POKETONE™

Water & Food Application

EARTH FRIENDLY

Non Toxic
High Efficiency

Acrylate Free
Melamine Free
Bisphenol A Free
Formaldehyde Free
Lead/ Chrome/ Free
Phthalate Free

Global Warming Potential

* PA6	6.70	
* PA66	6.40	
* PC	3.40	
* POM	3.20	
* ABS	3.10	
** PK	3.08	(kg CO_2 eq)

* Other ETP data is based upon the Eco-profiles data from **www.plasticseurope.org**

** PK Data is based upon Korea LCI database and Ecoinvent database.

POKETONE™ : Perfect match for water & food contact

A new thermoplastic polymer HYOSUNG Chemical POKETONE is a family of Semi-crystalline aliphatic polyketone, made of carbon monoxide(CO) and olefins.
POKETONE are used as engineering plastics in a broad range of application with eco-friendly and non-toxic characteristics, such as low VOCs(Volatile Organic compounds), free of formaldehyde and acrylonitrile, making it perfect for **drinking water purifier parts, table ware.**

Benefits for Water & Food contact parts

- No Formaldehyde
- Food Contact & Water certifications (FDA, NSF, KTW, WRAS, ACS, W270)
- Low water absorption & Dimensional stability
- High flowability & non-toxic characteristics such as less VOCs
- Leaves no aftertaste in water

Certifications

ISO 10993 · FDA APPROVED · KTW · WRAS APPROVED PRODUCT · USP Class VI · NSF · ACS · W270 · DVGW · REACH · RoHS COMPLIANT · GB

Properties

Properties	Unit (Method: ISO)	POKETONE M330F	POKETONE M630F
Density	-	1.24	1.24
Melt Index	g/10min	60	6
Tensile Strength	MPa	60	58
Elongation at Break	%	> 300	> 300
Flexural Strength	MPa	57	53
Flexural Modulus	MPa	1,500	1,350
Impact Strength	KJ/m^2	8	17

Tested and passed for food contact application under EU regulations

intertek
Total Quality. Assured.

TEST REPORT

Number : HKGH03255585

Conclusion:
The submitted sample was tested under the following requirements requested by the applicant, subject to the information stated in the remark and attached page(s) for details :

	Requirement	Result
(1)	European Commission Regulation No.10/2011 Annex II, Regulation No.2016/1416, Regulation No. 2017/752, Regulation No. 2020/1245 and Regulation No.1935/2004 - Specific Migration of Heavy Metal	Pass
(2)	European Commission Regulation No. 10/2011 and Regulation No. 2016/1416, Regulation No. 2020/1245 and Regulation No. 1935/2004 - Overall migration	Pass

Component no.	Component description	Location	Material type provided by client
1.	Grey Plastic	Fork	Polyketone

Test for Hazardous material elution (PK vs POM)

▶ **Test Condition** : After 24hr of 17EA parts in 90°C hot water,1 Liter

Sample Detail: **POKETONE(PK)** parts for water purifier (After 3 -year usage)

Items	Standard		Results	Items	Standard		Results
	Conc.	Unit			Conc.	Unit	
Cd	below 0.005	mg/L	ND	1,1,1-Trichloroethane	below 0.01	mg/L	ND
Se	below 0.001	mg/L	ND	Dichloromethane	below 0.002	mg/L	ND
Pb	below 0.001	mg/L	ND	Cis-1,2-Dichloroethylene	below 0.004	mg/L	ND
As	below 0.001	mg/L	ND	Tetrachloroethylene	below 0.001	mg/L	ND
Cu	below 0.1	mg/L	ND	Epichlorohydrin	below 0.01	mg/L	ND
Cr^{6}	below 0.005	mg/L	ND	Vinyl acetate	below 0.01	mg/L	ND
$KMnO_4$	below 1.0	mg/L	ND	Styrene	below 0.002	mg/L	ND
Phenols	below 0.000 5	mg/L	ND	1,2-Butadiene	below 0.001	mg/L	ND
Carbon tetrachloride	below 0.000 2	mg/L	ND	1,3-Butadiene	below 0.001	mg/L	ND
1,2-Dichloroethane	below 0.000 4	mg/L	ND	N,N-Dimethylaniline	below 0.01	mg/L	ND
1,1-Dichloroethylene	below 0.003	mg/L	ND	Formaldehyde	below 0.1	mg/L	ND
1,1,2-Trichloroethane	below 0.000 6	mg/L	ND	Toluene	below 0.07	mg/L	ND
Trichlorethylene	below 0.003	mg/L	ND	Xylenes	below 0.05	mg/L	ND
Benzene	below 0.001	mg/L	ND				

Sample Detail : **POM** parts for water purifier

$KMnO_4$	below 1.0	mg/L	0.6	Styrene	below 0.002	mg/L	ND
Phenols	below 0.000 5	mg/L	ND	1,2-Butadiene	below 0.001	mg/L	ND
Carbon tetrachloride	below 0.000 2	mg/L	ND	1,3-Butadiene	below 0.001	mg/L	ND
1,2-Dichloroethane	below 0.000 4	mg/L	ND	N,N-Dimethylaniline	below 0.01	mg/L	ND
1,1-Dichloroethylene	below 0.003	mg/L	ND	Formaldehyde	below 0.1	mg/L	0.066
1,1,2-Trichloroethane	below 0.000 6	mg/L	ND	Toluene	below 0.07	mg/L	ND
Trichlorethylene	below 0.003	mg/L	ND	Xylenes	below 0.05	mg/L	ND
Benzene	below 0.001	mg/L	ND				

* ND : No detection

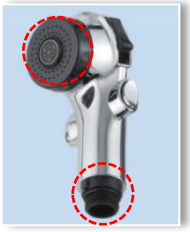
POKETONE water purifier parts

POKETONE™ applications at home

① Water purifier parts

② Kitchenware parts

③ Water supply parts



NEW Beer Brewing Parts

Wedge Seal Cap - POK

Tri-Clover Pressure Lid

Quick Disconnect

7mm Barb