



CREATING THE CULTURE FOR DISCOVERY™



## 2022/23 PRODUCT CATALOGUE

### ANTIBIOTICS, BIOCHEMICALS AND LIQUID BUFFERS

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# ANTIBIOTICS, BIOCHEMICALS AND LIQUID BUFFERS

## 3-AMINO-1,2,4-TRIAZOLE, 3-AT

SKU	Size
3AT010	10g
3AT025	25g
3AT100	100g

C2H4N4=84.08

3-AT is a competitive inhibitor of the product of the HIS3 gene, imidazoleglycerol-phosphate dehydratase. Imidazoleglycerol-phosphate dehydratase is an enzyme catalyzing the sixth step of histidine production.

### Specifications

Assay (TLC)	≥95%
Melting range	152 - 153°C
Loss on drying	<0.2%

Store at 2 - 8°C

CAS 61-82-5



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Hygroscopic - do not breathe dust



GHS08 - GHS09

# 5-AMINOLEVULINIC ACID HYDROCHLORIDE

SKU	Size
5ALA01	1g
5ALA05	5g
5-ALA10	10g

NH2CH2COCH2CH2COOH.HCl = 167.59

## Specifications

Assay (HPLC)	≥99%
Melting range	148.2 - 149.6°C
Loss on drying	<0.2%
Residue on ignition	0.06%

CAS 5451-09-2



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# 5-FLUOROOROTIC ACID MONOHYDRATE

SKU	Size
5FOA01	1g
5FOA05	5g
5FOA10	10g

C5H3FN2O4.H2O = 192.1

## Specifications

Character	Slight yellow crystalline powder
Solubility	Soluble in DMSO, slightly soluble in alcohol and methanol
Assay (HPLC)	≥98%
Loss on drying	<0.2%

CAS 207291-81-4



GHS07 Skin & Eye Irritation

# AMPICILLIN SODIUM

SKU	Size
AMP05	5g
AMP10	10g
AMP25	25g
AMP50	50g
AMP100	100g
AMP500	500g

C16H18N3O4SNa=371.4

## Specifications

USP 25, Ph. Eur.	Value

Store dry at 2-8°C

Soluble in water

Hygroscopic, protect against moisture

CAS 69-52-3



Hygroscopic - do not breathe dust

GHS08 - GHS09

# CARBENICILLIN DISODIUM

SKU	Size
CAR0005	5g
CAR0025	25g

C17H16N2Na2O6S=422.4

Store dry at 2-8°C

Soluble in water

Hygroscopic, protect against moisture

CAS 4800-94-6



Hygroscopic - do not breathe dust

GHS08 - GHS09

# CEFOTAXIME SODIUM

SKU	Size
CEFO001	1g
CEFO005	5g
CEFO025	25g

C16H16N5NaO7S2=477.4

Store dry at 2-8°C

Keep container tightly closed and protect from light

Soluble in water

CAS 64485-93-4



Hygroscopic - do not breathe dust  
GHS08 - GHS09

# CHLORAMPHENICOL

SKU	Size
CLA01	25g
CLA02	100g

C11H12Cl2N2O5=323.1

Store dry at room temperature

Slightly soluble in water (2.5 g/L)

Soluble in ethanol

CAS 56-75-7



Hygroscopic - do not breathe dust  
GHS08 - GHS09



GHS07 Skin & Eye Irritation

## **DOXYCYCLINE HYCLATE**

SKU	Size
DOX01	1g
DOX05	5g
DOX10	10g
DOX25	25g
DOX100	100g

$$\text{C22H24N2O8} \cdot \text{HCl} \cdot 0.5\text{H}_2\text{O} \cdot 0.5\text{C}_2\text{H}_6\text{O} = 512.94$$

Doxycycline is a bacteriostatic tetracycline-like antibiotic. The antibiotic is effective against both gram-positive and gram-negative bacteria. It binds reversibly to the ribosomal 30 S unit, preventing binding of aminoacyl transfer RNA and hence inhibiting protein synthesis.

Doxycycline is an effective repressor of the TetO7 promoter system.

Media containing 10 micro-gram Doxycycline effectively repress the TetO7 promoter.

## Specifications

Doxycycline Hyclate  
Doxycycline hydrochloride  
hemi-ethanolate hemihydrate

Assay >98%

Store dry at 2-8°C

Soluble in water

Protect against light

CAS 24390-14-5



Hygoscopic - do not breathe dust

GHS08 - GHS09



## GHS07 Skin & Eye Irritation

# DTT 1,4-DITHIOTHREITOL

SKU	Size
DTT005	5g
DTT010	10g
DTT025	25g
DTT100	100g

Dithiothreitol C4H10O2S2=154.2

Store dry at 2-8°C

Soluble in water

Hygroscopic, protect against moisture

CAS 3483-12-3



GHS07 Skin & Eye Irritation

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# EDTA DISODIUM

SKU	Size
EDTA250	250g
EDTA500	500g
EDTA1000	1000g
EDTA6000	6 x 1kg

C10H14N2O8Na2.2H2O = 372.2

EDTA Na2.2H2O

Ethylenediaminetetra-acetate Disodium Dihydrate



## Specifications

Purity >99%

Store dry at room temperature  
Soluble in water (20°C. 100g/L)  
Hygroscopic, protect against moisture  
CAS 6381-92-6



GHS07 Skin & Eye Irritation

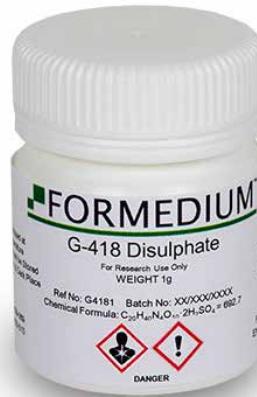
# G-418 DISULPHATE

SKU	Size
G4181	1g
G4185	5g

C20H40N4O10.2H2SO4=692.7

G-418 is a member of the large family of Aminoglycoside antibiotics and has a molecular structure almost like Gentamycin. The antibiotic is an irreversible inhibitor of protein synthesis. Due to its structure is capable of binding to both prokaryotic and eukaryotic ribosomes and inhibiting protein synthesis and generating errors in the transcription of the genetic code.

G-418 can be inactivated by NPTII or 3APH. The hydroxyl group present at the 3 position of G-418 is phosphorylated by NPTII. The resulting stoichiometric change of the molecular structure of the antibiotic prevents it from binding at its ribosome binding site.



## Specifications

Character	Fine white powder
Solubility	Freely soluble in water
Specific Optical Rotation	+104 ~ +121
Water	<6%
Absorbance 570 nm	<0.10
Absorbance 280 nm	<0.015
NH4+	< 1.0%
pH	5.5 ± 0.5
Thin Layer Chromatogram	One Spot
Potency	>720 µ/mg

Store at 2 - 8°C

Protect from light

CAS 108321-42-2



Hygroscopic - do not breathe dust

GHS08 - GHS09



GHS07 Skin & Eye Irritation

# G-418 DISULPHATE SOLUTION

SKU	Size
G418S	20ml
G4185S	5 x 20ml

C20H40N4O10.2H<sub>2</sub>SO<sub>4</sub>=692.7

G-418 is a member of the large family of Aminoglycoside antibiotics and has a molecular structure almost like Gentamycin. The antibiotic is an irreversible inhibitor of protein synthesis. Due to its structure is capable of binding to both prokaryotic and eukaryotic ribosomes and inhibiting protein synthesis and generating errors in the transcription of the genetic code.

1 Bottle contains 20 ml G-418 Solution 50 mg/ml.



## Specifications

Solubility	Freely soluble in water
Specific Optical Rotation	+104 ~ +121
Water	<6%
Absorbance 570 nm	<0.10
Absorbance 280 nm	<0.015
NH4+	< 1.0%
pH	5.5 ± 0.5
Thin Layer Chromatogram	One Spot
Potency	>720 µ/mg

## Water Purity Used

Resistivity at 25°C.	18.2 M
Bacterial endotoxin	<0.001 EU/ml
TOC	1-3 ppb
Bacteria	< 0.1 CFU/ml
Bacterial endotoxin	< 0.001/ml
RNase and DNase	Removed



Hygroscopic - do not breathe dust

GHS08 - GHS09



GHS07 Skin & Eye Irritation

Store at 4°C

CAS 108321-42-2

# GENTAMICIN SULPHATE

SKU	Size
GEN05	5g
GEN25	25g

## Specifications

Potency                          Approximately 640 µ/mg

Store dry at room temperature

Soluble in water

CAS 1405-41-0



- Hygroscopic - do not breathe dust  
GHS08 - GHS09
- GHS07 Skin & Eye Irritation

# GUANIDINE THIOCYANATE

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SKU	Size
GUA25	250g
GUA05	500g
GUA10	1kg
GUA50	5kg

Molecular Biology Grade >99%

Being a chaotropic agent, Guanidine is used as a general protein denaturant.

It is most commonly used as a general protein denaturant to protect DNA and RNA after lysis of cells and virus particles.

Guanidine prevents activity of RNase and DNase by denaturing these enzymes in the RNA and DNA extraction.

Store dry at room temperature  
Light sensitive – Hydroscopic

CAS 593-84-0



- GHS07 Skin & Eye Irritation
- GHS05 Corrosive

# HEPES

SKU	Size
HEPES01	100g
HEPES03	250g
HEPES05	500g
HEPES10	1000g
HEPES60	6kg

C8H18N2O4S=238.3

## Specifications

HEPES	>99.5%
Loss on Drying (105 C° 4hr)	<0.5%
Water Content (By KF)	<0.5%
Infrared	Complies
pH 1% in water	4.8-5.6 (25°C)
Solubility 1M in water	Clear and colourless solution
Residue on ignition	<0.1%
A260, 1M in water	<0.045
A280, 1M in water	<0.035
A420, 1M in water	<0.20
Heavy Metals	<5 ppm
pKa at 20°C	7.35-7.69

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Store dry at room temperature

Soluble in water

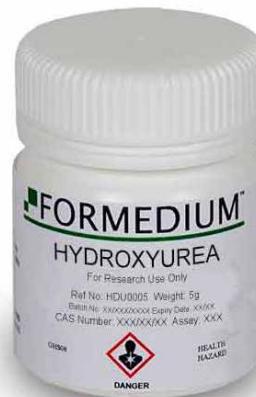
CAS 7365-45-9

# HYDROXYUREA

SKU	Size
HDU0005	5g
HDU0025	25g
HDU0100	100g
HDU0250	250g

**DNA replication inhibitor causing deoxyribonucleotide depletion CH4N2O2=76.05**

Hydroxyurea is an anti-neoplastic which inactivates ribonucleoside reductase by forming a free radical nitroxide that binds a tyrosyl free radical in the active site of the enzyme. This blocks the synthesis of deoxynucleotides, which inhibits DNA synthesis and induces synchronization or cell death in S-phase.



## Specifications

Appearance	White Crystalline Powder
Content by HPLC	>97.5
Water	>0.5%
Related substances	>0.2%
Residue on ignition	>0.1%
Heavy metals	>10ppm
Residue on ignition	>0.1%

Store at 2 -8°C in dark, dry place

CAS 127-07-1



Hygroscopic - do not breathe dust  
GHS08 - GHS09

# HYGROMYCIN B POWDER

SKU	Size
HYG0500	500mg
HYG1000	1g
HYG5000	5g

C20H37N3O13=527.5

## Specifications

Appearance	White Crystalline Powder
Identification (FTIR)	Positive
Solubility (100 mg/L)	Clear and colourless solution
Purity (HPLC)	>92%
Potency	>1000 µg/mg
Heavy metals	<20 ppm
Specific rotation	+22.1
Endotoxin	<10 EU/mg

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Store at 2 - 8°C

CAS 31282-04-9



GHS05 Corrosive



Hygroscopic - do not breathe dust  
GHS08 - GHS09



GHS06 Acute toxicity

# IPTG DIOXANE FREE

SKU	Size
IPTG005	5g
IPTG010	10g
IPTG025	25g
IPTG100	100g
IPTG250	250g

**Isopropyl-β-D-1-Thiogalactopyranoside**  
C9H18O5S=238.3

## Specifications

Purity (HPLC)	99.9%
Purity (TLC)	One Spot
IR	Conform standard
Solubility (5%, H <sub>2</sub> O)	Clear and colourless solution
pH (5%, H <sub>2</sub> O)	6.0
Optical rotation (C=1, H <sub>2</sub> O)	-32.4
Melting point	111.5 - 112.4°C
Water KF	0.1%
Dioxane (GLC)*	<1 ppm

\* Not used in manufacturing process



Store dry at 2-8°C

Soluble in ethanol and water

CAS 367-93-1

# KANAMYCIN MONOSULPHATE

SKU	Size
KAN0005	5g
KAN0025	25g

C18H36N4O11·H<sub>2</sub>SO<sub>4</sub>=582.6

Store dry at room temperature

Soluble in water

CAS 25389-94-0



Hygroscopic - do not breathe dust

GHS08 - GHS09

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# LEE'S MEDIUM

SKU	Size
LEES0500	500g
LEES1000	1kg

Suspend 17.09g in 1L of Distilled or De-ionised Water



# MES MONOHYDRATE

SKU	Size
MES01	100g
MES02	250g
MES03	500g
MES04	1000g
MES05	6 x 1kg

2-(N-Morpholino) Ethanesulfonic acid

C6H13NO4S·H2O=213.2

## Specifications

Appearance	White Crystalline Powder
Assay (Titration)	≥99%
Water Content	8.0-8.9%
pH 1% Di HB2BO	3.5-4.5
Solubility 0.1M water Clear	Colourless Solution
Residue On Ignition	≤0.1%
AB280B, 0.5M water	≤0.020
AB260B, 0.5M water	≤0.025
pKa 25	5.9-6.3
Heavy metals (Pb)	≤5ppm

Store dry at room temperature

Soluble in water

CAS 145224-94-8



# MES - SDS RUNNING BUFFER 20X

SKU	Size
MES-SDS0500	500ml
MES-SDS1000	1 Litre
MES-SDS5000	5 Litre

## 20 X sterile RNase free stock solution

Dilute 50 ml MES-SDS 20X into 950 ml of deionised water to make 1 litre of MES-SDS Running Buffer. Final concentration of 50mM MES, 50mM TRIS base, 3.47mM SDS and 1mM EDTA.



## Specifications

MES	1	M	195.2	g/L
TRIS	1	M	121.1	g/L
SDS	69.3	mM	20	g/L
EDTA Na <sub>2</sub>	20.5	mM	7.6	g/L

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Store at room temperature

Keep away from light

# MOPS

SKU	Size
MOPS01	100g
MOPS02	250g
MOPS03	500g
MOPS04	1000g
MOPS05	6 x 1kg

**Empirical Formula (Hill Notation): C<sub>7</sub>H<sub>15</sub>NO<sub>4</sub>S**

**Molecular Weight: 209.3**

## Specifications

Appearance	White Crystalline Powder
Assay (Titration, Dry Base)	≥99.0%
Water Content by KF	≤1%
Infrared	Complies
Solubility 1M water	Clear colourless solution
pH 1% Di H <sub>2</sub> O	3.6 - 4.4 (25°C)
A <sub>280</sub> , 1M water	≤0.10
A <sub>260</sub> , 1M water	≤0.15

Store dry at room temperature

Soluble in water

CAS 001132-61-2



# MOPS - SDS RUNNING BUFFER 20X

SKU	Size
MES-SDS0500	500ml
MES-SDS1000	1 Litre
MES-SDS5000	5 Litre

## 20 X sterile RNase free stock solution

Dilute 50 ml MOPS-SDS 20X into 950 ml of deionised water to make 1 litre of MOPS-SDS Running Buffer. Final concentration is 50mM MOPS, 50mM TRIS base, 3.47mM SDS and 1mM EDTA.



## Specifications

MES	1	M	209.3	g/L
TRIS	1	M	121.1	g/L
SDS	69.3	mM	20	g/L
EDTA Na2	20.5	mM	7.6	g/L

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Store at room temperature

Keep away from light

R: 36/37/38

S: 26,36

# PHOSPHATE BUFFERED SALINE

SKU	Size
PBS10L	10L Pack - 99.3g
PBS20L	20L Pack - 198.6g
PBS100L	100L Pack - 993g

## pH 7.4 premix

Reliable, quick and no pH adjustment necessary. A 10L pack (99.3g) in one litre is 10X; at this strength the pH is around 6.8/6.9, do not adjust this pH as on dilution to 1X the pH automatically adjusts to 7.4 which we determine during production.

Store at room temperature



# RNASEZERO®

SKU	Size
RZ500	500ml

RNaseZero® is a ready to use solution.

Completely removes RNase contamination from glass, plastic and stainless steel surfaces



# SDS MICRO-PELLETS

SKU	Size
SDS0100	100g
SDS0500	500g
SDS1000	1kg

(Sodium dodecyl (lauryl) sulfate)

Molecular Formula:  $\text{CH}_3(\text{CH}_2)_{11}\text{OSO}_3\text{Na}$

New micro-pellets allow convenient weighing and handling without the mess and odor of powders. High purity SDS is additive free. Easy to dissolve in water for denaturing proteins prior to gel electrophoresis. Store at room temperature.

## Specification Test Results

Assay (calculated on anhydrous)	Min. 99%
Assay (C12 compounds)(calc.on anhydrous)	Min. 99%
IR Spectrum	Passes test
Acidity or alkalinity	Max. 0.05 meq/g
Loss on drying (100°C)	Max. 1.0%
Cl (Chloride)	Max. 0.03%
PO <sub>4</sub> (Phosphate)	Max. 10ppm
Cu (Copper)	Max. 5ppm
Fe (Iron)	Max. 1ppm
Pb (Lead)	Max. 5ppm

Store at Room Temperature

Keep Tightly Closed

Cas No.: 151-21-3



GHS07 Skin & Eye Irritation



GHS05 Corrosive

# TAE BUFFER 50X

SKU	Size
TAE0500	500ml
TAE1000	1 Litre
TAE5000	5 Litre

## 50 X sterile stock solution

Dilute 20ml TAE Buffer 50X with 980ml deionised water to make 1 litre of TAE Buffer.

Final concentration is 40mM Tris Base, 20mM Glacial Acetic Acid and 1mM Na2EDTA.

## Specifications

TRIS	2.0	M	242.0	g/L
Acetic Acid	1.0	M	60.0	g/L
Na2EDTA	0.05	M	30.3	g/L

Store at Room Temperature

Keep Tightly Closed



# TBE BUFFER 10X

SKU	Size
TBE0500	500ml
TBE1000	1 Litre
TBE5000	5 Litre

## 10 X sterile stock solution

Dilute 100ml TBE Buffer 10X into 900ml deionised water to make 1 litre of TBE Buffer.

Final concentration is 89mM Tris base, 89mM Borate and 2mM Na2EDTA.

## Specifications

TRIS	0.9	M	108.0	g/L
Boric Acid	0.9	M	55.0	g/L
Na2EDTA	0.02	M	43.5	g/L

Store at Room Temperature  
Keep Tightly Closed



Hygroscopic - do not breathe dust  
GHS08 - GHS09

# TBS BUFFERED SALINE 10X, PH 7.4

SKU	Size
TBSL0500-7.4	500ml
TBSL1000-7.4	1 Litre
TBSL5000-7.4	5 Litre

## 10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 7.4.

## Specifications

TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature

Keep away from light



# TBS BUFFERED SALINE 10X, PH 7.6

SKU	Size
TBSL0500-7.6	500ml
TBSL1000-7.6	1 Litre
TBSL5000-7.6	5 Litre

## 10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 7.6.

## Specifications

TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature

Keep away from light



# TBS BUFFERED SALINE 10X, PH 7.8

SKU	Size
TBSL0500-7.8	500ml
TBSL1000-7.8	1 Litre
TBSL5000-7.8	5 Litre

## 10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 7.8.



## Specifications

TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature

Keep away from light

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# TBS BUFFERED SALINE 10X, PH 8

SKU	Size
TBSL0500-7.8	500ml
TBSL1000-7.8	1 Litre
TBSL5000-7.8	5 Litre

## 10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 8.



## Specifications

TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature

Keep away from light

# TETRACYCLINE HCL

SKU	Size
TET02	25g
TET03	100g

$C_{22}H_{24}N_1O_8 \cdot HCl = 480.9$

Store dry at room temperature

Slightly soluble in water, soluble in ethanol

Protect from light

CAS 64-75-5



H411 Toxic to aquatic life with long lasting effects



Hygroscopic - do not breathe dust  
GHS08 - GHS09

# TRIS GLYCINE BUFFER 10X

SKU	Size
TGS0500	500ml
TGS1000	1 Litre
TGS5000	5 Litre

Tris Glycine Transfer Buffer 10X sterile stock solution.

Dilute 100ml Tris Glycine Transfer Buffer 10X with 900 ml deionised water to make 1 litre of Tris Glycine Buffer. Final concentration is 25 mM Tris Base, 0.192 M Glycine and 1g/l SDS.

pH, 20 C.  $8.33 \pm 0.05$  at 1 x use rate



## Final concentration after diluting

TRIS	0.25M	30.3	g/L
Glycine	1.92M	144.1	g/L
SDS	10.0		g/L

Store at room temperature

Keep away from light



GHS07 Skin & Eye Irritation

# TRIS (HYDROXYMETHYL) AMINOMETHANE

SKU	Size
TRIS05	500g
TRIS01	1kg
TRIS06	5kg

Ultra Pure 99.9%

Chemical Breakdown:  $C_4H_{11}NO_3 = 121.1$

Store dry at room temperature (18-25°C)

CAS 77-86-1



# X-GAL

SKU	Size
XGAL001	1g
XGAL005	5g
XGAL010	10g

## 5-Bromo-4-chloro-3-indolyl-β-D-galactopyranoside

C<sub>14</sub>H<sub>15</sub>BrClNO<sub>6</sub>=408.6

Store dry at 2-8°C

Allow bottle to stand to room temperature before opening

Soluble in DMSO and DMF

Hygroscopic, protect against moisture

Store dark, protect against light



## Specifications

Purity (HPLC)	99.2%
Purity (TLC)	>99%
Water KF	0.2%
Optical rotation (C=1, DMF:H <sub>2</sub> O=1:1)	-61.1%
Solubility (Sol., 2% DMF)	Clear and colourless solution
<sup>1</sup> H-NMR	Conforming to structure

CAS 7240-90-6



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