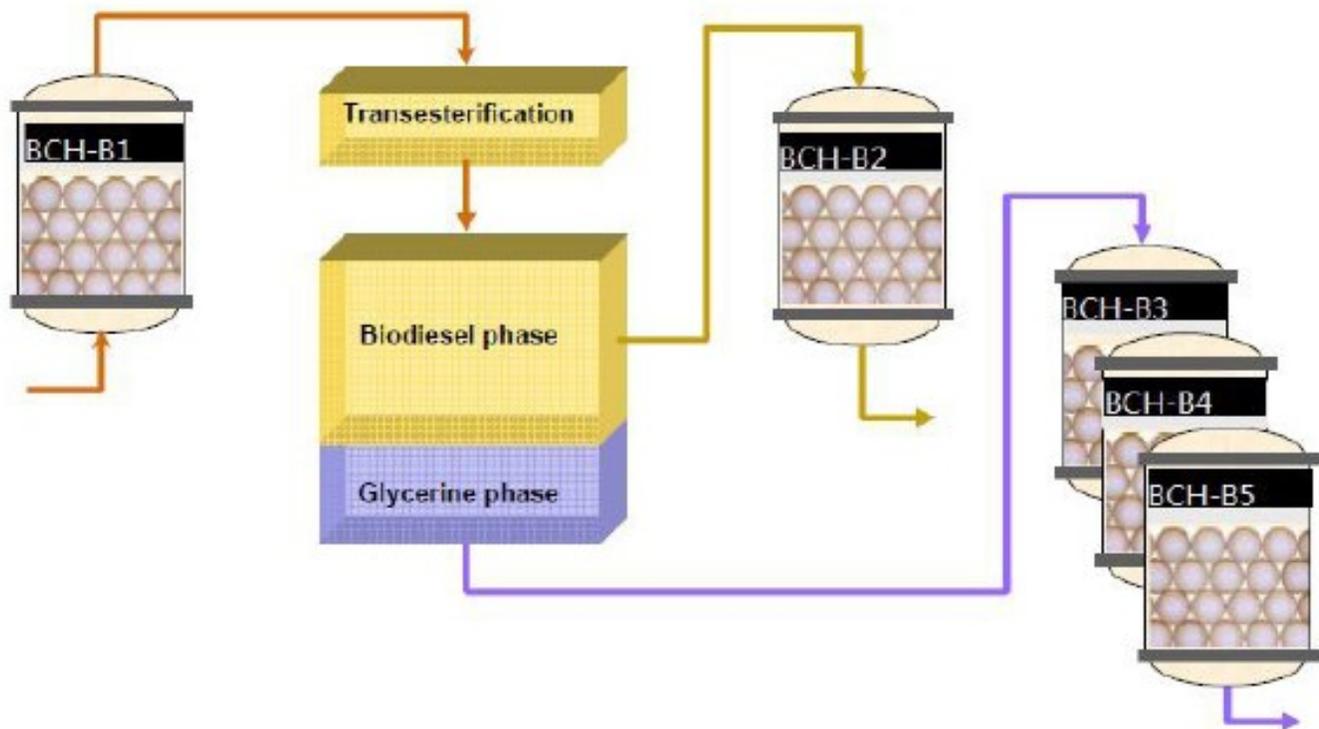




ION EXCHANGE RESIN

We have high quality resin specially designed for biodiesel and glycerin processors. Comparable to DOWEX, Lanxess, Amberlite, Purolite, Lewatit, Tulsion – at a fraction of the cost.



BCH-B1: Esterification catalyst for fatty acids removal from triglycerides.

BCH-B2: Adsorber for glycerine, soaps, salts, water, MeOH

BCH-B3: Separation of salts from glycerine

BCH-B4: Polisher, cation removal from glycerine

BCH-B5: Polisher, anion removal, decolorization from glycerine

BCH-B1 to BCH-B5 are similar to Lanxess's GF101 to GF505. We also have BC800 and BD90-M to purify biodiesel. By the way, you do not need to use the process from BCH-B3 to BCH-B5, it just depends on what kind of Glycerine you want your glycerine be.

PRODUCT SPECIFICATION

BCH-B1 Macroporous Strongly Acidic Cation Exchange Resin

PRODUCT DESCRIPTION

BCH-B1 is a premium grade, macroporous strong acid cation exchange resin. It is a copolymer of styrene and divinylbenzene with sulfonic acid exchange group. The unique structure allows for high operating capacity and excellent chemical and physical stability. Its matrix promotes better kinetics and better diffusion rates into and out of the bead. Due to the special surface area, pore size, it is used as catalysts in synthetic industry. It can be used in polar and non-polar media, especially suitable for the reduction of free fatty acids in triglycerides prior to transesterification to biodiesel.

ITS PHYSICAL & CHEMICAL PROPERTIES

Appearance		Opaque spherical beads
Polymer Matrix Structure		Styrene - DVB
Type		Macroporous strong acid
Functional Group		R—(SO ₃)-M ⁺
Ionic Form		H ⁺
Moisture Content	%	57 - 63
Total Capacity	eq/kg	≥ 4.7
Shipping Weight	g/ml	0.72-0.80
Density	g/ml	1.12- 1.18
Granularity(0.40-1.25mm)	%	≥ 95
Stability	°C	-20-+130
Storability	max. years	2

PACKAGING

25L/bag or 1000L/bag

PRODUCT SPECIFICATION

BCH-B2 Cation Exchange Resin

PRODUCT DESCRIPTION

BCH-B2 is a bead form macroporous dry cation exchange resin. It has excellent physical and chemical properties such as high capacity and operating capacity, lower pressure drop, well physical and chemical stability. BCH-B2 is specially used in the removal of glycerine and soaps from biodiesel. It can remove soaps and salts simultaneously.

ITS PHYSICAL & CHEMICAL PROPERTIES

Type		Macroporous strong acid
Functional Group		R—(SO ₃)M ⁺
Ionic Form		Na ⁺
Moisture Content	%	<3
Capacity in Mass	mmol/g	≥ 4.5
Capacity in Volume	mmol/ml	≥ 1.9
Density	g/ml	1.24
Shipping Weight	g/ml	0.74
Mean bead size	mm	0.60-0.70
Uniformity Coefficient		≤ 1.1
Whole Bead Rate	%	≥ 95
Stability	• •	-20-+40
Storability	max. years	2

SUGGESTED OPERATING CONDITIONS

pH Range		0 – 14
The High Temperature	• •	≤ 150
The Bed high	m	1.0 – 3.0
Regenerant		Methanol
Regenerant Flow Rate	m/h	2
Operating Flow Rate	m/h	4 -5

PACKAGING

25L/bag or 1000L/bag

PRODUCT SPECIFICATION

BCH-B3 Strongly Acidic Cation Exchange Resin

PRODUCT DESCRIPTION

BCH-B3 is a bead form polystyrene sulphonate cation exchange resin. It has excellent physical and chemical properties such as high capacity and operating capacity, lower pressure drop, well physical and chemical stability. The product is supplied in the sodium form. BCH-B3 is used in glycerine purification.

ITS PHYSICAL & CHEMICAL PROPERTIES

Appearance		Clear spherical beads
Polymer Matrix Structure		Styrene - DVB
Functional Group		R—(SO ₃)-M ⁺
Ionic Form		Na ⁺
Moisture Content	%	45 -50
Capacity in Volume	mmol/ml	≥ 1.95
Shipping Weight	g/ml	0.77– 0.87
Density	g/ml	1.25– 1.29
Mean Bead Size	mm	0.55 – 0.65
Uniformity Coefficient		≤ 1.20
Swelling • Na→H •	%	≤ 10
Whole Spherical Rate After Attrition	%	≥ 90

SUGGESTED OPERATING CONDITIONS

pH Range		0 – 14	
The High Temperature	• •	≤ 120 (For Na Form)	
The Bed high	m	1.0 – 3.0	
Regenerant		NaCl	HCl
Regenerant Level	g/mol	100-120	70-80
Regenerant Concentration	%	5 - 8	3-4
Regenerant Flow Rate	m/h	4 - 5	3-5
Regenerant Temperature	• •	Normal Temperature	
Regenerant Contact Time	min	• •30	
Exchange Flow Rate	m/h	4 - 5	3-5
Exchange Time	min	20 -30	
Rinsing Flow Rate	m/h	15 - 20	
Rinsing Time	min	10 -20	
Operating Flow Rate	m/h	15 -30	

PACKAGING

25L/bag or 1000L/bag

PRODUCT SPECIFICATION

BCH-B4 Macroporous Strongly Acidic Cation Exchange Resin

PRODUCT DESCRIPTION

BCH-B4 is a premium grade, macroporous strong acid cation exchange resin. It is a copolymer of styrene and divinylbenzene with sulfonic acid exchange group. The unique structure allows for high operating capacity and excellent chemical and physical stability. Its matrix promotes better kinetics and better diffusion rates into and out of the bead. It is used in glycerine polishing.

ITS PHYSICAL & CHEMICAL PROPERTIES

Appearance		Opaque spherical beads
Polymer Matrix Structure		Styrene - DVB
Type		Macroporous strong acid
Functional Group		R—(SO ₃)-M+
Ionic Form		H+
Moisture Content	%	50 - 55
Total Capacity	eq/kg	• •4.8
Shipping Weight	g/ml	0.72-0.80
Density	g/ml	1.12– 1.18
Mean bead size	mm	0.60-0.70
Uniformity Coefficient		< 1.20
Storability	max. years	2
Stability	• •	-20-+130

PACKAGING

25L/bag or 1000L/bag

PRODUCT SPECIFICATION

BCH-B5 Macroporous Anion Resin

PRODUCT DESCRIPTION

BCH-B5 is a macroporous anion exchange resin with styrene-DVB matrix. **BCH-B5** has superior kinetics and greater resistance to oxidation and osmotic shock. It has high regeneration efficiency with low amount of regenerant and yields high operating capacities. Large organic molecules are also readily removed by the resin and easily eluted due to macroporous structure of **BCH-B5**. It is used in glycerine polishing.

ITS PHYSICAL & CHEMICAL PROPERTIES

Appearance		White to light yellow spherical beads
Polymer Matrix Structure		Styrene - DVB
Type		macroporous intermediate base
Ionic Form		Free base/Cl ⁻
Moisture Content	%	61-66
Capacity in Volume	equiv/l	≥ 1.3
Shipping Weight	g/ml	0.61– 0.65
Density	g/ml	1.03- 1.06
Mean Particle Size	mm	0.54– 0.64
Uniformity Coefficient		≤ 1.20
Swelling• OH→Cl• •	%	≤ 25

SUGGESTED OPERATING CONDITIONS

pH Range		0 – 7
The High Temperature	• •	≤ 60
The Bed high	m	0.8 – 3.0
Regenerant		NaOH
Regenerant Level	g/l	50-80
Regenerant Concentration	%	1 - 4
Regenerant Flow Rate	m/h	2-10
Regenerant Temperature	• •	Atmosphere surrounding temperature
Regenerant Contact Time	min	• •30
Exchange Flow Rate	m/h	3 - 6
Exchange Time	min	20 - 30
Rinsing Flow Rate	m/h	20 - 30
Rinsing Time	min	10 - 20
Operating Flow Rate	m/h	20 - 40

PACKAGING

25L/bag or 1000L/bag

PRODUCT SPECIFICATION

BC 800

BC800 Strong Acidic Cation Exchange Resin

PRODUCT DESCRIPTION

BC800 is a dry bead form polystyrene sulphonate cation exchange resin. It has excellent physical and chemical properties such as high capacity and operating capacity, lower pressure drop, well physical and chemical stability. The product is used in the removal of glycerine and soaps from biodiesel. It can remove soaps and salts simultaneously. It can be as dehydrating agent, catalysts.



ITS PHYCIAL & CHEMICAL PROPERTIES

Appearance		Black / Dark brown spherical beads
Polymer Matrix Structure		Styrene - DVB
Type		Gel strong acid
Functional Group		R—(SO ₃)-M ⁺
Ionic Form		H ⁺
Moisture Content	%	≤ 3
Capacity in Volume	mmol/ml	≥ 1.8
Shipping Weight	g/ml	0.78– 0.83
Density	g/ml	1.17– 1.22
Whole Bead Rate	%	≥ 99
Swelling• Na→H• •	%	≤ 10

SUGGESTED OPERATING CONDITIONS

pH Range		0 – 14
The High Temperature	• •	≤ 150
The Bed high	m	1.0 – 3.0
Regenerant		Methanol
Regenerant Flow Rate	m/h	2
Operating Flow Rate	m/h	4 -5

PACKAGING

25L/bag or 1000L/bag

PRODUCT SPECIFICATION

BD80-M Strongly Acidic Cation Exchange Resin

International Equivalents: Amberlite bd10dry, Dowex DR-G8, Purolite PD206, Lewatit GF 202, Tulsion T-45 BD

PRODUCT DESCRIPTION

BD80-M is a bead form macroporous dry cation exchange resin. It has excellent physical and chemical properties such as high capacity and operating capacity, lower pressure drop, well physical and chemical stability. The product is supplied in the hydrogen form. BD80-M is specially used in the removal of catalyst, glycerine and soaps from biodiesel. It can remove soaps and salts simultaneously.

ITS PHYSICAL & CHEMICAL PROPERTIES

Appearance		Brown spherical beads
Ionic Form		H ⁺
Moisture Content	%	<3
Capacity in Mass	mmol/g	≥ 4.5
Capacity in Volume	mmol/ml	≥ 1.9
Density	g/ml	1.16-1.24
Shipping Weight	g/ml	0.78-0.83
Granularity(0.3-1.2mm)	%	≥ 95
Effective Particle Size Range	mm	0.40 – 0.60
Uniformity Coefficient		≤ 1.50
Swelling	Dry to biodiesel%	6 – 15
	Dry to methanol %	130
	Dry to water %	150
Whole Bead Rate	%	≥ 95

SUGGESTED OPERATING CONDITIONS

pH Range		0 – 14
The High Temperature	• •	≤ 150
The Bed high	m	1.0 – 3.0
Regenerant		Methanol
Regenerant Flow Rate	m/h	2
Operating Flow Rate	m/h	4 -5

APPLICATIONS

BD80-M macroporous strong acid cation exchange resin is widely used in Biodiesel Purification. It can be as dehydrating agent, catalysts. It can also be as ion exchanger & absorbent of heavy metal cation or impurities in nonaqueous solution.

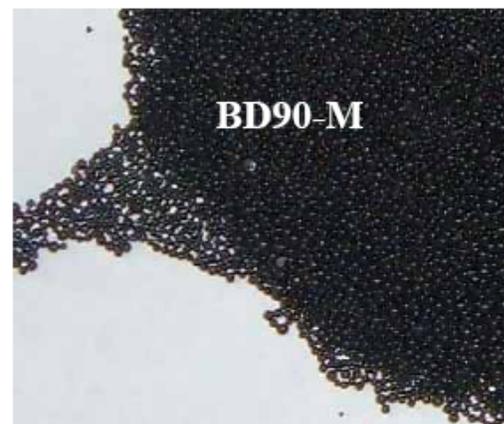
PACKAGING

25L/bag

PRODUCT SPECIFICATION

BD90-M Strongly Acidic Cation Exchange Resin

International Equivalents: Amberlite bd10dry, Dowex DR-G8, Purolite PD206, Lewatit GF 202, Tulsion T-45 BD



PRODUCT DESCRIPTION

BD90-M is a bead form macroporous dry cation exchange resin. It has excellent physical and chemical properties such as high capacity and operating capacity, lower pressure drop, well physical and chemical stability. The product is supplied in the hydrogen form. BD90-M is specially used in the removal of glycerine and soaps from biodiesel. It can remove soaps and salts simultaneously.

ITS PHYSICAL & CHEMICAL PROPERTIES

Appearance		Black spherical beads
Polymer Matrix Structure		Styrene - DVB
Type		Macroporous strong acid
Functional Group		R-(SO ₃)M ⁺
Ionic Form		H ⁺
Moisture Content	%	<3
Capacity in Mass	mmol/g	≥ 4.5
Capacity in Volume	mmol/ml	≥ 1.9
Density	g/ml	1.16-1.24
Shipping Weight	g/ml	0.78-0.83
Granularity(0.3-1.2mm)	%	≥ 95
Effective Particle Size Range	mm	0.40 – 0.60
Uniformity Coefficient		≤ 1.50
Swelling • Na→H • •	%	≤ 8
Whole Bead Rate	%	≥ 95

SUGGESTED OPERATING CONDITIONS

pH Range		0 – 14
The High Temperature	• •	≤ 150
The Bed high	m	1.0 – 3.0
Regenerant		Methanol
Regenerant Flow Rate	m/h	2
Operating Flow Rate	m/h	4 -5

APPLICATIONS

BD90-M macroporous strong acid cation exchange resin is widely used in Biodiesel Purification. It can be as dehydrating agent, catalysts. It can also be as ion exchanger & absorbent of heavy metal cation or impurities in nonaqueous solution.

PACKAGING

25L/bag