

Intermediate Bulk Container
packaging | storing | transporting

Specifications & Compliances





Sustainable Watertight Container

Product Description

Multitank™ 400, is a rectangular watertight plastic container for the storage and transport of bulk products, such as solids, liquids, or semi-liquids, with a 400 liter capacity, which is molded in one-piece using an injection molding process. It is an RPP reusable plastic tank and can be nested within another plastic tank and stacked one above the other.

Product Components

Basic		Optional	
Code	Description	Code	Description
BD-420	Body	MN-420	Main Net
ML-420	Main Lid	RN-420	Round Net Ø320
RL-420	Round Lid Ø320	SF-420	Small Filter
FP-420	Feet Plugs (x4)	VP-420	Valve 2"
LP-420	Locking Pins (x22)	TR-420	Traverse
AV-420	Air Valve Ø50	WL-420	Wheel (x4)
MG-420-S	Main Gaskets (standard)	MG-420-L	Main Gasket (Food Grade)
RO-420-S	Round O-ring (standard) Ø320	RO-420-L	Round O-ring (Food Grade) Ø320
VO-420-S	Valve O-ring (standard) Ø50	VO-420-L	Valve O-ring (Food grade) Ø50
GV-420-S	Gas Valve gasket (standard)	GV-420-S	Gas Valve gasket (Food Grade)
		AS-420-S-2	Aseptic Bag Standard 410lit, 2x2"

Product characteristics

Status:	Commercial
Availability:	Europe, Australia N/Z, Asia, Middle East, USA, Latin America
Processing Method:	Injection Molding
Features:	Watertight, Oil tight, Airtight *, Stackable, Nestable, Antioxidant, High Rigidity, UV Residence, Chemical Resistance, Discharge Hole 2 inches BSB thread ,Low Warpage, 100% Recycled, <small>*up to 1,5 psi</small>
Typical Customer Applications:	Food Products preserved in liquids, Liquid food products, Semi Liquid Food products, Pulps, Other Liquids, Chemicals, Solids



Dimensions

External Dimensions including Lid:	top:	L x W x H	1.000 x 800 x 958	(mm)
	bottom:	L x W	800 x 600	(mm)
External Dimension excluding Lid:	top:	L x W x H	1.000 x 800 x 935	(mm)
Internal Dimension excluding Lid:		L x W x H	963 x 763 x 778	(mm)

Height of Stacked:	Dynamic Stacked (2 height)	1847	(mm)
	Static Stacked (3 height)	2850	(mm)

Height of Nested	10 Multitanks height	2360	(mm)
	11 Multitanks height	2850	(mm)
	Each one more	160	(mm)

Main Lids nested (include round lid, gas valve, pins, gaskets)	37 Main Lids height	2384	(mm)
	38 Main Lids height	2520	(mm)
	each one	64	(mm)

Volume - Weight

Nominal Volume: 400 liters

Working Volume: 385 liters

Weight:	<u>Complete Multitank:</u>	33,0	kg
	- Body:	23,8	kg
	- Main Lid:	7,20	kg
	- Round Lid:	0,50	kg
	- 4 x Feet Plugs	0,94	kg
	- 22 x Locking Pins:	0,35	kg
	- Gas Valve:	0,04	kg
	- Set of 3 gaskets	0,17	kg

Typical Properties

Maximum Loading Capacity:	Static Loading	(1 x Multitank)	500	kg
	Dynamic Loading	(2 x Multitanks)	1120	kg
	Static Loading	(3 x Multitanks)	1680	kg*

*Not recommended if temperature exceed 45⁰ C

Working Temperature*: -20⁰ C to +60⁰ C

*a sufficient fluctuation of dimensions may happen according raw material specifications

Raw Materials - Product Compliance

All plastic and gasket raw materials, used for the production of Multitank, complies with relevant regulation intend to come into contact with food:

EU

Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/

EEC Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food, 321/2011 (1/4/2011), 1282/2011 (28/11/2011), 1183/2012 (30/11/2012)

Commission Regulation (EC) No 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food (GMP) as amended Migration tests carried on, under the conditions 10 days at 40°C, in the food simulants A, B and D2 show that the Overall Migration Limit of 10 mg/dm² food is not exceeded.

USA

Title 21 Code of Federal Regulations (CFR, 2013 Edition) Olefin polymers parts 177.1520 (c) Specifications 3.2a, 178.2010 and other regulations promulgated under the Federal Food, drug and Cosmetic Act as may be applicable. The finished polymers are to contact food only under Conditions of Use B through H described in table 2 of 21 CFR 176.170 (c) and when contacting fatty food of Types III, IV-A, V, VII-A and IX described in table 1 of 21 CFR 176.170 (c), the finished articles are to have a volume of at least 18.9 liters (5 gallons)

HDPE (High Density Polyethylene):

The bellow plastic parts manufacture with the highest standard of PP (polypropylene).
Body BD-420, Main Lid ML-420,

HDPE (High Density Polyethylene):

The bellow plastic parts manufacture with the highest standard of HDPE.
Round Lid RL-420, Feet Plugs FP-420, Main Net MN-420,
Round Net RN-420, Small Filter SF-420, Valve VP-420, Traverse TR-420

PE (Polyamide):

Locking Pins (LP-420) manufactures from High quality Polyamide.

Gaskets

Blue or White Food Quality Nitrile Rubber

The components used and their maximum proportions in the composition of the rubber mixture are in accordance with the FDA (food and drug administration) regulation 177 (indirect food additives) section 177.2600 – rubber articles for repeated usage.

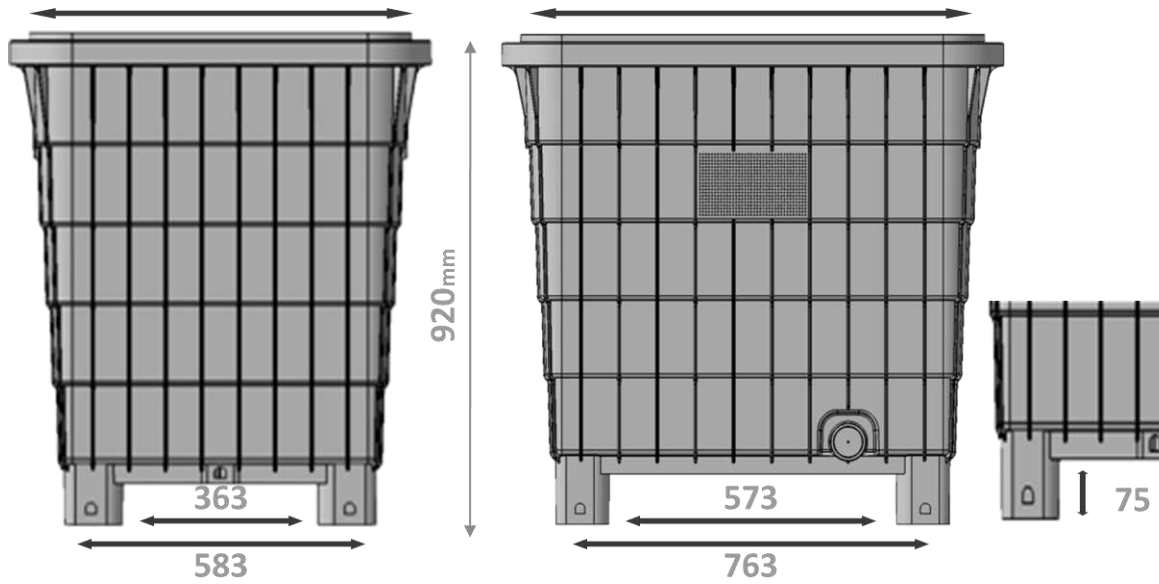
Colors – Print Features

Standard colors: Grey (RAL-9023), Green (RAL-5017), Red (RAL-3020), Blue (RAL-5017), Yellow (RAL-1003), Black (RAL-9910), White (RAL-1030)

Special private colors and logo printing features are available upon request.



Basic Dimensions:



Migration Tests

Specific food simulants and test conditions for overall migration for aqueous food as per USFDA, EEC and BIS standards

SI No	Condition of Use	Simulant and Test Conditions		
		USFD	BIS	EEC
1	Frozen condition (no thermal treatment in container)	Dist. Water (21°C/48h)	Dist. Water (40°C/10days)	10% Ethanol (20°C/10days)
2	Room temperature filled and stored and also in refrigerated	Dist. Water (49°C/48h)	Dist. Water (40°C/10days)	10% Ethanol (40°C/10days)
3	Hot filled or pasteurized bellow 66°C/70°C	Dist. Water (66°C/2h)	Dist. Water (70°C/2h)	10% Ethanol (70°C/2h)
4	Hot filled or pasteurized Above 70°C/ bellow 100°C	Dist. Water (100°C/0.5h)	Dist. Water (100°C/1h)	10% Ethanol (100°C/1h)

SI No	Condition of Use	Storage for 30days		
		Test Method	Units	Result
1	Overall migration into acetic acid 3% (w/v) using total immersion. Temperature 40°C	EN 1186-3:2002 (E)	mg/dm ²	2.9
2	Overall migration into ethanol 20% (v/v) using total immersion. Temperature 40°C	EN 1186-3:2002 (E)	mg/dm ²	<1.0
3	Overall migration into iso-octane using total immersion. Temperature 40°C	EN 1186-14:2002 (E)	mg/dm ²	3.0

Overall migration studies were carried o HDPE food contact material under various simulating storage conditions of time and temperature as per USFDA, EEC directives and BIS

	Storage Conditions	US-FDA Dist. Water (21°C/48h)		BIS Dist. Water (40°C/10days)		EEC 10% Ethanol (20°C/10days)	
		mg/dm ²	(ppm)	mg/dm ²	(ppm)	mg/dm ²	(ppm)
1	Frozen condition (no thermal treatment in container)	0,36 ^a ±0.11	3.66	0,40 ^b ±0.05	4.00	0,40 ^c ±0.05	4.16
2	Room temperature filled and stored and also in refrigerated	0,38 ^a ±0.05	3.83	0,40 ^b ±0.05	4.00	0,42 ^c ±0.05	4.23
3	Hot filled or pasteurized bellow 66°C/70°C	0,42 ^a ±0.05	4.26	0,44 ^b ±0.05	4.46	0,46 ^c ±0.05	4.63
4	Hot filled or pasteurized Above 70°C/ bellow 100°C	0,57 ^a ±0.12	5.71	0,58 ^b ±0.13	5.83	0,61 ^c ±0.14	6.10