

Bagian : QC

RQ000376

ANALISA PERMINTAAN BARANG

Due date : 25 Maret 2026

Tanggal : 23 Februari 2026

No	Kode Barang	Nama Barang	Satuan	Stok Saat Ini (A)	Rencana Kebutuhan (B)	Kekurangan (A -B + C)	Pending Penerimaan (C)	Jumlah	Realisasi Pembelian	Realisasi Penggunaan
1	IRE00719	Phosphomolybdic Acid	Gr	0	25	-25	0	25	0	0

Catatan :

Phosphomolybdic Acid Hydrate Ex. Sigma Aldrich Cat. No: 221856-25G- Digunakan sebagai reagen untuk analisa parameter Identifikasi *Si* pada bahan baku PEG 6000.

- Packing size: 1 Botol @25 Gram

- Estimasi harga: Rp.1.714.000

Latar belakang permintaan:

- Sehubungan dengan adanya pengujian Identifikasi pada bahan baku PEG 6000 sesuai dengan Japanese Pharmacopoeia dimana pada pengujian Identifikasi dibutuhkan reagen Phosphomolibdic Acid Hydrate. Maka dari itu diperlukan pengadaan reagen tersebut untuk menunjang kegiatan analisa rutin bahan baku tersebut.

- Pemesanan pertama Dept. QC

- Terlampir Japanese Pharmacopoeia, penawaran harga dan rencana kebutuhan.

Pemohon


ADA 23/26
02

Mengetahui


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62

yellow-green precipitate is formed.

pH <2.54> Dissolve 1.0 g of Macrogol 1500 in 20 mL of water: the pH of the solution is between 4.0 and 7.0.

Purity (1) Clarity and color of solution—Dissolve 5.0 g of Macrogol 1500 in 50 mL of water: the solution is clear and colorless.

(2) Acidity—Dissolve 5.0 g of Macrogol 1500 in 20 mL of neutralized ethanol, and add 2 drops of phenolphthalein TS and 0.20 mL of 0.1 mol/L sodium hydroxide VS: the solution is red in color.

(3) Ethylene glycol and diethylene glycol—Place 50.0 g of Macrogol 1500 in a distilling flask, add 75 mL of diphenyl ether, warm to dissolve if necessary, distil slowly under a reduced pressure of 0.13 to 0.27 kPa and take 25 mL of the distillate in a 100-mL container with 1-mL graduation. To the distillate add exactly 20 mL of water, shake vigorously, cool in ice water, congeal the diphenyl ether, and filtrate into a 25-mL volumetric flask. Wash the residue with 5.0 mL of ice-cold water, combine the washings with the filtrate, warm to room temperature, and add water to make 25 mL. Transfer this solution to a glass-stoppered flask, shake with 25.0 mL of freshly distilled acetonitrile, and use this solution as the sample solution. Separately, to 62.5 mg of diethylene glycol add a mixture of water and freshly distilled acetonitrile (1:1) to make exactly 25 mL, and use this solution as the standard solution. Take exactly 10 mL each of the sample solution and the standard solution, and add to each exactly 15 mL of cerium (IV) diammonium nitrate TS. Perform the test with this solution as directed under Ultraviolet-visible Spectrophotometry <2.24> within 2 to 5 minutes: the absorbance of the solution obtained from the sample solution at the wavelength of maximum absorption at about 450 nm is not larger than the absorbance of the solution obtained from the standard solution.

Water <2.48> Not more than 1.0% (2 g, volumetric titration, direct titration).

Residue on ignition <2.44> Not more than 0.1% (1 g).

Containers and storage Containers—Tight containers.

Macrogol 4000

Polyethylene Glycol 4000

マクロゴール 4000

Macrogol 4000 is a polymer of ethylene oxide and water, represented by the formula $\text{HOCH}_2(\text{CH}_2\text{OCH}_2)_n\text{CH}_2\text{OH}$, in which the value of n ranges from 59 to 84.

Description Macrogol 4000 is a white, paraffin-like solid, occurring as flakes or powder. It is odorless or has a faint, characteristic odor.

It is very soluble in water, freely soluble in methanol and in pyridine, and practically insoluble in ethanol (99.5) and in diethyl ether.

Congealing point: 53 – 57°C

Identification Dissolve 50 mg of Macrogol 4000 in 5 mL of dilute hydrochloric acid, add 1 mL of barium chloride TS, shake, and filter, if necessary. To the filtrate add 1 mL of a solution of phosphomolybdic acid n -hydrate (1 in 10): a yellow-green precipitate is formed.

pH <2.54> Dissolve 1.0 g of Macrogol 4000 in 20 mL of water: the pH of this solution is between 4.0 and 7.5.

Purity (1) Clarity and color of solution—A solution of 5.0 g of Macrogol 4000 in 50 mL of water is clear and colorless.

(2) Acidity—Dissolve 5.0 g of Macrogol 4000 in 20 mL of neutralized ethanol by warming, cool, and add 0.20 mL of 0.1 mol/L sodium hydroxide VS and 1 drop of phenolphthalein TS: the color of the solution is red.

Average molecular mass Weigh accurately about 12.5 g of Macrogol 4000, transfer to an about 200-mL glass-stoppered pressure bottle, add about 25 mL of pyridine, dissolve by warming, and allow to cool. Separately, pipet 300 mL of freshly distilled pyridine into a 1-L light-resistant, glass-stoppered bottle, add 42 g of phthalic anhydride, dissolve with vigorous shaking, and allow to stand for 16 hours or more. Pipet 25 mL of this solution, transfer to the former pressure bottle, stopper the bottle tightly, wrap it securely with strong cloth, and immerse in a water bath, previously heated at $98 \pm 2^\circ\text{C}$, to the level so that the mixture in the bottle soaks completely in water. Maintain the temperature of the bath at $98 \pm 2^\circ\text{C}$ for 30 minutes. Remove the bottle from the bath, and allow to cool in air to room temperature. Add exactly 50 mL of 0.5 mol/L sodium hydroxide VS and 5 drops of a solution of phenolphthalein in pyridine (1 in 100). Titrate <2.50> with 0.5 mol/L sodium hydroxide VS until a light red color remains for not less than 15 seconds. Perform a blank determination in the same manner.

$$\text{Average molecular mass} = (M \times 4000)/(a - b)$$

M : Amount (g) of Macrogol 4000 taken

a : Volume (mL) of 0.5 mol/L sodium hydroxide VS consumed in the blank determination

b : Volume (mL) of 0.5 mol/L sodium hydroxide VS consumed in the test of the sample

Average molecular mass is between 2600 and 3800.

Water <2.48> Not more than 1.0% (2 g, volumetric titration, direct titration).

Residue on ignition <2.44> Not more than 0.2% (1 g).

Containers and storage Containers—Well-closed containers.

Macrogol 6000

Polyethylene Glycol 6000

マクロゴール 6000

Macrogol 6000 is a polymer of ethylene oxide and water, represented by the formula $\text{HOCH}_2(\text{CH}_2\text{OCH}_2)_n\text{CH}_2\text{OH}$, in which the value of n ranges from 165 to 210.

Description Macrogol 6000 is a white, paraffin-like solid, occurring as flakes or powder. It is odorless or has a faint, characteristic odor.

It is very soluble in water, freely soluble in pyridine, and practically insoluble in methanol, in ethanol (95), in ethanol (99.5) and in diethyl ether.

Congealing point: 56 – 61°C

Identification Dissolve 50 mg of Macrogol 6000 in 5 mL of dilute hydrochloric acid, add 1 mL of barium chloride TS,

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shake, and filter, if necessary. To the filtrate add 1 mL of a solution of **phosphomolybdic acid *n*-hydrate (1 in 10)**: a yellow-green precipitate is formed.

pH <2.54> Dissolve 1.0 g of Macrogol 6000 in 20 mL of water: the pH of this solution is between 4.5 and 7.5.

Purity (1) Clarity and color of solution—Dissolve 5.0 g of Macrogol 6000 in 50 mL of water: the solution is clear and colorless.

(2) Acidity—Dissolve 5.0 g of Macrogol 6000 in 20 mL of neutralized ethanol by warming, cool, and add 0.20 mL of 0.1 mol/L sodium hydroxide VS and 1 drop of phenolphthalein TS: the color of the solution is red.

Average molecular mass Weigh accurately about 12.5 g of Macrogol 6000, transfer to an about 200-mL glass-stoppered pressure bottle, add about 25 mL of pyridine, dissolve by warming, and allow to cool. Separately, pipet 300 mL of freshly distilled pyridine into a 1-L light-resistant, glass-stoppered bottle, add 42 g of phthalic anhydride, dissolve with vigorous shaking, and allow to stand for 16 hours or more. Pipet 25 mL of this solution, transfer to the former pressure bottle, stopper the bottle tightly, wrap it securely with strong cloth, and immerse in a water bath, previously heated at $98 \pm 2^\circ\text{C}$, to the level so that the mixture in the bottle soaks completely in water. Maintain the temperature of the bath at $98 \pm 2^\circ\text{C}$ for 30 minutes. Remove the bottle from the bath, and allow to cool in air to room temperature. Add exactly 50 mL of 0.5 mol/L sodium hydroxide VS and 5 drops of a solution of phenolphthalein in pyridine (1 in 100). Titrate <2.50> with 0.5 mol/L sodium hydroxide VS until a light red color remains for not less than 15 seconds. Perform a blank determination in the same manner.

$$\text{Average molecular mass} = (M \times 4000)/(a - b)$$

M: Amount (g) of Macrogol 6000 taken

a: Volume (mL) of 0.5 mol/L sodium hydroxide VS consumed in the blank determination

b: Volume (mL) of 0.5 mol/L sodium hydroxide VS consumed in the test of the sample

Average molecular mass is between 7300 and 9300.

Water <2.48> Not more than 1.0% (2 g, volumetric titration, direct titration).

Residue on ignition <2.44> Not more than 0.2% (1 g).

Containers and storage Containers—Well-closed containers.

Macrogol 20000

Polyethylene Glycol 20000

マクロゴール 20000

Macrogol 20000 is a polymer of ethylene oxide and water, represented by the formula $\text{HOCH}_2(\text{CH}_2\text{OCH}_2)_n\text{CH}_2\text{OH}$, in which the value of *n* lies between 340 and 570.

Description Macrogol 20000 occurs as white, paraffin-like flakes or powder. It is odorless or has a faint, characteristic odor.

It is freely soluble in water and in pyridine, and practically insoluble in methanol, in ethanol (95), in petroleum benzene and in macrogol 400.

Congealing point: $56 - 64^\circ\text{C}$

Identification Dissolve 50 mg of Macrogol 20000 in 5 mL of dilute hydrochloric acid, add 1 mL of barium chloride TS, shake, and filter, if necessary. To the filtrate add 1 mL of a solution of phosphomolybdic acid *n*-hydrate (1 in 10): a yellow-green precipitate is formed.

pH <2.54> Dissolve 1.0 g of Macrogol 20000 in 20 mL of water: the pH of this solution is between 4.5 and 7.5.

Purity (1) Clarity and color of solution—Dissolve 5.0 g of Macrogol 20000 in 50 mL of water: the solution is clear and colorless.

(2) Acidity—Dissolve 5.0 g of Macrogol 20000 in 20 mL of neutralized ethanol by warming, cool, and add 0.20 mL of 0.1 mol/L sodium hydroxide VS and 1 drop of phenolphthalein TS: the color of the solution is red.

Average molecular mass Weigh accurately about 15 g of Macrogol 20000, transfer to an about 200-mL glass-stoppered pressure bottle, add about 25 mL of pyridine, dissolve by warming, and allow to cool. Separately, pipet 300 mL of freshly distilled pyridine into a 1-L light-resistant glass-stoppered bottle, add 42 g of phthalic anhydride, dissolve with vigorous shaking, and allow to stand for 16 hours or more. Pipet 25 mL of this solution, transfer to the former pressure bottle, stopper the bottle tightly, wrap it securely with strong cloth, and immerse in a water bath, having a temperature of $98 \pm 2^\circ\text{C}$, to the same depth as the mixture in the bottle. Maintain the temperature of the bath at $98 \pm 2^\circ\text{C}$ for 60 minutes. Remove the bottle from the bath, and allow to cool in air to room temperature. Add exactly 50 mL of 0.5 mol/L sodium hydroxide VS and 5 drops of a solution of phenolphthalein in pyridine (1 in 100). Titrate <2.50> with 0.5 mol/L sodium hydroxide VS until a light red color remains for not less than 15 seconds. Perform a blank determination in the same manner.

$$\text{Average molecular mass} = (M \times 4000)/(a - b)$$

M: Amount (g) of Macrogol 20000 taken

a: Volume (mL) of 0.5 mol/L sodium hydroxide VS used in the blank determination

b: Volume (mL) of 0.5 mol/L sodium hydroxide VS used in the test of the sample

Average molecular mass is between 15000 and 25000.

Water <2.48> Not more than 1.0% (2 g, volumetric titration, direct titration).

Residue on ignition <2.44> Not more than 0.2% (1 g).

Containers and storage Containers—Well-closed containers.

Macrogol Ointment

Polyethylene Glycol Ointment

マクロゴール軟膏

Method of preparation

Macrogol 4000	500 g
Macrogol 400	500 g

To make 1000 g

Melt Macrogol 4000 and Macrogol 400 by warming on a water bath at 65°C , and mix well until it congeals. Less than

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**PT. INDOFA UTAMA MULTI CORE**

Jl. Kemanggisan Raya No. 125, Palmerah Jakarta-11480

Phone : (021)-53666156/22123318 , Fax : (021)-5484120

QUOTE**To** **MERSIFARMA TIRMAKU MERCUSANA,****Address** Jl. Raya Pelabuhan Km 18 Cikembar

Cikembar Kab Sukabumi

Attn **Vabi****QUOTATION NO** 0131/J/IUMC/09/25**DATE** 09/09/2025**QUOTE VALIDITY** 16/09/2025

NO	CATALOG	DESCRIPTION	PACK SIZE	NOTE	QTY	UNIT PRICE	DISC	LINE TOTAL
1	221856-25G	Phosphomolybdic acid hydrate SigmaAldrich SA/SIGMA-ALDRICH	25GR	Ready Merck jkt	1	1,714,000	0.00	1,714,000

SALES PERSON	PAYMENT TERMS
Ritma, Ine	30 hari

Note :

- Harga belum termasuk PPN, franco Jkt
- Barang ready stok tidak mengikat, estimasi delivery dari Merck Jkt ke Indofa +/- 1-2mgg

THANK YOU FOR YOUR BUSINESS!



PT. KARUNIA JASINDO
JL. Jembatan III No. 36AG Kec. Penjaringan
Jakarta 14450, Indonesia
Telp. 021-663 0353 , Fax : 021-661 1085

PRICE QUOTATION

Date: 09 Sep 2025

Quotation: 2025/PQ-KJ/IX/357

To:

PT. MERSIFARMA TIRMAKU MERCUSANA
JL. Raya Pelabuhan KM. 18 Cikembar
Sukabumi Jawa Barat 43347

Ship:

PT. MERSIFARMA TIRMAKU MERCUSANA
JL. Raya Pelabuhan KM. 18 Cikembar
Sukabumi Jawa Barat 43347

Customer ID : IN-03-1800330

Prepared by	Inquiry No.	Inquiry Date	Shipping Method	Currency	Payment Term	Payee Bank Account
Shabrina	Via Email / Phone	09 Sep 2025		IDR	30 Days	-

No.	Brand	Code No.	Product	UOM	Qty	Unit Price	Disc.%	Amount	Estimated Delivery	EUD
1	Kanto	32186-30	12 Molybdo(VI) phosphoric acid n-hydrate , 25 GR CAS: 51429-74-4 GR	Glass Bottle	1	2,660,000	0	2,660,000	Indent, 2-3 Months	☐

Note

1. Pembayaran ditujukan kepada rekening Bank dibawah ini:

Bank : BCA, Cab. Pluit Timur

Atas Nama : PT. Karunia Jasindo

No. Rekening: 386-3018877

2. Stock dapat berubah sewaktu-waktu

3. Masa berlaku penawaran ini 30 hari semenjak di terbitkan

4. Surat Penggunaan Produk diperlukan bila EUD di check

Untaxed Amount : Rp 2,660,000.00

VAT 11%(PPN) : Rp 292,600.00

Total Amount : Rp 2,952,600.00

Salesperson, Carina (carina@karusindo.com)

RENCANA KEBUTUHAN REAGEN BARU UNTUK PENGUJIAN RUTIN

Phosphomolybdic Acid Hydrate

No.	Bahan Baku	Kebutuhan/Batch	Jumlah Batch	Kebutuhan/Tahun	Kebutuhan/Bulan
	1 PEG 6000	1 gr	6	6 gr	0.24 gr