Thermo SCIENTIFIC
166 Cummings Center
Beverly, MA 01915 USA
Telephone: 978-232-6000
CHEMTREC® 24 hr Emergency: US 800-424-9300;
CHEMTREC® 24 hr Emergency: International 703-527-3887

Orion 810001
ROSS™ Storage Solution
Material Safety Data Sheet

I. PRODUCT IDENTIFICATION: ROSS™ Storage Solution

Orion 810001

PRODUCT USE: Reagent

NFPA RATINGS: HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

II. COMPOSITION/INFORMATION ON INGREDIENTS

		%	LD_{50} mg/kg
COMPONENT	Potassium Hydrogen Phthalate (KHP)		
CAS NO.	877-24-7	<1	3,200 (ORL-RAT)
COMPONENT	Potassium Chloride (KCl)		
CAS NO.	7447-40-7	22	2,500 (ORL-GPG)
COMPONENT	Deionized Water		
CAS NO.	7732-18-5	77	190,000 (IPR-MUS)

III. HAZARDS IDENTIFICATION

TARGET ORGANS: Skin and eyes.
ACUTE TOXICITY: Not an acute hazard because of low concentration of salts.
CHRONIC TOXICITY: Not a chronic hazard because of low concentration salts.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Could aggravate diseases of the skin.

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Wash off contact area with soap and water.
INHALATION: Not hazardous.
INGESTION: Dilute with water and consult physician.

V. FIRE FIGHTING MEASURES

FLASH POINT: NA AUTOIGNITION POINT:NA
FLAMMABILITY LIMITS: UPPER: NA LOWER: NA
EXTINGUISHING MEDIA: Dry chemical, water, foam, or CO_2.

VI. ACCIDENTAL RELEASE MEASURES

Take up with absorbent materials, then wash spill site.

VII. HANDLING AND STORAGE

Always wear eye protection and gloves when working with this product.
Avoid contact with eyes, skin or clothing.
Keep sealed and store at room temperature.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

OSHA & ACGIH THRESHOLD LIMIT: None listed.
PROTECTIVE EQUIPMENT: Safety glasses, lab coat and gloves.

IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: Colorless liquid ODOR THRESHOLD: None
SENSITIVITY TO MECHANICAL IMPACT: None
SENSITIVITY TO STATIC DISCHARGE: None
COEFFICIENT OF OIL/WATER DISTRIBUTION: None
SOLUBILITY IN WATER: Soluble pH: 3.7
SPECIFIC GRAVITY: 1.11
BOILING POINT: Approx. 100°C MELTING POINT: Not determined
VAPOR DENSITY: Not determined

X. STABILITY AND REACTIVITY

Product is stable. Hazardous polymerization will not occur.
Incompatibles: Strong Oxidizing Agents.
Hazardous decomposition product: None.

XI. TOXICOLOGICAL INFORMATION

Route of Exposure: May cause irritation of eyes and skin. Maybe harmful if swallowed.
Teratogen Status: None
Mutagen Status: None
Reproductive Toxicity: None
Carcinogen Status: None

XII. ECOLOGICAL INFORMATION

None available.

XIII. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with Federal, State and Local Regulations.

XIV. TRANSPORT INFORMATION

Product is not hazardous for transport.

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

None.

US/ CANADA INFORMATION

SARA/Title III: Not listed.
Cal. Proposition 65: Ingredients not listed.
US TSCA Inventory: Ingredients are listed.
CPR Class: None.
TDG Class: None.
MSDS discloses elements required by the CPR.

XVI. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.

MSDS prepared by Quality Assurance Group.

Document Number 249582-001 Rev. C Effective Date: March 18, 2008

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CHEMTREC® urgence 24 heure: International 703-527-3887

Orion 810001
Solution de stockage ROSS™
Fiche de données de sécurité

I. IDENTIFICATION DU PRODUIT : Solution de stockage ROSS™

Orion 810001

USAGE DU PRODUIT : Réactif

INDICE NFPA : SANTÉ : 1 INFLAMMABILITÉ : 0 RÉACTIVITÉ : 0

II. COMPOSITION/INFORMATIONS CONCERNANT LES INGRÉDIENTS

		%	DL_{50} mg/kg
COMPOSANT	Biphtalate de potassium (KHP)		
N° CAS	877-24-7	<1	3 200 (oral-rat)
COMPOSANT	Chlorure de potassium (KCl)		
N° CAS	7447-40-7	22	2 500 (oral-cobaye)
COMPOSANT	Eau déminéralisée		
N° CAS	7732-18-5	77	190 000 (inj ip-souris)

III. IDENTIFICATION DES RISQUES

ORGANES CIBLES : Peau et yeux.
TOXICITÉ AIGUË : Absence de risque aigu en raison de la faible concentration en sels.
TOXICITÉ CHRONIQUE : Absence de risque chronique en raison de la faible concentration en sels.
ÉTATS MÉDICAUX AGGRAVÉS PAR L'EXPOSITION : Peut aggraver les maladies de la peau.

IV. MESURES DE PREMIÈRE URGENCE

CONTACT AVEC LA PEAU ET LES YEUX : Laver la zone touchée avec de l'eau et du savon.
INHALATION : Aucun risque.
INGESTION : Diluer avec de l'eau et consulter un médecin.

V. MESURES DE LUTTE CONTRE L'INCENDIE

POINT D'ÉCLAIR : N/A TEMPÉRATURE D'AUTO-IGNITION : N/A
LIMITES D'INFLAMMABILITÉ : SUPÉRIEURE : N/A INFÉRIEURE : N/A
AGENTS EXTINCTEURS : Agent chimique en poudre, eau, mousse ou CO_2.

VI. MESURES A PRENDRE EN CAS DE DISPERSION ACCIDENTELLE

Ramasser le produit avec des matériaux absorbants, puis laver le site contaminé.

VII. MANIPULATION ET STOCKAGE

Toujours porter une protection oculaire et des gants pour travailler avec ce produit. Éviter tout contact avec les yeux, la peau ou les vêtements.
Conserver hermétiquement fermé et à température ambiante.

VIII. CONTRÔLE DE L'EXPOSITION/ PROTECTION PERSONNELLE

LIMITE D'EXPOSITION ADMISSIBLE OSHA ET ACGIH : Aucune trouvée.
ÉQUIPEMENT DE PROTECTION : Lunettes de sécurité, blouse de laboratoire et gants.

IX. PROPRIÉTÉS PHYSIQUES ET CHIMIQUES

ÉTAT : Liquide incolore SEUIL OLFACTIF : Aucun
SENSIBILITÉ AUX CHOCS MÉCANIQUES : Aucune
SENSIBILITÉ AUX DÉCHARGES ÉLECTROSTATIQUES : Aucune
COEFFICIENT DE PARTAGE HUILE/EAU : Aucun
SOLUBILITÉ DANS L'EAU : Soluble pH : 3,7
DENSITÉ RELATIVE : 1,11
POINT D'ÉBULLITION : Env. 100°C POINT DE FUSION : Indéterminé
DENSITÉ DE VAPEUR : Indéterminée

X. STABILITÉ ET RÉACTIVITÉ

Le produit est stable. Aucune polymérisation dangereuse ne se produit.
Incompatibilité : Agents oxydants forts.
Produits de décomposition dangereux : Aucun.

XI. INFORMATIONS TOXICOLOGIQUES

Voie d'exposition : Peut irriter les yeux et la peau. Peut être nocif en cas d'ingestion.
Risque tératogène : Aucun
Risque mutagène : Aucun
Toxicité reproductive : Aucune
Risque cancérigène : Aucun

XII. INFORMATIONS RELATIVES A L'ENVIRONNEMENT

Aucune disponible.

XIII. INFORMATIONS SUR LES POSSIBILITÉS D'ÉLIMINATION DES DÉCHETS

Respecter les réglementations départementales, nationales et locales relatives à l'élimination des déchets.

XIV. INFORMATIONS RELATIVES AU TRANSPORT

Ce produit n'est pas dangereux lors du transport.

XV. INFORMATIONS RÉGLEMENTAIRES

INFORMATIONS EUROPÉENNES :

Aucune.

INFORMATIONS POUR LES ÉTATS-UNIS / LE CANADA

SARA/Titre III : Ingrédients non repris sur la liste.
Proposition 65 de l'État de Californie : Ingrédients non repris sur la liste.
Inventaire TSCA (États-Unis) : Ingrédients repris sur la liste.
Classe CPR : Aucune.
Classe TDG : Aucune.
Cette fiche de données de sécurité révèle les éléments d'information requis par le RPC (Canada).

XVI. AUTRES INFORMATIONS

NOUS CROYONS QUE LES INFORMATIONS CI-DESSUS SONT EXACTES ET REPRÉSENTENT LES MEILLEURES INFORMATIONS ACTUELLEMENT À NOTRE DISPOSITION. TOUS LES PRODUITS SONT FOURNIS EN CONFORMITÉ AUX SPÉCIFICATIONS DE PRODUCTION DU FABRICANT ET SONT DESTINÉS UNIQUEMENT À DES ESSAIS ANALYTIQUES. LE FABRICANT NE SERA EN AUCUN CAS RESPONSABLE EN CAS DE BLESSURES, PERTES OU DOMMAGES RÉSULTANT DE LA MANIPULATION OU DE L'UTILISATION BONNE OU MAUVAISE DE CES PRODUITS.

Fiche de données de sécurité préparée par le Groupe d'assurance qualité.

Document n° 249582-001 rév. C Date d'entrée en vigueur : le 18 mars 08

Thermo SCIENTIFIC
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CHEMTREC® 24 hr Emergency: US 800-424-9300; International 703-527-3887

Orion 910110 & 911060 & 9110CB pH 10.01 Buffer Material Safety Data Sheet

I. PRODUCT IDENTIFICATION: pH 10.01 Buffer

Orion 910110 & 911060 & 9110CB

PRODUCT USE: Buffer

NFPA RATINGS: HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

II. COMPOSITION/INFORMATION ON INGREDIENTS

		%	LD_{50} mg/kg
COMPONENT	Sodium Bicarbonate ($NaHCO_3$)		
CAS NO.	144-55-8	<1	4220 (ORL-RAT)
COMPONENT	Sodium Carbonate (Na_2CO_3)		
CAS NO.	497-19-8	<1	117 (IPR-MUS)
COMPONENT	Methyl Paraben ($C_8H_8O_3$)		
CAS NO.	99-76-3	<0.1	3000 (ORL-DOG)
COMPONENT	FD&C Blue ($C_{37}H_{34}N_2O_9S_3$*2Na)		
CAS NO.	3844-45-9	<0.01	5.5g/Kg (SEN-RAT) LD_{LO}
COMPONENT	Deionized Water (H_2O)		
CAS NO.	7732-18-5	99	190,000 (IPR-MUS)

III. HAZARDS IDENTIFICATION

Low hazard for normal usage.
Harmful if swallowed. May irritate eyes and skin.
TARGET ORGANS: Skin.
ACUTE TOXICITY: Low hazard.
CHRONIC TOXICITY: May irritate skin after prolonged exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Disease of the skin.

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Wash off with large amounts of water.
INGESTION: Give large amounts of water. Consult physician.
INHALATION: Not hazardous

V. FIRE FIGHTING MEASURES

FLASH POINT: NA AUTOIGNITION POINT: NA
FLAMMABILITY LIMITS: UPPER: NA LOWER: NA
EXTINGUISHING MEDIA: Water, CO_2, dry chemical or foam.

VI. ACCIDENTAL RELEASE MEASURES

Take up with absorbent materials. Place in small containers for disposal. Wash spill site after material pick up is complete.

VII. HANDLING AND STORAGE

Always wear eye protection and gloves when working with this product.
Avoid contact with eyes, skin or clothing. Avoid ingestion.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

OSHA & ACGIH THRESHOLD LIMIT: None listed.
PROTECTIVE EQUIPMENT: Safety glasses, lab coat and gloves.

IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: Light blue liquid ODOR THRESHOLD: None
SENSITIVITY TO MECHANICAL IMPACT: None
SENSITIVITY TO STATIC DISCHARGE: None
COEFFICIENT OF OIL/WATER DISTRIBUTION: None
SOLUBILITY IN WATER: Soluble pH: 10.01
SPECIFIC GRAVITY: 1.0
BOILING POINT: 100ºC MELTING POINT: Not determined
VAPOR DENSITY: Not determined

X. STABILITY AND REACTIVITY

Product is stable. Hazardous polymerization will not occur.
Incompatibles: NaK alloy, $NH_4H_2PO_4$, Al, P_2O_5, H_2SO_4.
Hazardous decomposition product: CO_2 upon heating.

XI. TOXICOLOGICAL INFORMATION

Route of Exposure: May irritate skin. May be harmful if swallowed.
Teratogen Status: None
Mutagen Status: None
Reproductive Toxicity: None
Carcinogen Status: None

XII. ECOLOGICAL INFORMATION

None available.

XIII. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with Federal, State and Local Regulations.

XIV. TRANSPORT INFORMATION

Product is not hazardous for transport.

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

None

US/ CANADA INFORMATION

SARA/Title III: Not on list.
Cal. Proposition 65: FD & C Blue is listed.
US TSCA Inventory: Ingredients are listed.
CPR Class: None.
TDG Class: None.
MSDS discloses elements required by the CPR.

XVI. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.

MSDS prepared by Quality Assurance Group.

Document Number 205488-001 Rev. R Effective Date: January 27, 2009

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Orion 910110, 911060 et 9110CB
Tampon pH 10,01
Fiche de données de sécurité

I. IDENTIFICATION DU PRODUIT : Tampon pH 10,01

Orion 910110, 911060 et 9110CB

USAGE DU PRODUIT : Tampon

CLASSIFICATION NFPA : SANTÉ : 1 INFLAMMABILITÉ : 0 RÉACTIVITÉ : 0

II. COMPOSITION/INFORMATIONS CONCERNANT LES INGRÉDIENTS

		%	DL_{50} mg/kg
COMPOSANT	Bicarbonate de sodium ($NaHCO_3$)		
N° CAS	144-55-8	<1	4220 (oral-rat)
COMPOSANT	Carbonate de sodium (Na_2CO_3)		
N° CAS	497-19-8	<1	117 (IP-souris)
COMPOSANT	Méthylparabène ($C_8H_8O_3$)		
N° CAS	99-76-3	<0,1	3000 (oral-chien)
COMPOSANT	Bleu FD et C ($C_{37}H_{34}N_2O_9S_3$*2Na)		
N° CAS	3844-45-9	<0,01	5,5 g/kg (SEN-rat) DL_{50}
COMPOSANT	Eau déminéralisée (H_2O)		
N° CAS	7732-18-5	99	190.000 (IP-souris)

III. IDENTIFICATION DES RISQUES

Faible risque pour usage normal.
Nocif en cas d'ingestion. Peut provoquer des irritations cutanées et oculaires.
ORGANES CIBLES : Peau.
TOXICITÉ AIGUË : Faible risque.
TOXICITÉ CHRONIQUE : Peut provoquer des irritations cutanées en cas d'exposition prolongée.
ÉTATS MÉDICAUX AGGRAVÉS PAR L'EXPOSITION : Maladies de la peau.

IV. MESURES DE PREMIÈRE URGENCE

CONTACT AVEC LA PEAU ET LES YEUX : Laver abondamment avec de l'eau.
INGESTION : Faire boire de grandes quantités d'eau. Consulter un médecin.
INHALATION : Aucun risque.

V. MESURES DE LUTTE CONTRE L'INCENDIE

POINT D'ÉCLAIR : NA TEMPÉRATURE D'AUTO-IGNITION :NA
LIMITES D'INFLAMMABILITÉ : SUPÉRIEURE : NA INFÉRIEURE : NA
AGENTS D'EXTINCTION : Eau, CO_2, agent chimique en poudre ou mousse.

VI. MESURES A PRENDRE EN CAS DE DISPERSION ACCIDENTELLE

Ramasser le produit avec un matériau absorbant. Placer le produit dans de petits récipients afin de l'éliminer. Laver la zone contaminée après récupération de la totalité du produit.

VII. MANIPULATION ET STOCKAGE

Toujours porter une protection oculaire et des gants pour travailler avec ce produit. Éviter tout contact avec les yeux, la peau ou les vêtements. Éviter l'ingestion.

VIII. CONTRÔLE DE L'EXPOSITION/ PROTECTION PERSONNELLE

LIMITE D'EXPOSITION ADMISSIBLE OSHA ET ACGIH : Aucune trouvée
ÉQUIPEMENT DE PROTECTION : Lunettes de sécurité, blouse de laboratoire et gants.

IX. PROPRIÉTÉS PHYSIQUES ET CHIMIQUES

ÉTAT : Liquide bleu clair SEUIL OLFACTIF : Aucun
SENSIBILITÉ AUX CHOCS MÉCANIQUES : Aucune
SENSIBILITÉ AUX DÉCHARGES ÉLECTROSTATIQUES : Aucune
COEFFICIENT DE PARTAGE HUILE/EAU : Aucun
SOLUBILITÉ DANS L'EAU : Soluble pH : 10,01
DENSITÉ : 1,0
POINT D'ÉBULLITION : 100ºC POINT DE FUSION : Indéterminé
DENSITÉ DE VAPEUR : Indéterminée

X. STABILITÉ ET RÉACTIVITÉ

Le produit est stable. Aucune polymérisation dangereuse ne se produit.
Incompatibilités : alliages à base de NaK, $NH_4H_2PO_4$, Al, P_2O_5, H_2SO_4.
Produits de décomposition dangereux : CO_2 lors de chauffage.

XI. INFORMATIONS TOXICOLOGIQUES

Voie d'exposition : Peut être irritant pour la peau. Potentiellement nocif en cas d'ingestion.
Risque tératogène : Aucun
Risque mutagène : Aucun
Toxicité reproductive : Aucune
Risque cancérigène : Aucun

XII. INFORMATIONS RELATIVES A L'ENVIRONNEMENT

Aucune disponible.

XIII. INFORMATIONS SUR LES POSSIBILITÉS D'ÉLIMINATION DES DÉCHETS

Respecter les réglementations départementales, nationales et locales relatives à l'élimination des déchets.

XIV. INFORMATIONS RELATIVES AU TRANSPORT

Ce produit n'est pas dangereux lors du transport.

XV. INFORMATIONS RÉGLEMENTAIRES

INFORMATIONS EUROPÉENNES :

Aucune

INFORMATIONS POUR LES ÉTATS-UNIS / LE CANADA

SARA/Titre III : Non repris sur la liste.
Proposition 65 de l'état de Californie : Le bleu FD et C est repris sur la liste.
Inventaire TSCA (États-Unis) : Ingrédients repris sur la liste.
Classe CPR : Aucune
Classe TDG : Aucune.
Cette fiche de données de sécurité révèle les éléments d'information requis par le RPC (Canada).

XVI. AUTRES INFORMATIONS

NOUS CROYONS QUE LES INFORMATIONS CI-DESSUS SONT EXACTES ET REPRÉSENTENT LES MEILLEURES INFORMATIONS ACTUELLEMENT À NOTRE DISPOSITION. TOUS LES PRODUITS SONT FOURNIS EN CONFORMITÉ AUX SPÉCIFICATIONS DE PRODUCTION DU FABRICANT ET SONT DESTINÉS UNIQUEMENT À DES ESSAIS ANALYTIQUES. LE FABRICANT NE SERA EN AUCUN CAS RESPONSABLE EN CAS DE BLESSURES, PERTES OU DOMMAGES RÉSULTANT DE LA MANIPULATION OU DE L'UTILISATION BONNE OU MAUVAISE DE CES PRODUITS.

Fiche de données de sécurité préparée par le Groupe d'assurance qualité.

Document nombre 205488-001 Rév. R Date d'entrée en vigueur : janvier 27, 2009

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Orion 910110, 911060 y 9110CB
Tampón de pH 10,01
Ficha de Datos de Seguridad

I. IDENTIFICACION DE LA SUBSTANCIA/PREPARADO:
Tampón de pH 10,01
Orion 910110, 911060 y 9110CB

USO DE LA SUBSTANCIA/PREPARADO: Tampón

CLASIFICACIONES NFPA:
SALUD: 1 INFLAMABILIDAD: 0 REACTIVIDAD: 0

II. COMPOSICION/INFORMACION SOBRE COMPONENTES

		%	$LD_{50\ MG/KG}$
COMPONENTE	Sodio Bicarbonato ($NaHCO_3$)		
CAS nº	144-55-8	<1	4220 (ORL-RAT)
COMPONENTE	Sodio Carbonato ($NaHCO_3$)		
CAS nº	497-19-8	<1	117 (IPR-MUS)
COMPONENTE	Metil Paraben ($C_8H_8O_3$)		
CAS nº	99-76-3	<0,1	3000 (ORL-DOG)
COMPONENTE	Azul FD&C		
CAS nº	3844-45-9	<0,01	6,5g/Kg (SEN-RAT) LD_{LO}

Ruta de exposición; Puede irritar la piel. Puede ser peligroso si se traga.
Estado teratógeno; Ninguno
Estado mutágeno: Ninguno.
Toxicidad reproductiva: Ninguna
Estado carcinógeno: Ninguno

ONENTE	Agua desionizada		
CAS nº	7732-18-5	99	190.000 (IPR-MUS)

III. IDENTIFICACION DE LOS PELIGROS

Bajo peligro en uso normal.
Peligroso si se traga. Puede irritar ojos y piel.
ORGANOS OBJETO: Piel.
TOXICIDAD AGUDA: Bajo peligro.
TOXICIDAD CRÓNICA: Puede irritar la piel después de exposición prologada.
CONDICIONES MEDICAS AGRAVADAS CON LA EXPOSICION: Enfermedades de la piel.

IV. PRIMEROS AUXILIOS

CONTACTO CON EL OJO Y LA PIEL: Lavar con grandes cantidades de agua.
INGESTIÓN: Dar grandes cantidades de agua. Consultar al médico.
INHALACION: No peligroso

V. MEDIDAS DELUCHA CONTRA INCENDIOS

PUNTO DE INFLAMACIÓN: No aplicable
PUNTO DE AUTOIGNICIÓN: No aplicable
LIMITES DE INFLAMABILIDAD; SUPERIOR: No aplicable
INFERIOR: No aplicable
MEDIO DE EXTINCIÓN: Agua, CO_2, producto químico seco o espuma.

VI. MEDIDAS EN CASO DE VERTIDO ACCIDENTAL

Limpiar con materiales absorbentes. Colocarlo en pequeños contenedores para su deshecho. Lavar el lugar del derrame después que se haya recogido completamente el material.

VII. MANIPULACION Y ALMACENAJE

Llevar siempre gafas protectoras y guantes cuando se trabaje con este producto.
Evitar el contacto con ojos, piel o ropa. Evitar la ingestión.

VIII. CONTROLES DE EXPOSICION/PROTECCION PERSONAL

LIMITE DE MARGEN OSHA & ACGIH: No relacionado
EQUIPO PROTECTOR: Gafas de seguridad, bata de laboratorio y guantes.

IX PROPIEDADES FISICAS Y QUIMICAS

ESTADO: Líquido ligeramente azul OLOR: Ninguno
SENSIBILIDAD A IMPACTOS MECÁNICOS: Ninguna
SENSIBILIDAD A DESCARGAS ELÉCTRICAS: Ninguna
COEFICIENTE DE DISTRIBUCIÓN ACEITE/AGUA. Ninguno
SOLUBILIDAD EN AGUA: Soluble pH: 10,01
DENSIDAD: 1,0
PUNTO DE EBULLICIÓN: 100ºC
PUNTO DE FUSIÓN: No determinado
DENSIDAD DEL VAPOR: No determinada

X. ESTABILIDAD Y REACTIVIDAD

Producto estable. No ocurren polimerizaciones peligrosas.
Incompatibles: Aleaciones de NaK, NH_4PO_5, H_2SO_{4-}
Descomposición peligrosa del producto: CO_2 al calentar.

XI. INFORMACION TOXICOLÓGICA

Ruta de exposición: Puede irritar la piel. Puede ser peligroso si se traga.
Estado teratógeno; Ninguno
Estado mutágeno: Ninguno.
Toxicidad reproductiva: Ninguna
Estado carcinógeno: Ninguno

XII. INFORMACIÓN ECOLÓGICA

No disponible.

XIII. CONSIDERACIONES SOBRE LA ELIMINACIÓN

Eliminarlo de acuerdo con las leyes locales, autonómicas y estatales.

XIV. INFORMACION RELATIVA AL TRANSPORTE

El producto no es peligroso para el transporte.

XV. INFORMACION REGLAMENTARIA

INFORMACION EUROPEA
Ninguna.

XVI. OTRA INFORMACION
ESTA INFORMACIÓN SE CREE CORRECTA Y REPRESENTA LA MEJOR INFORMACIÓN DEL FABRICANTE. LOS PRODUCTOS SON SOLAMENTE PARA USO EN ENSAYOS QUÍMICOS. EL FABRICANTE EN NINGÚN CASO SE HARÁ RESPONSABLE DE LOS DAÑOS RESULTANTES POR LA MANIPULACIÓN O EL MAL USO DE ESTOS PRODUCTOS.

Ficha de Datos de Seguridad preparado por el grupo de aseguramiento de la calidad.

Número de documento 205488-001 Rev. R fecha de entrada en vigor: enero 27, 2009

Thermo SCIENTIFIC

Orion 900024 pH Cleaner D Material Safety Data Sheet

I. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Orion 900024
pH Cleaner D

PRODUCT USE: Reagent

MANUFACTURER/SUPPLIER: Thermo Fisher Scientific Inc.
22 Alpha Rd
Chelmsford, MA 01824 USA
Phone: 978-232-6000
E-mail: info.water@thermo.com

CHEMTREC® 24 hr Emergency: US 800-424-9300; International 703-527-3887

II. HAZARDS IDENTIFICATION

NFPA RATINGS: HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0

TARGET ORGANS: Skin, eyes.
ACUTE TOXICITY: Low acute hazard because of low concentration of salts.
CHRONIC TOXICITY: Low chronic hazard because of low concentration of salts.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Possible aggravation of skin disease.

III. COMPOSITION/INFORMATION ON INGREDIENTS

		%	LD_{50} mg/kg
COMPONENT	Potassium Dihydrogen Phosphate (KH_2PO_4)		
CAS NO.	7778-77-0	<0.1	None found
COMPONENT	Disodium Hydrogen Phosphate (Na_2HPO_4)		
CAS NO.	7558-79-4	<0.1	17,000 (ORL-RAT)
COMPONENT	Sodium Lauryl Ether Sulfate ($C_{12}H_{25}O.[C_2H_4O]_2.SO_3.NH_4$)		
CAS NO.	32612-48-9	5	1,600 (ORL-RAT)
COMPONENT	Methylparaben ($C_8H_8O_3$)		
CAS NO.	99-76-3	<0.1	960 (IPR-MUS)
COMPONENT	Triton X-100 ($C_{32}H_{58}O_{11}$)		
CAS NO.	9002-93-1	<0.1	1,800 (ORL-RAT)
COMPONENT	Deionized Water (H_2O)		
CAS NO.	7732-18-5	>94	190,000 (IPR-MUS)

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Wash contact area with water.
INHALATION: Low hazard.
INGESTION: Give large amounts of water. Consult physician.

V. FIRE FIGHTING MEASURES

FLASH POINT: NA AUTOIGNITION POINT: NA
FLAMMABILITY LIMITS: UPPER: NA LOWER: NA
EXTINGUISHING MEDIA: Dry chemical.

VI. ACCIDENTAL RELEASE MEASURES

Wash down drain with water if local law allows.

VII. HANDLING AND STORAGE

Always wear eye protection and gloves when working with this product.
Keep sealed.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

OSHA & ACGIH THRESHOLD LIMIT: None listed.
PROTECTIVE EQUIPMENT: Safety glasses, lab coat and gloves.

IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: Clear liquid ODOR THRESHOLD: None
SENSITIVITY TO MECHANICAL IMPACT: None
SENSITIVITY TO STATIC DISCHARGE: None
COEFFICIENT OF OIL/WATER DISTRIBUTION: None
SOLUBILITY IN WATER: Soluble pH: 6.5 – 7.0
SPECIFIC GRAVITY: 1.0
BOILING POINT: 100ºC MELTING POINT: Not determined
VAPOR DENSITY: Not determined

X. STABILITY AND REACTIVITY

Product is stable. Hazardous polymerization will not occur.
Incompatibles: Magnesium and Sodium salts.
Hazardous decomposition product: Possible evolution of fumes from phosphate if heated.

XI. TOXICOLOGICAL INFORMATION

Route of Exposure: Irritation of skin.
Teratogen Status: None
Mutagen Status: None
Reproductive Toxicity: None
Carcinogen Status: None

XII. ECOLOGICAL INFORMATION

None available.

XIII. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with Federal, State and Local Regulations.

XIV. TRANSPORT INFORMATION

Product is not hazardous for transport.

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

None.

US/ CANADA INFORMATION

SARA/Title III: Releases of Na_2HPO_4 are subject to reporting under Section 302 of Title III.
Cal. Proposition 65: Ingredients not listed.
US TSCA Inventory: Ingredients are listed.
CPR Class: None.
TDG Class: None.
MSDS discloses elements required by the CPR.

XVI. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.

MSDS prepared by Environmental, Health and Safety.

Document Number 227444-001 Rev. K Effective Date: 13 November 2014

Thermo SCIENTIFIC

Orion 900024
Détergent D pour pH
Fiche de données de sécurité

I. IDENTIFICATION DU PRODUIT ET ENTREPRISE:

PRODUIT : Orion 900024
Détergent D pour pH

UTILISATION : Réactif

FABRICANT / FOURNISSEUR: Thermo Fisher Scientific Inc.
22 Alpha Rd
Chelmsford, MA 01824 États-Unis
Téléphone 978-232-6000
Courriel: info.water@thermo.com

CHEMTREC® urgence 24 heure: US 800-424-9300; International 703-527-3887

II. IDENTIFICATION DES RISQUES

INDICE NFPA : SANTE : 0 INFLAMMABILITE : 0 REACTIVITE : 0

ORGANES CIBLES : yeux, peau.
TOXICITE AIGUE : faible risque aigu étant donné la faible concentration de sel.
TOXICITE CHRONIQUE : faible risque chronique étant donné la faible concentration de sel.
TROUBLES MEDICAUX AGGRAVES PAR EXPOSITION : maladies de la peau.

III. COMPOSITION/INFORMATION SUR LES INGREDIENTS

		%	LD_{50} mg/kg
COMPOSANT	Phosphate de potassium monobasique (KH_2PO_4)		
N° CAS	7778-77-0	<0,1	Aucun trouvé
COMPOSANT	Phosphate disodique (Na_2HPO_4)		
N° CAS	7558-79-4	<0,1	17.000 (ORL-RAT)
COMPOSANT	Sulfate de laureth-5 et d'ammonium ($C_{12}H_{25}O.[C_2H_4O]_2.SO_3.NH_4$)		
N° CAS	32612-48-9	5	1.600 (ORL-RAT)
COMPOSANT	Ester méthylique de l'acide hydroxy-4 benzoïque ($C_8H_8O_3$)		
N° CAS	99-76-3	<0,1	960 (IPR-MUS)
COMPOSANT	Ether de polyéthylène glycol et d'octyphényle ($C_{32}H_{58}O_{11}$)		
N° CAS	9002-93-1	<0,1	1.800 (ORL-RAT)
COMPOSANT	Eau (H_2O)		
N° CAS	7732-18-5	>94	190.000 (IPR-MUS)

IV. MESURES DE PREMIERE URGENCE

CONTACT AVEC LES YEUX ET LA PEAU : laver à l'eau la zone affectée.
INHALATION : faible risque.
INGESTION : faire boire beaucoup d'eau. Consulter un médecin.

V. MESURES DE LUTTE CONTRE L'INCENDIE

POINT D'ECLAIR : NA POINT D'AUTO-INFLAMMATION: NA
LIMITES D'INFLAMMABILITE : SUPERIEURE : NA INFERIEURE : NA
AGENTS D'EXTINCTION : agent chimique en poudre.

VI. MESURES A PRENDRE EN CAS DE DISPERSION ACCIDENTELLE

Laver à l'eau dans l'évier si la réglementation locale le permet.

VII. MANIPULATION ET STOCKAGE

Porter toujours des lunettes et des gants de protection pour travailler avec ce produit.
Fermer hermétiquement.

VIII. CONTROLE DE L'EXPOSITION/PROTECTION PERSONNELLE

VALEUR LIMITE DE L'OSHA ET DE L'ACGIH : aucune répertoriée.
EQUIPEMENTS DE PROTECTION : lunettes, blouse de laboratoire et gants de protection.

IX. PROPRIETES PHYSIQUES ET CHIMIQUES

ETAT : Liquide clair
SENSIBILITE AU CHOC MECANIQUE : aucune
SENSIBILITE A LA DECHARGE STATIQUE : aucune
COEFFICIENT DE PARTAGE HUILE/EAU : aucun
SOLUBILITE DANS L'EAU : soluble pH : 6,5 – 7,0
DENSITE : 1,0
POINT D'EBULLITION : 100 ºC POINT DE FUSION : non-réponse
DENSITE DE VAPEUR : non-réponse

X. STABILITE ET REACTIVITE

Le produit est stable. La polymérisation dangereuse ne se produira pas.
Incompatibilité : sels de magnésium et de sodium.
Produit de décomposition dangereux : émissions possibles de fumées de phosphate si chauffé.

XI. INFORMATIONS TOXICOLOGIQUES

Voie d'exposition : irritation cutanée.
Risque tératogène : aucun
Risque mutagène : aucun
Toxicité pour la reproduction : aucune
Risque cancérogène : aucun

XII. INFORMATIONS RELATIVES A L'ENVIRONNEMENT

Aucune disponible.

XIII. INFORMATIONS SUR LES POSSIBILITES D'ELIMINATION DES DECHETS

Eliminer selon les procédures et réglementations locales, nationales et communautaires.

XIV. INFORMATIONS RELATIVES AU TRANSPORT

Le produit n'est pas dangereux à transporter.

XV. INFORMATIONS REGLEMENTAIRES

INFORMATIONS EUROPEENNES :

Aucune.

INFORMATIONS E.-U./CANADA

Titre III de la loi SARA : les émissions de Na_2HPO_4 doivent être signalées selon la Section 302 du Titre III.
Proposition 65 de l'Etat de Californie : ingrédients non répertoriés.
Inventaire US TSCA (loi américaine réglementant les substances toxiques) : ingrédients répertoriés.
Classe RPC : aucune.
Classe TDG : aucune.
Cette FDS contient des informations requises par le RPC.

XVI. AUTRES INFORMATIONS

NOUS CROYONS QUE LES INFORMATIONS CI-DESSUS SONT EXACTES ET REPRESENTENT LES MEILLEURES INFORMATIONS EXISTANTES. TOUS LES PRODUITS SONT OFFERTS CONFORMEMENT AUX SPECIFICATIONS DE PRODUCTION COURANTES DU FABRICANT ET SONT UNIQUEMENT CONCUS POUR DES TESTS D'ANALYSE. LE FABRICANT NE SERA TENU EN AUCUN CAS RESPONSABLE DE TOUTES BLESSURES, PERTES OU DOMMAGES RESULTANT DE LA MANIPULATION, DE L'UTILISATION BONNE OU MAUVAISE DE CES PRODUITS.

FDS préparée par le l'environnement, la santé et la sécurité.

Document n° 227444-001 Rév. K Date d'effet : 13 novembre 2014

Orion 900024
Limpiador D para pH
Hoja de Datos de Seguridad del Material

I. IDENTIFICACIÓN DEL PRODUCTO Y COMPAÑÍA

PRODUCTO: Orion 900024
Limpiador D para pH

USO DEL PRODUCTO: Reactivo

FABRICANTE/PROVEEDOR: Thermo Fisher Scientific Inc.
22 Alpha Rd
Chelmsford, MA 01824 USA
Teléfono: 978-232-6000
E-mail: info.water@thermo.com

CHEMTREC® Emergencia 24 hr: US 800-424-9300; Internacional 703-527-3887

II. IDENTIFICACIÓN DE RIESGOS

ÍNDICES NFPA: SALUD: 0 INFLAMABILIDAD: 0 REACTIVIDAD: 0

ÓRGANOS AFECTADOS: Piel y ojos.
TOXICIDAD AGUDA: Bajo riesgo de toxicidad aguda debido a la baja concentración de las sales.
TOXICIDAD CRÓNICA: Bajo riesgo de toxicidad crónica debido a la baja concentración de las sales.
CONDICIONES MÉDICAS AGRAVADAS POR LA EXPOSICIÓN: Posible agravación de enfermedades de la piel.

III. COMPOSICIÓN/INFORMACIÓN DE INGREDIENTES

		%	LD_{50} mg/kg
COMPONENTE	Fosfato Dihidrógeno de Potasio (KH_2PO_4)		
CAS NO.	7778-77-0	<0.1	Ninguno encontrado
COMPONENTE	Fosfato de Hidrógeno Disodio (Na_2HPO_4)		
CAS NO.	7558-79-4	<0.1	17,000 (ORL-RAT)
COMPONENTE	Lauril Éter Sulfato de Sodio ($C_{12}H_{25}O.[C_2H_4O]_2.SO_3.NH_4$)		
CAS NO.	32612-48-9	5	1,600 (ORL-RAT)
COMPONENTE	Metilparabeno ($C_8H_8O_3$)		
CAS NO.	99-76-3	<0.1	960 (IPR-MUS)
COMPONENT	Triton X-100 ($C_{32}H_{58}O_{11}$)		
CAS NO.	9002-93-1	<0.1	1,800 (ORL-RAT)
COMPONENTE	Agua Desionizada (H_2O)		
CAS NO.	7732-18-5	>94	190,000 (IPR-MUS)

IV. MEDIDAS PARA PRIMEROS AUXILIOS

CONTACTO CON LOS OJOS Y LA PIEL: Lave el área de contacto con agua.
INHALACIÓN: Bajo riesgo.
INGESTIÓN: Suministre abundante agua. Consulte al médico.

V. MEDIDAS PARA COMBATIR INCENDIOS

PUNTO DE INFLAMABILIDAD: NA PUNTO DE AUTOIGNICIÓN: NA
LIMITES DE FLAMMABILIDAD: SUPERIOR: NA INFERIOR: NA
MEDIO DE EXTINCIÓN: Químico seco.

VI. MEDIDAS POR ESCAPE ACCIDENTAL

Lave y deseche por dreno con agua si las leyes locales lo permiten.

VII. MANEJO Y ALMACENAJE

Siempre use protección ocular y guantes cuando trabaje con este producto**.**
Mantenga sellado**.**

VIII. CONTROLES DE EXPOSICIÓN/PROTECCIÓN PERSONAL

LÍMITE DEL UMBRAL SEGÚN OSHA & ACGIH: Ninguno listado.
EQUIPO DE PROTECCION: Anteojos de seguridad, bata de laboratorio y guantes.

IX. PROPIEDADES FÍSICAS Y QUÍMICAS

ESTADO: Líquido claro UMBRAL DE AROMA: Aroma a cloro
SENSIBILIDAD A IMPACTO MECÁNICO: Ninguno
SENSITIBILIDAD A DESCARGA ESTÁTICA: Ninguna
COEFICIENTE DE DISTRIBUCIÓN DE ACEITE/AGUA Ninguno
SOLUBILIDAD EN AGUA: Soluble pH: 6.5 – 7.0
GRAVEDAD ESPECÍFICA: 1.0
PUNTO DE EBULLICIÓN: 100ºC PUNTO DE FUSIÓN: No determinado
DENSIDAD DEL VAPOR: No determinado

X. ESTABILIDAD Y REACTIVIDAD

El producto es estable. Polimerización peligrosa no ocurrirá.
Incompatibles: Sales de Magnesio y Sodio.
Descomposición peligrosa del producto: Posible evolución de gases por el calentamiento del fosfato.

XI. INFORMACIÓN TOXICOLÓGICA

Ruta de Exposición: Irritación de la piel.
Estado Teratógeno: Ninguno
Estado Mutageno: Ninguno
Toxicidad Reproductiva: Ninguna
Estado Carcinógeno: Ninguno

XII. INFORMACION ECOLÓGICA

No disponible.

XIII. FACTORES DE DESCARTE

Descarte de manera concordante con las Regulaciones Federales, Estatales y Locales.

XIV. INFORMACIÓN DE TRANSPORTE

El producto no es riesgoso para el transporte.

XV. INFORMACIÓN REGULADORA

INFORMACIÓN EUROPEA:

Ninguna.

INFORMACIÓN PARA USA/ CANADA

SARA/ Título III: La liberación de Na_2HPO_4 está sujeto a reporte bajo la Sección 302 del Título III.
Proposición Cal. 65: Los ingredientes no están listados.
Inventario US TSCA: Los ingredientes están listados.
Clase CPR: Ninguna.
Clase TDG: Ninguna.
La MSDS revela elementos requeridos por CPR.

XVI. OTRA INFORMACIÓN

LA INFORMACIÓN DE ARRIBA SE CONSIDERA QUE ES EXACTA Y REPRESENTA LA MEJOR INFORMACIÓN DISPONIBLE A LA FECHA PARA NOSOTROS. TODOS LOS PRODUCTOS SON OFRECIDOS DE ACUERDO CON LAS ESPECIFICACIONES DE PRODUCCIÓN ACTUAL DEL FABRICANTE Y EL PROPÓSITO ES SOLAMENTE PARA USO EN PRUEBAS ANALÍTICAS. EL FABRICANTE NO SERÁ RESPONSABLE POR CUALQUIER HERIDA, PÉRDIDA O DAÑO RESULTANTE DEL MANEJO, USO O MAL USO DE ESTOS PRODUCTOS.

MSDS preparada para Ambiente, Salud y Seguridad.

Documento Número 227444-001 Rev. K Fecha efectiva: 13 noviembre 2014

SAFETY DATA SHEET

Revision Date 18-May-2015 **WAI1 - AGHS - OSHA** **Revision Number** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name pH 4.01 Buffer

Product Number(s) 910104

Pure substance/mixture Mixture

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Use as laboratory reagent

Uses advised against No Information available

Manufacturer/Supplier

Thermo Fisher Scientific©
Water and Lab Products
22 Alpha Road
Chelmsford, MA 01824, USA
1-978-232-6000

E-mail address info.water@thermo.com

Made in USA

Emergency Telephone

24 Hour Emergency Phone Number
CHEMTREC®
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: 1-703-527-3887
(collect calls accepted)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Light red **Physical State** Liquid **Odor** Odorless

Safety data sheet available on request

Precautionary Statements
Do not handle until all safety information has been read and understood.

Hazards not otherwise classified (HNOC)
No information available

Other Information
No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %	Trade Secret
Water	7732-18-5	90 - 100%	*
Potassium Hydrogen Phthalate	877-24-7	0 - 10%	*
Potassium Hydroxide	1310-58-3	0 - 10%	*
Amaranth Red No. 27	915-67-3	0 - 10%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice Use first aid treatment according to the nature of the injury. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Obtain medical attention.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. If skin reactions occur, contact a physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, obtain medical attention.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Call a physician or Poison Control Center immediately.

Protection of First-aiders Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms and effects, both acute and delayed

Most important symptoms/effects No information available

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
No information available

Specific Hazards Arising from the Chemical
No information available

Explosion Data
Sensitivity to Mechanical Impact None
Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment. Refer to Section 8. Evacuate personnel to safe areas.
Environmental Precautions Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling To avoid risks to human health and the environment, comply with the instructions for use
Wear personal protective equipment
Avoid breathing dust/fume/gas/mist/vapours/spray
Ensure adequate ventilation, especially in confined areas

Conditions for Safe Storage, Including any Incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place

Store at room temperature in the original container
Keep away from direct sunlight

Incompatible Products No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium Hydroxide 1310-58-3	Ceiling: 2 mg/m³	(Vacated) Ceiling: 2 mg/m³	Ceiling: 2 mg/m³

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face Protection Wear chemical splash goggles. If splashes are likely to occur, wear:. Face-shield.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection None required under normal usage. In case of inadequate ventilation wear respiratory protection.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid
Appearance Light red
Odor Odorless
Odor Threshold No information available
pH Range No information available

Property	Values	Remarks • Method
Melting point/freezing point	No information available	
Boiling Point/Range	~ 100 °C / 212 °F	
Flash Point (High in °C)	N/A	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature		
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Density	No Information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity
No Information available

Chemical Stability
Stable under normal conditions

Possibility of Hazardous Reactions
None under normal processing

Conditions to Avoid
Extremes of temperature and direct sunlight

Incompatible Materials
No information available

Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating gases and vapors

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No information available
Eye Contact	No information available
Skin Contact	No information available
Ingestion	No information available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Potassium Hydrogen Phthalate 877-24-7	3200 mg/kg (Rat)	-	-
Potassium Hydroxide 1310-58-3	284 mg/kg (Rat)	-	-

Information on Toxicological Effects

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available
Mutagenic Effects	No information available
Carcinogenicity	No information available.
Reproductive Effects	No information available
STOT - single exposure	No information available

STOT - repeated exposure No information available

Aspiration hazard No information available

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Water Flea
Potassium Hydroxide 1310-58-3	-	80 mg/L LC50 96 h	-

Persistence and Degradability
No information available

Bioaccumulation/ Accumulation
No information available

Mobility
No information available.

Component	log Pow
Potassium Hydroxide 1310-58-3	0.83

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Improper disposal or reuse of this container may be dangerous and illegal.

Component	CAWAST
Potassium Hydroxide 1310-58-3	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

USINV	Complies
CANINV	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

USINV/ TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
CANINV/ DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japanese Existing and New Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium Hydroxide 1310-58-3	1000 lb	-	-	X

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
Potassium Hydroxide 1310-58-3	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Potassium Hydroxide 1310-58-3	X	X	X

U.S. EPA Label Information
No information available

16. OTHER INFORMATION

Prepared By Environmental, Health and Safety

Prepared For Thermo Fisher Scientific Inc.©

Issue Date No information available

Revision Date 18-May-2015

Expiration Date SDS is valid 3 years from revision date. Contact wai.techservbev@thermofisher.com for the latest revision.

Reason for revision Update to CLP Format

Disclaimer

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End of Safety Data Sheet

Thermo SCIENTIFIC
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CHEMTREC® 24 hr Emergency: US 800-424-9300;
CHEMTREC® 24 hr Emergency: International 703-527-3887

Orion 910107 & 910760 & 9107CB pH 7.00 Buffer Material Safety Data Sheet

I. PRODUCT IDENTIFICATION: pH 7.00 Buffer

Orion 910107 & 910760 & 9107CB

PRODUCT USE: Buffer

NFPA RATINGS: HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0

II. COMPOSITION/INFORMATION ON INGREDIENTS

		%	LD_{50} mg/kg
COMPONENT	Potassium Dihydrogen Phosphate (KH_2PO_4)		
CAS NO.	7778-77-0	<1	None found
COMPONENT	Disodium Hydrogen Phosphate (Na_2HPO_4)		
CAS NO.	7558-79-4	<1	298 LD_{Lo} (INV-DOG)
COMPONENT	5-Bromo-5-Nitro-1,3-Dioxane		
CAS NO.	30007-47-7	<1	455 (ORL-RAT)
COMPONENT	FD&C Yellow #5		
CAS NO.	1934-21-0	<0.01	12,750 (ORL-MUS)
COMPONENT	Deionized Water		
CAS NO.	7732-18-5	99	190,000 (IPR-MUS)

III. HAZARDS IDENTIFICATION

Low hazard for normal usage.
Harmful if swallowed. May irritate eyes and skin.
TARGET ORGANS: Skin.
ACUTE TOXICITY: Low hazard.
CHRONIC TOXICITY: May irritate skin after prolonged exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Disease of the skin.

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Wash off with large amounts of water.
INGESTION: Give large amounts of water. Consult physician.
INHALATION: Not hazardous

V. FIRE FIGHTING MEASURES

FLASH POINT: NA AUTOIGNITION POINT: NA
FLAMMABILITY LIMITS: UPPER: NA LOWER: NA
EXTINGUISHING MEDIA: Water, CO_2, dry chemical or foam.

VI. ACCIDENTAL RELEASE MEASURES

Take up with absorbent materials. Place in small containers for disposal. Wash spill site after material pick up is complete.

VII. HANDLING AND STORAGE

Always wear eye protection and gloves when working with this product.
Avoid contact with eyes, skin or clothing. Avoid ingestion.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

OSHA THRESHOLD LIMIT: NONE
ACGIH THRESHOLD LIMIT: NONE
PROTECTIVE EQUIPMENT: Safety glasses, lab coat and gloves.

IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: Light yellow liquid ODOR THRESHOLD: None
SENSITIVITY TO MECHANICAL IMPACT: None
SENSITIVITY TO STATIC DISCHARGE: None
COEFFICIENT OF OIL/WATER DISTRIBUTION: None
SOLUBILITY IN WATER: Soluble pH: 7.00
SPECIFIC GRAVITY: 1.0
BOILING POINT: 100ºC MELTING POINT: Not determined
VAPOR DENSITY: Not determined

X. STABILITY AND REACTIVITY

Product is stable. Hazardous polymerization will not occur.
Incompatibles: Magnesium and sodium salts.
Hazardous decomposition product: Fumes from phosphates.

XI. TOXICOLOGICAL INFORMATION

Route of Exposure: May irritate skin. May be harmful if swallowed.
Teratogen Status: None
Mutagen Status: None
Reproductive Toxicity: None
Carcinogen Status: None

XII. ECOLOGICAL INFORMATION

None available.

XIII. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with Federal, State and Local Regulations.

XIV. TRANSPORT INFORMATION

Product is not hazardous for transport.

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

None

US/ CANADA INFORMATION

SARA/Title III: Regulated under Section 302.
Cal. Proposition 65: Ingredients not listed.
US TSCA Inventory: Ingredients are listed.
CPR Class: None.
TDG Class: None.
MSDS discloses elements required by the CPR.

XVI. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.

MSDS prepared by Quality Assurance Group.

Document Number 246600-001 Rev. C Effective Date: January 27, 2009

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Orion 910107, 910760 y 9107CB
Tampón de pH 7,00
Ficha de Datos de Seguridad

I. IDENTIFICACION DE LA SUBSTANCIA/PREPARADO:
Tampón de pH 7,00
Orion 910107, 910760 y 9107CB

USO DE LA SUBSTANCIA/PREPARADO: Tampón

CLASIFICACIONES NFPA:
SALUD: 0 INFLAMABILIDAD: 0 REACTIVIDAD: 0

II. COMPOSICION/INFORMACION SOBRE COMPONENTES

		%	$LD_{50\ MG/KG}$
COMPONENTE	Potasio Dihidrógeno Fosfato (KH_2PO_4)		
CAS nº	7778-77-0	<1	No encontrado
COMPONENTE	Disodio Hidrógeno Fosfato ($NaHPO_4$)		
CAS nº	7558-79-4	<1	298 LD_{LO} (INV-DOG)
COMPONENTE	5-Bromo-5Nitro-1,3-Dioxano		
CAS nº	30007-47-7	<1	455 (ORL-RAT)
COMPONENTE	Amarillo #5 FD&C		
CAS nº	1934-21-0	<0,01	12.750 (ORL-MUS)
COMPONENTE	Agua desionizada		
CAS nº	7732-18-5	>66	190.000 (IPR-MUS)

III. IDENTIFICACION DE LOS PELIGROS

Bajo peligro en uso normal.
Peligroso si se traga. Puede irritar ojos y piel.
ORGANOS OBJETO: Piel.
TOXICIDAD AGUDA: Bajo peligro.
TOXICIDAD CRÓNICA: Puede irritar la piel después de exposición prologada.
CONDICIONES MEDICAS AGRAVADAS CON LA EXPOSICION: Enfermedades de la piel.

IV. PRIMEROS AUXILIOS

CONTACTO CON EL OJO Y LA PIEL: Lavar con grandes cantidades de agua.
INGESTIÓN: Dar grandes cantidades de agua. Consultar al médico.
INHALACION: No peligroso

V. MEDIDAS DELUCHA CONTRA INCENDIOS

PUNTO DE INFLAMACIÓN: No aplicable
PUNTO DE AUTOIGNICIÓN: No aplicable
LIMITES DE INFLAMABILIDAD; SUPERIOR: No aplicable
INFERIOR: No aplicable
MEDIO DE EXTINCIÓN: Agua, CO_2, producto químico seco o espuma.

VI. MEDIDAS EN CASO DE VERTIDO ACCIDENTAL

Limpiar con materiales absorbentes. Colocarlo en pequeños contenedores para su deshecho. Lavar el lugar del derrame después que se haya recogido completamente el material.

VII. MANIPULACION Y ALMACENAJE

Llevar siempre gafas protectoras y guantes cuando se trabaje con este producto. Evitar el contacto con ojos, piel o ropa. Evitar la ingestión.

VIII. CONTROLES DE EXPOSICION/PROTECCION PERSONAL

LIMITE DE MARGEN OSHA: NINGUNO
LIMITE DE MARGEN ACGIH: NINGUNO
EQUIPO PROTECTOR: Gafas de seguridad, bata de laboratorio y guantes.

IX PROPIEDADES FISICAS Y QUIMICAS

ESTADO: Líquido ligeramente amarillo OLOR: Ninguno
SENSIBILIDAD A IMPACTOS MECÁNICOS: Ninguna
SENSIBILIDAD A DESCARGAS ELÉCTRICAS: Ninguna
COEFICIENTE DE DISTRIBUCIÓN ACEITE/AGUA. Ninguno
SOLUBILIDAD EN AGUA: Soluble pH: 7,00
DENSIDAD: 1,0
PUNTO DE EBULLICIÓN: 100ºC
PUNTO DE FUSIÓN: No determinado
DENSIDAD DEL VAPOR: No determinada

X. ESTABILIDAD Y REACTIVIDAD

Producto estable. No ocurren polimerizaciones peligrosas.
Incompatibles: Sales de magnesio y sodio.
Descomposición peligrosa del producto: Humos de fosfatos.

XI. INFORMACION TOXICOLÓGICA

Ruta de exposición: Puede irritar la piel. Puede ser peligroso si se traga.
Estado teratógeno; Ninguno
Estado mutágeno: Ninguno.
Toxicidad reproductiva: Ninguna
Estado carcinógeno: Ninguno

XII. INFORMACIÓN ECOLÓGICA

No disponible.

XIII. CONSIDERACIONES SOBRE LA ELIMINACIÓN

Eliminarlo de acuerdo con las leyes locales, autonómicas y estatales.

XIV. INFORMACION RELATIVA AL TRANSPORTE
El producto no es peligroso para el transporte.

XV. INFORMACION REGLAMENTARIA

INFORMACION EUROPEA
Ninguna.

XVI. OTRA INFORMACION
ESTA INFORMACIÓN SE CREE CORRECTA Y REPRESENTA LA MEJOR INFORMACIÓN DEL FABRICANTE. LOS PRODUCTOS SON SOLAMENTE PARA USO EN ENSAYOS QUÍMICOS. EL FABRICANTE EN NINGÚN CASO SE HARÁ RESPONSABLE DE LOS DAÑOS RESULTANTES POR LA MANIPULACIÓN O EL MAL USO DE ESTOS PRODUCTOS.

Ficha de Datos de Seguridad preparado por el grupo de aseguramiento de la calidad.

Número de documento 246600-001 Rev. C fecha de entrada en vigor: enero 27, 2009