTP		CUSTOMER				CUSTOMER							
CAVITY AMOUNT		1		CAVITY AMOUNT				CAVITY AMOUNT							
WEIGHT PER PIECE				WEIGHT PER PIECE				WEIGHT PER PIECE							
SET UP BY:		J. ARANGUREN		SET UP BY:				SET UP BY:							
SET UP DATE:		8-Feb-19		SET UP DATE:				SET UP DATE:							
EVALUATED BY:		J. GALICIA		EVALUATED BY:				EVALUATED BY:							
NOTED:				NOTED:				NOTED:							
APPROVED:				APPROVED:				APPROVED:							
CLAMP CONDITION				CLAMP CONDITION				CLAMP CONDITION				CLAMP CONDITION			
APPLIED CLAMPING FORCE 100				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	240	VLIMIT	25	LIMIT	240	VLIMIT	25	LIMIT	240	VLIMIT	25	LIMIT	240	VLIMIT	25
2ND	150	2ND	30	2ND	150	2ND	30	2ND	150	2ND	30	2ND	150	2ND	30
1ST	60	1ST	10	1ST	60	1ST	10	1ST	60	1ST	10	1ST	60	1ST	10
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	150	1ST	20	1ST	150	1ST	20	1ST	150	1ST	20	1ST	150	1ST	20
2ND	85	2ND	15	2ND	85	2ND	15	2ND	85	2ND	15	2ND	85	2ND	15
M.LD. CLMP	1.55	VCLAMP	10	M.LD. CLMP	1.55	VCLAMP	10	M.LD. CLMP	1.55	VCLAMP	10	M.LD. CLMP	1.55	VCLAMP	10
POS.	10	LW PRES	15	POS.	10	LW PRES	15	POS.	10	LW PRES	15	POS.	10	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.	20	VEL.	20	VEL.	20	VEL.	20	VEL.	20	VEL.	20	VEL.	20	VEL.	20
PRES.	20	PRES.	25	PRES.	20	PRES.	25	PRES.	20	PRES.	25	PRES.	20	PRES.	25
MODE		TIMER CONT.		MODE		TIMER CONT.		MODE		TIMER CONT.		MODE		TIMER CONT.	
EJ. COUNT	1	EJ. KEEP	0.3	EJ. COUNT	1	EJ. KEEP	0.3	EJ. COUNT	1	EJ. KEEP	0.3	EJ. COUNT	1	EJ. KEEP	0.3
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 5				HOLD PRESS. VEL				HOLD PRESS. VEL				HOLD PRESS. VEL			
NO. OF STAGES 1				NO. OF STAGES				NO. OF STAGES				NO. OF STAGES			
TIME		PRESSURE		TIME		PRESSURE		TIME		PRESSURE		TIME		PRESSURE	
4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH	4TH
3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD	3RD
2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND	2ND
1ST	2	1ST	1000	1ST	2	1ST	1000	1ST	2	1ST	1000	1ST	2	1ST	1000
INJECTION/ FILLING				INJECTION/ FILLING				INJECTION/ FILLING				INJECTION/ FILLING			
FILL TIME 8				FILL TIME				FILL TIME				FILL TIME			
FILL PRESSURE 1500				FILL PRESSURE				FILL PRESSURE				FILL PRESSURE			
POSITION		VELOCITY		POSITION		VELOCITY		POSITION		VELOCITY		POSITION		VELOCITY	
5TH	11	5TH	10	5TH	11	5TH	10	5TH	11	5TH	10	5TH	11	5TH	10
4TH	14	4TH	15	4TH	14	4TH	15	4TH	14	4TH	15	4TH	14	4TH	15
3RD	27	3RD	20	3RD	27	3RD	20	3RD	27	3RD	20	3RD	27	3RD	20
2ND	95	2ND	7	2ND	95	2ND	7	2ND	95	2ND	7	2ND	95	2ND	7
1ST	100	1ST	20	1ST	100	1ST	20	1ST	100	1ST	20	1ST	100	1ST	20
COOLING 20		FILLING		COOLING		FILLING		COOLING		FILLING		COOLING		FILLING	
HOLD		OPERATION		HOLD		OPERATION		HOLD		OPERATION		HOLD		OPERATION	
INTERVAL 50		V-P PRES 0		INTERVAL		V-P PRES		INTERVAL		V-P PRES		INTERVAL		V-P PRES	
V-P SWITCH POS. SW		DOSE MODE STD		V-P SWITCH		DOSE MODE		V-P SWITCH		DOSE MODE		V-P SWITCH		DOSE MODE	
HOLDING PRES. OPERATION		DEF. FLARATING PATTERN		HOLDING PRES. OPERATION		DEF. FLARATING PATTERN		HOLDING PRES. OPERATION		DEF. FLARATING PATTERN		HOLDING PRES. OPERATION		DEF. FLARATING 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 mm/s	POS	0	mm	VEL mm/s	POS	0	mm	VEL mm/s	POS	0	mm	VEL mm/s
1ST	2ND	PLAST		1ST	2ND	PLAST		1ST	2ND	PLAST		1ST	2ND	PLAST	
POS	OFF	108	110	POS	OFF	108	110	POS	OFF	108	110	POS	OFF	108	110
BCK PRES	OFF	70	60	BCK PRES	OFF	70	60	BCK PRES	OFF	70	60	BCK PRES	OFF	70	60
REV	OFF	100	90	REV	OFF	100	90	REV	OFF	100	90	REV	OFF	100	90
DELAY ON				DELAY				DELAY				DELAY			
PULL BACK - AFTER				PULL BACK - AFTER				PULL BACK - AFTER				PULL BACK - AFTER			
POS	3	mm	VEL 25 mm/s	POS	3	mm	VEL mm/s	POS	3	mm	VEL mm/s	POS	3	mm	VEL mm/s
DELAY	OFF			DELAY	OFF			DELAY	OFF			DELAY	OFF		
MATERIAL NAME POM				MATERIAL NAME				MATERIAL NAME				MATERIAL NAME			
GRADE M90S				GRADE				GRADE				GRADE			
COLOR BLK				COLOR				COLOR				COLOR			
BARREL TEMP.				BARREL TEMP.				BARREL TEMP.				BARREL TEMP.			
T1	220	T4	205	T1	220	T4	205	T1	220	T4	205	T1	220	T4	205
T2	215	T3	200	T2	215	T3	200	T2	215	T3	200	T2	215	T3	200
T3	210			T3	210			T3	210			T3	210		
MOLD TEMP. SETTING				MOLD TEMP. SETTING				MOLD TEMP. SETTING				MOLD TEMP. SETTING			
CONTROLLER TYPE				CONTROLLER TYPE				CONTROLLER TYPE				CONTROLLER TYPE			
CORE		CAVITY		CORE		CAVITY		CORE		CAVITY		CORE		CAVITY	
SET	40	SET	40	SET	40	SET	40	SET	40	SET	40	SET	40	SET	40
ACTUAL	35	ACTUAL	35	ACTUAL	35	ACTUAL	35	ACTUAL	35	ACTUAL	35	ACTUAL	35	ACTUAL	35
ACTUAL MONITORING				ACTUAL MONITORING				ACTUAL MONITORING				ACTUAL MONITORING			
FILL START 112.99		FILL PEAK 1477		FILL START		FILL PEAK		FILL START		FILL PEAK		FILL START		FILL PEAK	
V-P SWITCH 11		CYCLE 41.69		V-P SWITCH		CYCLE		V-P SWITCH		CYCLE		V-P SWITCH		CYCLE	
CUSHION 6.62		FILLTIME 5.957		CUSHION		FILLTIME		CUSHION		FILLTIME		CUSHION		FILLTIME	
HOLD END 6.62		PLAST TM 19.26		HOLD END		PLAST TM		HOLD END		PLAST TM		HOLD END		PLAST TM	
REMARKS				REMARKS				REMARKS				REMARKS			
> FLASH TIME= 0.15SEC > ± 10 % ON PRESSURE, VELOCITY, TIME AND POSITION > ± 10°C ON TEMPERATURE															

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 : KD04093-Y147

PART NAME : PANEL R

MATERIAL USED

MATERIAL GENERIC NAME : POM

MATERIAL DESIGNATION : M90S

MANUFACTURE OF MATERIAL : POLYPLASTICS. CO., LTD

UL94 FLAME CLASS : 94HB

UL FILE No. : E45034

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.

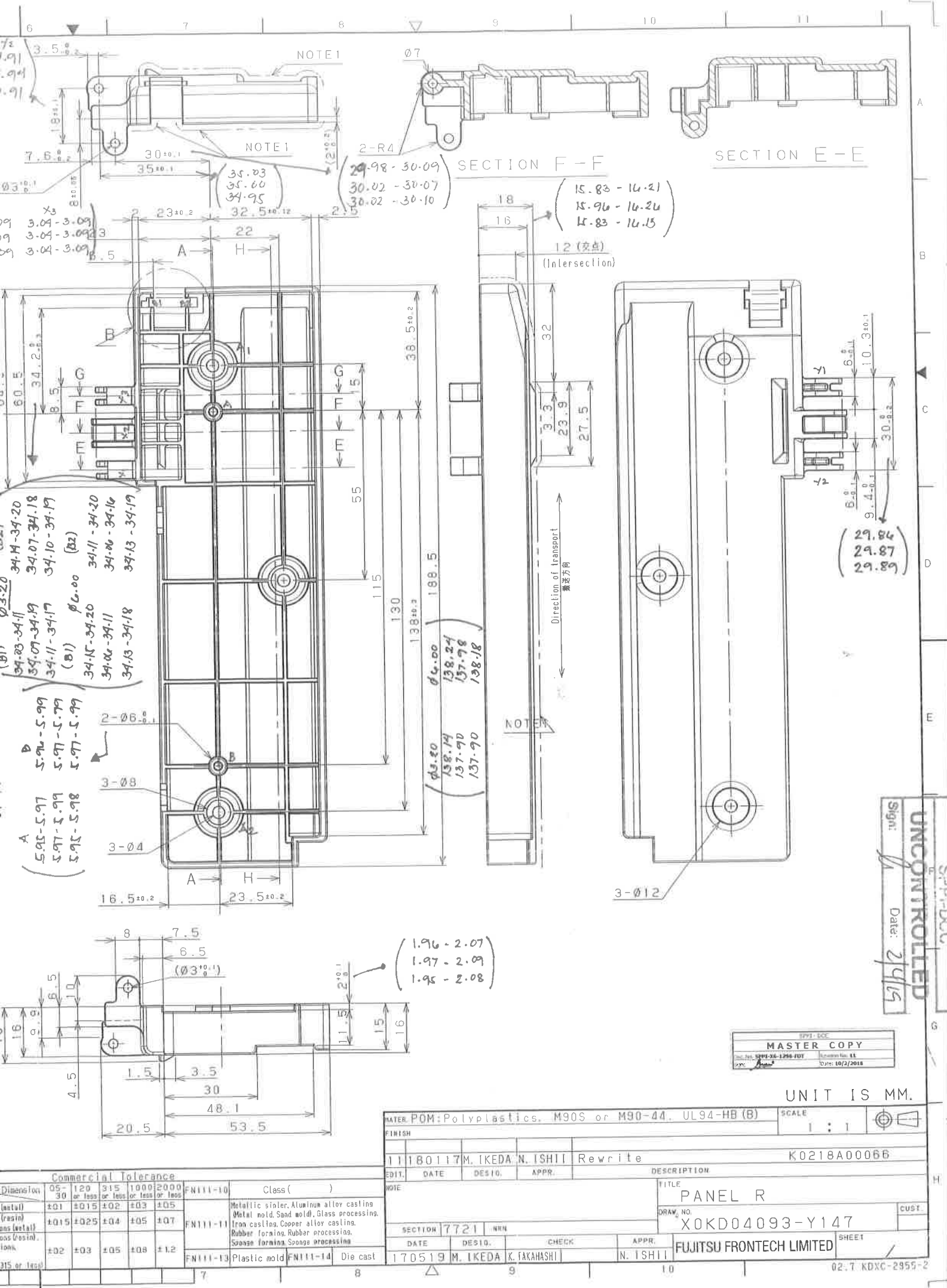
DATE 12-Feb-19

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
9/14/2015



UNCONTROLLED
Date: 2/4/15

MASTER COPY
Date: 10/2/2018

UNIT IS MM.

MATERIAL: POM: Polyplastics, M90S or M90-44, UL94-HB (B)					SCALE				
FINISH					1 : 1				
11180117		M. IKEDA, N. ISHII		Rewrite		K0218A00066			
EDIT		DATE		DESIG.		APPR.		DESCRIPTION	
NOTE					TITLE			PANEL R	
					DRAW. NO.			CUST.	
					X0KD04093-Y147				
SECTION		7721		HRN					
DATE		DESIG.		CHECK		APPR.		SHEET	
170519		M. IKEDA		K. TAKAHASHI		N. ISHII		FUJITSU FRONTTECH LIMITED	
9		10		02		7 KDXC-2955-2			

Commercial Tolerance									
Dimension	05	120	315	1000	2000	FN111-10	Class ()		
(mm)	±0.1	±0.15	±0.2	±0.3	±0.5	FN111-11	Metallic stoler, Aluminum alloy casting		
(mm)	±0.15	±0.25	±0.4	±0.5	±0.7	FN111-11	Metal mold, Sand mold, Glass processing		
(mm)	±0.2	±0.3	±0.5	±0.8	±1.2	FN111-13	Iron casting, Copper alloy casting		
(mm)	±0.2	±0.3	±0.5	±0.8	±1.2	FN111-13	Rubber forming, Rubber processing		
(mm)	±0.2	±0.3	±0.5	±0.8	±1.2	FN111-13	Sponge forming, Sponge processing		
(mm)	±0.2	±0.3	±0.5	±0.8	±1.2	FN111-13	Plastic mold		
(mm)	±0.2	±0.3	±0.5	±0.8	±1.2	FN111-13	Die cast		

SAFETY DATA SHEET (SDS)

Issued: January 18, 2013

Revised: January 25, 2016

FileNo. 1001

1. Chemical Product & Company Identification

CHEMICAL PRODUCT NAME:	DURACON®	M90S CD3069
NAME OF COMPANY:	Polyplastics Co., Ltd.	
ADDRESS:	2-18-1 Konan, Minato-ku, Tokyo, 108-8280 Japan	
SECTION IN CHARGE:	Quality Assurance Dept.	
TELEPHONE NUMBER:	03-6711-8605	
FACSIMILE NUMBER:	03-6711-8616	

2. Hazards identification

[GHS CLASSIFICATION]

Physical and Chemical Hazards

- Flammable solids : Classification not possible
- Self-reactive substances and mixtures : Not applicable
- Pyrophoric solids : Not classified
- Self-heating substances and mixtures : Classification not possible
- Substances and mixtures, which in contact with water, emit flammable gases : Not classified
- Oxidizing solids : Not classified
- Corrosive to metal : Not classified

Health Hazards

- Carcinogeneses : No hazard
- Specific target organ/systemic toxicity (Repeated exposure) : No hazard

Environmental Hazards

- Classification not possible

[SYMBOL]

- None

[SIGNAL WORD]

- None

[HAZARD STATEMENT]

- None

[PRECAUTIONARY STATEMENTS]

Prevention

- Wash hands thoroughly after handling.
- Wear protective gloves.

Response

• -

Storage

- Avoid direct sunlight and store in a well-ventilated place.

Disposal

- Dispose of contents/container in accordance with local & national regulations.

3. Composition/information on ingredients

SUBSTANCE/MIXTURE

- Mixture

COMMON CHEMICAL NAME

- Polyoxymethylene

SYNONYMS

- Polyacetal(POM)

INGREDIENTS AND COMPOSITION

- POM $\geq 97.5\%$, Carbon black $\leq 0.5\%$, Others $\leq 2\%$

CHEMICAL FORMULA

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SERIAL No. IN OFFICIAL GAZETTE

- 7-129(base resin)
(Law Concerning Examination and Regulation of Manufacture, etc., of Chemical Substances)

CAS No.

- 24969-26-4(base resin)

INGREDIENTS CONTRIBUTING TO THE HAZARD

- Formaldehyde.
Cadmium, lead, hexavalent chromium and mercury are not used in this grade.

4. First-aid measures

INGESTION

- When a gas generated from the molten polymer has been inhaled, move to area of fresh air without delay and wait until the victim is recovered. If sick feeling continues, ask a physician for advice.

SKIN CONTACT

- Cool the contacted skin with clean water without delay, if a

EYE CONTACT	<p>contact with the polymer in a molten form. Do not force to remove the solid resin on the skin. If any burns are observed on the skin, ask a physician for advice.</p> <p>: Cool and rinse the eye with clean water for at least 15 minutes when the eyes had contact with molten polymer. In case of wearing contact lenses, remove the lenses as soon as possible, and ask a physician for advice. When the eye had contact with the polymer in an ordinary solid form, rinse the eye with clean water without delay. If the discomfort persists, ask a physician for advice.</p> <p>: Help to vomit as much as possible. If sick feeling continues, ask a physician for advice.</p>
SWALLOW	
5. Fire-fighting measures	
EXTINGUISHING MEDIA	: Water, foam fire-extinguishing agent, powder fire-extinguishing agent, and carbon dioxide gas.
SPECIFIC METHODS	: Extinguish the fire with water. A method of extinguishing an ordinary fire may be applied. Do not apply water directly to processing machines.
SPECIFIC HAZARDS	: Incomplete combustion leads to generation of toxic gases such as carbon monoxide or formaldehyde, in addition to carbonic acid gas and water.
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS	: In case the fire gained force, use a gas mask or other protective equipment.
6. Accidental release measures	
PERSONAL PRECAUTIONS	: When pellets were spilled on the road or floor, wipe them off with a besom or cleaner not to cause slipping.
ENVIRONMENTAL PRECAUTION	: Handle the spillage in accordance with provisions given in the "Resin pellet spillage preventive manual", in order to prevent intakes by marine animals and birds.
7. Handling and storage	
HANDLING	: Polyacetal resin in a pellet form will neither ignite nor explode at room temperatures, but it falls under the inflammables designated by the Fire Service Law. Keep it away from the igniting sources, as it quickly gains force once it is ignited.
HANDLING 2	: Polyacetal resin in a powdered form is likely to cause dust explosion and is therefore designated in the Guideline for Hazard of Dust Explosion in U.S.Bureau of Mines. Effective earthing means or use of inert gas like N2 are required for dust handling equipment to eliminate static electricity.
HANDLING 3	: This pellets spilled on the floor are likely to cause slipping. Remove such spillage at any times.
HANDLING 4	: For molding work, effective means for local exhaust are required to discharge gases generated by melt processing.
HANDLING 5	: Avoid inhaling of gases generated in molding work. Do not directly touch resin of high temperature.
HANDLING 6	: Avoid retaining hot resin in the processing machines for many hours.
HANDLING 7 STORAGE	: Avoid mixed extrusion with strong acid, oxidizing agents and PVC. Keep the substance away from any fire or heat sources for the sake of safe storage.
STORAGE 2	: This polymer is a synthetic resin designated as an inflammable substance by the Fire Service Law and should be handled in accordance with municipal rules and regulations (concerning fire-fighting equipment, indoor storage, for instance).
RECOMMENDED PACKAGING	: No information.

MATERIALS

8. Exposure controls/ personal protection

CONTROL CONCENTRATION

: None at present

PERMISSIBLE CONCENTRATION

: OSHA PEL/1985

Max. permissible concentration of inactive powder 15mg/m³

- ditto - (Aspiration) 5mg/m³

ACGIH TLV/1992 1993

Exposure limit of the powder TWA 10 mg/m³

(Reference) Human exposure to formaldehyde -

Ministry of Health & Welfare/2002

Guideline value 0.08 ppm

OSHA Parameter/1992

TWA 0.75 ppm

STEL 2 ppm

ACGIH TLV/1992 1993

TWA 0.3 ppm

ENGINEERING MEASURE

: •When handling dust: Use totally enclosed containers resisting dust explosion.

•When heat melted in molding: Effective local ventilation must be provided.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION

: Wear a dust-proof mask.

HAND PROTECTION

: Wear heat-resisting gloves against burns, when handling molten polymer.

EYE PROTECTION

: Wear protective glasses or goggles.

SKIN & BODY PROTECTION

: Wear long sleeve clothes against burns, when handling molten polymer.

9. Physical and chemical properties

APPEARANCE etc.

: Pellet

BOILING POINT

: Not applicable

VAPOUR PRESSURE

: Not applicable

VOLATILITY

: Not applicable

INITIAL BOILING POINT

: Not applicable

SUBLIMATION

: None

MELTING POINT

: 165°C

DENSITY

: 1.41

SOLUBILITY

: Insoluble in water

FLASH POINT

: 320°C or higher

IGNITION POINT

: 400°C or higher

EXPLOSION PROPERTY

: Not applicable

INFLAMMABILITY

: Inflammable(Designated as inflammable resin by the Fire Service Law)

REACTIVITY WITH WATER

: None

OXIDIZABILITY

: None

SELF-REACTIVITY

: None

DUST EXPLOSIVENESS

: Upper explosion limit : Not applicable. Lower explosion limit : 35g/m³

10. Stability and reactivity

STABILITY AND REACTIVITY

: Stable for normal storage or handling.

CONDITIONS TO AVOID

: Avoid contacts with strong acid, oxidizing agent or PVC under hot melt conditions.

HAZARDOUS DECOMPOSITION

: Formaldehyde will be generated when heated (for drying or melting) or burnt.

PRODUCTS

11. Toxicological information

SKIN CORROSION/IRRITATION

: No finding.

SERIOUS EYE DAMAGE/IRRITATION	: Gas generated in drying or melting is irritating eyes and skins.
RESPIRATORY OR SKIN	: No finding
SENSITISATION	
ACUTE TOXICITY(INCLUDING LD50)	: No finding.
SUBACUTE TOXICITY	: No finding.
CHRONIC TOXICITY	: No finding.
CARCINOGENECITY	: This product contains the substance of carcinogenic category 2 in the GHS classification.(CB)
MUTAGENECITY(Micro organisms, chromosomal aberration)	: No finding.
REPRODUCTIVE TOXICITY	: No finding.
TERATOGENICITY	: No finding.
OTHERS(Including generation of hazardous gases by reaction with water, for example)	: No finding in this report means that there will be no hazard in general, but no proving data available at the time of reporting.
OTHER CAUTIONS	: With regard to dust, the maximum permissible concentration and limits are fixed by OSHA and ACGIH.
OTHER CAUTIONS 2	: Formaldehyde will be generated when heated (for drying or melting) or burnt.
OTHER CAUTIONS 3	: Carcinogenicity class of formaldehyde, which may be generated if overheated.
OTHER CAUTIONS 4	IARC(International Agency for Research on Cancer): Group1 : Toxicological information of Carbon black which is an ingredient is shown below. Toxicity of the ingredient does not appear as product for pellet. When dust is generated by cutting and sanding, toxicity appears. Avoid breathing dust and avoid generating dust. [Carbon black] Acute toxicity Oral: Rat LD50 15,400mg/kg GHS Not classified Dermal: No information Inhalation: No information Skin Corrosion/Irritation: No information Eye Damage/Irritation: No information Sensitization-Skin: No information Germ Cell Mutagenicity: No information Carcinogenicity: IARC 2B; Possible carcinogenic to humans. Toxicity to Reproduction: No information Specific Target Organ Toxicity(Single Exposure) No information Specific Target Organ Toxicity(Repeated Exposure) Category 1 based on the influence on lungs (the hyperplasia of the epithelium, pulmonary fiber symptom) in pneumoconiosis of human and a rat inhalational examination in the range of guidance level Category 1 Aspiration Hazard: No information
REMARKS	: Hazards information and so on result from the national classification of carbon black.

12. Ecological information

BIODEGRADABILITY	: No finding.
BIOACCUMULATION	: No finding.
FISH TOXICITY	: No finding.
HAZARDS TO OZONE LAYER	: None

13. Disposal considerations	
WASTE FROM RESIDUES	: This is designated as waste plastics among industrial wastes by the Wastes Disposal Law. Disposal waste pellets through licensed wastes handlers or local autonomous bodies if they are handling wastes disposal.
WASTE FROM RESIDUES 2	: When disposed by incineration, use the well controlled incinerators in accordance with the Wastes Disposal Law, Air Pollution Control Law and Water Pollution Prevention Law.
14. Transport information	
UN CLASSIFICATION NUMBER	: Not restricted for ICAO/IATA.
OTHER CAUTIONS	: Handle with care so as not to give damages to containers or not to be subjected to wetting.
OTHER CAUTIONS 2	: Secure the containers firmly so as not to cause collapsing.
15. Regulatory information	
FIRE SERVICE LAW	: Inflammable synthetic resin Designated quantity: More than 20m3 for the foamed product. More than 3,000 kg for other types.
WASTE DISPOSAL LAW	: Waste plastics among industrial wastes.
INDUSTRIAL SAFETY AND HEALTH LAW	: Designated as Cabinet order No.93 Annex 9 No.130.(Carbon black)
OTHERS	: Formaldehyde is designated as Class 2 substance by the Industrial Safety and Health Law(Regulations concerning hazards caused by specific chemicals) and designated as deleterious substance by the Poisons and Deleterious Substance Control Law. Recommended usage, criteria, and limit values are provided by Japan Industrial Safety and Health Society, OSHA and ACGIH.
16. Other information	
HANDLING OF THE DETAILS GIVEN ABOVE	: This SDS is the English version translated from the Japanese SDS which is prepared for domestic use. Details given above are based on references, information and data available at this moment, but no warranty can be made on exactness of these details. They are also prepared on the assumption that the product will be handled in a normal way. For special handling, adequate safety and environmental measures should be taken in respect to its applications. Our products are not specifically intended for implants for medical and dental applications, and therefore they are not recommended for such applications. "No finding" in this report means that there will be no hazard in general, but no proving data is available at the time of reporting.
WHERE TO CALL FOR FURTHER INFORMATION	: Polyplastics Co., Ltd. Quality Assurance Dept. Tel. No 03-6711-8605

*DURACON® is a registered trademark of Polyplastics Co., Ltd. in Japan and other countries.

No. WR0905003206

5 22, 2009

To SANYO PLASTIC PHILIPPINES, INC.

Material Certification

We certificate that grades mentioned below do not contain the chemicals listed below, which are regulated by EC Directive 2002/95/EC (RoHS directive), beyond the bounds of allowable concentration values judging from its formulation. We do not intentionally use those chemicals, either.

Brand	Grade	Color No.
DURACON	M90S	CD3069

Chemicals

1. Cadmium
2. Lead
3. Mercury
4. Hexavalent chromium
5. Polybrominated biphenyl (PBB)
6. Polybrominated diphenylether (PBDE)

MAC*

- : 0.01%
- : 0.1%
- : 0.1%
- : 0.1%
- : 0.1%
- : 0.1%

* : A maximum allowable concentration value by weight

Polyplastics Co., Ltd.



Michiyuki Sugita
Manager
Quality Assurance Department

FOR EXTERNAL USE ONLY

Polyplastics

Polyplastics Co., Ltd.
Quality Assurance Department
JR Shinagawa East Building,
18-1, Konan 2-chome, Minato-ku,
Tokyo, 108-8280, Japan
TEL.: 81-3-6711-8605
FAX.: 81-3-6711-8616

April 16, 2010

To whom it may concern :

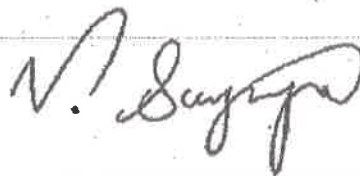
3rd proposal for REACH SVHC

Regarding Polyplastics Products sold under DURACON®, FORTRON®, VECTRA®, FREQTIS® and TOPAS®


We confirm that the intentional composition of the above mentioned products do not contain more than 0.1% of the following substances:

No	Substance name	CAS number	EC number
1	Trichloroethylene	79-01-6	201-167-4
2	Boric acid	10043-35-3 / 11113-50-1	233-139-2 / 234-343-4
3	Disodium tetraborate, anhydrous	1330-43-4 12179-04-3 1303-96-4	215-540-4
4	Tetraboron disodium heptaoxide, hydrate	12267-73-1	235-541-3
5	Sodium chromate	7775-11-3	231-889-5
6	Potassium chromate	7789-00-6	232-140-5
7	Ammonium dichromate	7789-09-5	232-143-1
8	Potassium dichromate	7778-50-9	231-906-6

Polyplastics Co., Ltd.



N. Sugiyama
General Manager
Quality Assurance Department

Doc. No. SP-17-04E	Rev. 01
Sign: 	Date: 2010.04.16

FOR INTERNAL USE ONLY

October 20, 2009

To whom it may concern :

Additional proposal for REACH SVHC

Regarding Polyplastics Products sold under DURACON®, FORTRON®, VECTRA®, FREQTIS® and TOPAS®

We confirm that the intentional composition of the above mentioned products do not contain the following substances:

No	Substance name	CAS number	EC number
1	Anthracene oil	90640-80-5	292-602-7
2	Anthracene oil, anthracene paste, distn.Light	91995-17-4	295-278-5
3	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9
4	Anthracene oil, anthracene-low, anthracene fraction	90640-82-7	292-604-8
5	Anthracene oil, anthracene paste	90640-81-6	292-603-2
6	Coal tar pitch, high temperature	65996-93-2	266-028-2
7	Acrylamide	79-06-1	201-173-7
8	Aluminosilicate, Refractory Ceramic Fibers	-	-
9	Zirconia Aluminosilicate, Refractory Ceramic Fibers	-	-
10	2,4-Dinitrotoluene	121-14-2	204-450-0
11	Diisobutyl phthalate	84-69-5	201-553-2
12	Lead chromate	7758-97-6	231-846-0
13	Lead chromate molybdate sulfate red (C.I.Pigment Red 104)	12656-85-8	235-759-9
14	Lead sulfochromate yellow (C.I.Pigment Yellow 34)	1344-37-2	215-693-7
15	Tris(2-chloroethyl) phosphate	115-96-8	204-118-5

Polyplastics Co., Ltd.



N. Sugiyama
General Manager
Quality Assurance Department

Doc. No. 0711-X01-0096	Rev. 0
Sign: [Signature]	Date: 9/20/09

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Polyplastics

Polyplastics Co., Ltd.
Quality Assurance Department
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18-1, Konan 2-chome, Minato-ku,
Tokyo, 108-8280, Japan
TEL.: 81-3-6711-8605
FAX: 81-3-6711-8616

December 1, 2008

To whom it may concern :

REACH SVHC

Regarding Polyplastics Products sold under DURACON®, FORTRON®, VECTRA®, FREQTIS® and TOPAS®

We confirm that the intentional composition of the above mentioned products do not contain the following substances:

No.	Substance name	CAS number	EC number
1	Anthracene	120-12-7	204-371-1
2	4,4'-Diaminodiphenylmethane	101-77-9	202-974-4
3	Dibutyl phthalate	84-74-2	201-557-4
4	Cyclododecane	294-62-2	206-33-9
5	Cobalt dichloride	7646-79-9	231-589-4
6	Diarsenic pentaoxide	1303-28-2	215-116-9
7	Diarsenic trioxide	1327-53-3	215-481-4
8	Sodium dichromate, dihydrate	7789-12-0	234-190-3
9	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4
10	Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-0
11	Hexabromocyclododecane (HBCDD)	25637-99-4	247-148-4
12	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5
13	Bis(tributyltin)oxide	56-35-9	200-268-0
14	Lead hydrogen arsenate	7784-40-9	232-064-2
15	Triethyl arsenate	15606-95-8	427-700-2
16	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7

Polyplastics Co., Ltd.



N. Sugiyama
General Manager
Quality Assurance Department

Doc. No. QM-80-029 E	Sign:
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