

2 MARCH 2022

OUR REF : D064165

**CERTIFICATE OF ANALYSIS**

**PRODUCT** : KORTACID REFINED GLYCERINE 99.7% MIN  
**QUANTITY** : 100,000 KGS  
**CONTRACT NO.** : CE37691  
**YOUR ORDER NO.** : 460603149  
**VESSEL** : YM HARMONY V.350S  
**ETD** : 26/02/2022  
**MANUFACTURING DATE** : 11, 12 & 13 FEBRUARY 2022  
**RE-TEST DATE** : 10, 11 & 12 FEBRUARY 2024  
**MARKING** : BATCH NO : 515D1220211A / 515D1220211B / 515D1220212A  
515D1220212B / 515D1220213A

<u>ANALYSIS RESULT</u>	<u>BATCH NO :</u>	<u>515D1220211A</u>	<u>515D1220211B</u>	<u>515D1220212A</u>
	<u>SPECIFICATION</u>	20,000 KGS	20,000 KGS	20,000 KGS
ASSAY, %	99.7MIN	99.8	99.8	99.8
COLOR, (APHA)	20MAX	<5	<5	<5
SPECIFIC GRAVITY (25/25DEGREE C)	1.249MIN	1.2616	1.2616	1.2616
CHLORINATED COMPOUNDS (AS Cl) ppm	30MAX	<30	<30	<30
CHLORIDES, ppm	10MAX	<10	<10	<10
FATTY ACIDS & ESTERS (ml OF 0.5N NaOH)	1.0MAX	0.34	0.34	0.34
HEAVY METALS (as Pb), ppm	5MAX	<0.02ND	<0.02ND	<0.02ND
SULPHATES ppm	20MAX	<20	<20	<20
WATER %	0.3MAX	0.1	0.1	0.1
RESIDUE ON IGNITION %	0.01MAX	<0.01	<0.01	<0.01

**MANUFACTURER- PACIFIC OLEOCHEMICALS SDN BHD**

ASMIRA NOR BTE ABDUL RAZAK - CHEMIST

*(This is a computer generated document and will not bear any signature)*

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The following steps should be taken to ensure product quality will not be affected during discharge and storage.

a) Use clean and stainless steel discharge line to discharge product.

b) For solid/semi solid product, the melting process should be controlled at condition which heating rate is NOT exceeding 1-2°C/hour or low pressure steam 1-2bar to prevent localised over heating.

c) Product shelf life is not applicable once product is discharged from original receptacle. Packed product must be stored in proper ventilated closed warehouse.  
Fatty Acid (C6/C8/C10) colour is reported at the time of shipment, Color will increase over the time.

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**CERTIFICATE OF ANALYSIS**

<u>ANALYSIS RESULT</u>	<u>BATCH NO:</u>	<u>515D1220212B</u>	<u>515D1220213A</u>
	<u>SPECIFICATION</u>	<u>20,000 KGS</u>	<u>20,000 KGS</u>
ASSAY, %	99.7MIN	99.8	99.8
COLOR, (APHA)	20MAX	<5	<5
SPECIFIC GRAVITY (25/25DEGREE C)	1.249MIN	1.2616	1.2616
CHLORINATED COMPOUNDS (AS Cl) ppm	30MAX	<30	<30
CHLORIDES, ppm	10MAX	<10	<10
FATTY ACIDS & ESTERS (ml OF 0.5N NaOH)	1.0MAX	0.34	0.31
HEAVY METALS (as Pb), ppm	5MAX	<0.02ND	<0.02ND
SULPHATES ppm	20MAX	<20	<20
WATER %	0.3MAX	0.1	0.1
RESIDUE ON IGNITION %	0.01MAX	<0.01	<0.01

ND=NOT DETECTED

"TEST ACCORDING AS PER USP METHOD"

**MANUFACTURER- PACIFIC OLEOCHEMICALS SDN BHD**

ASMIRA NOR BTE ABDUL RAZAK - CHEMIST

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