

TYPICAL DATA SHEET*	ISSUE DATE	OCT 2024
HIGH DENSITY POLYETHYLENE	www.tpco.ir	
HD6040UA		BRIZ/TABRIZPETROCHEMICAL D.BOX:51745-354/TEL:+984134282612

HD6040UA is high density polyethylene copolymer containing butene-1(C4) as co monomer with based on INEOS's gas phase

technology.

Features: HD6040UA have the following characteristics: good impact strength, excellent surface finish and UV stabilized. This grade

has food contact approval.

Processing Method: injection molding Application: large dustbins and pails, pallet

Description

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUE
MELT FLOW INDEX (190°C 2.16KG)	g/10min	ASTM D-1238	3.9
DENSITY	gr/cm³	ASTM D-1505	0.960
VICAT SOFTENING POINT(120°C/hr 1kg)	°c	ASTM D-1525	112
HDT(120°C/HR AND 1.82MPa)	°c	ASTM D-648	72
HARDNESS (SHORE D 3Sec)	-	ISO868-1978 TYPE D	65
TENSILE STRESS AT YEILD	MPa	ASTM D-638	20
TENSILE STRESS AT BREAK	MPa	ASTM D-638	24
ELONGATION AT YEILD	%	ASTM D-638	8
ELONGATION AT BREAK	%	ASTM D-638	700
FLEXURAL MODULUS	MPa	ASTM D-790	1200
CHARPY IMPACT(NOTCHED)	KJ/m ²	ASTM D-6110	10
YELLOW INDEX	-	ASTM E-313	-1
WHITENESS INDEX		ASTM E-313	60

^{*} All above mentioned data are typical values and not to be construed as real specifications. Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S. (Standard Sales Specifications)

Grade Suffix (Additives Indication) UA: GENERAL ANTIOXIDANT AND LIGHT STABLISER



TECHNICAL DATA SHEET

Product Data sheet: BG-HD-6040

High Density Polyethylene	Injection Molding		
HDPE: BG-HD-6040	Density: 0.956-0.960	MFI: 3.5-4.3	
Feature:	Application:	Additive:	
 High tensile strength High Elongation High Toughness Good Stiffness 	 Pallets Dustbins & Pails Shipping Container Fish Crates Storing Cases 	5 .0	

Material properties (this data are typical values and shall not be construed as product specifications.)

Resin Properties	Unit	Condition	Typical Value	Test Method
Melt Flow Rate (MFR)	g/10 min	190°c/2.16 kg	3.5-4.3	ASTM D1238
Density	g/cm²	23°C	0.956-0.960	ASTM D1505
Physical Properties	Unit	Condition	Typical Value	Test Method
Izod Impact	J/M _		Min. 85	ASTM D256
Flexural Young Modulus	MPa	4	Max. 1300	ASTM D638
Tensile Modulus	MPa	-	1040	ASTM D638
Tensile Strength @ Yield	MPa	¥:	31-33	ASTM D638
Tensile Strength @ Break	MPa	2"	Min. 15	ASTM D638
Tensile Elongation @ Yield	MPa	-	Min. 8	ASTM D638
Tensile Elongation @ Break	%	<u>=</u>	Min. 1300	ASTM D638
/icat Softening Temperature	*C	_	130-133	ASTM D1525