

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**SECTION 1. IDENTIFICATION**

Product name : MPC Nucleic Acid Isolation Kit I

Product code : 03730964001

Manufacturer or supplier's details

Company name of supplier : Roche Diagnostics

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Address : 9115 Hague Road
46250 Indianapolis IN
USA

Telephone : 1-800-428-5074

Emergency telephone

In case of emergencies: : CHEMTREC 1-800-424-9300 (U.S. or Canada)
1-703-527-3887 (International)**Recommended use of the chemical and restrictions on use**

Restrictions on use : For professional users only.

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with 29 CFR 1910.1200**

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapor.
H302 + H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H336 May cause drowsiness or dizziness.
H350 May cause cancer.Precautionary Statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P285 In case of inadequate ventilation wear respiratory protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015
SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
Proteinase K (PK)
GHS Classification

Respiratory sensitization : Category 1

Skin sensitization : Category 1

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
glycerol	56-81-5	>= 50 - < 70
Proteinase K	39450-01-6	>= 1 - < 5

Lysis/Binding Buffer
GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Thiocyanic acid, compd. with guanidine (1:1)	593-84-0	>= 30 - < 50
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	9002-93-1	>= 20 - < 30

Magnetic Glass Particles (MGPs) Suspension
GHS Classification

Flammable liquids : Category 2

Eye irritation : Category 2A

Specific target organ systemic toxicity - single exposure : Category 3 (Central nervous system)

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
2-Propanol	67-63-0	>= 90 - <= 100

Wash Buffer I (WB I) / Inhib. Removal Buffer

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**GHS Classification**

Flammable liquids : Category 3
Acute toxicity (Oral) : Category 4
Skin irritation : Category 2
Eye irritation : Category 2A
Carcinogenicity : Category 1A

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Guanidine, hydrochloride (1:1)	50-01-1	>= 30 - < 50
Ethanol	64-17-5	>= 20 - < 30

Wash Buffer II**GHS Classification**

Flammable liquids : Category 3
Carcinogenicity : Category 1A

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Ethanol	64-17-5	>= 30 - < 50

Wash Buffer III**GHS Classification**

Not a hazardous substance or mixture.

Hazardous ingredients

No hazardous ingredients

Elution Buffer**GHS Classification**

Not a hazardous substance or mixture.

Hazardous ingredients

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

- Consult a physician.
Show this material safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Call a physician or poison control center immediately.
Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : In case of fire hazardous decomposition products may be produced such as:
Carbon oxides

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Nitrogen oxides (NO_x)
Sulfur oxides
Hydrogen cyanide (hydrocyanic acid)

- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Refer to protective measures listed in sections 7 and 8.
Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).
Use only explosion-proof equipment.
Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Dispose of rinse water in accordance with local and national regulations.

Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

To prevent leaks or spillages from spreading, provide a suitable liquid retention system.

- Conditions for safe storage : No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.
- Technical measures/Precautions : See label, package insert or internal guidelines
- Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Proteinase K (PK)
Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
glycerol	56-81-5	TWA (mist, respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (mist, total dust)	15 mg/m ³	OSHA Z-1
		TWA (Mist - total dust)	10 mg/m ³	OSHA P0
		TWA (Mist - respirable fraction)	5 mg/m ³	OSHA P0
Proteinase K	39450-01-6	IOEL	0.00006 mg/m ³	Roche Industrial Hygiene Committee (RIHC)

Lysis/Binding Buffer
Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Magnetic Glass Particles (MGPs) Suspension

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015
Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-Propanol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m ³	NIOSH REL
		ST	500 ppm 1,225 mg/m ³	NIOSH REL
		TWA	400 ppm 980 mg/m ³	OSHA Z-1
		TWA	400 ppm 980 mg/m ³	OSHA P0
		STEL	500 ppm 1,225 mg/m ³	OSHA P0

Biological occupational exposure limits

Ingredients	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-Propanol	67-63-0	Acetone	Urine	End of shift at end of work-week	40 mg/l	ACGIH BEI

Wash Buffer I (WB I) / Inhib. Removal Buffer
Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m ³	OSHA P0
		STEL	1,000 ppm	ACGIH

Wash Buffer II
Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m ³	OSHA P0

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

		STEL	1,000 ppm	ACGIH
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Wash Buffer III
Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Elution Buffer
Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : No data available

Personal protective equipment

Respiratory protection : In the case of vapor formation use a respirator with an approved filter.

Hand protection

Material : Protective gloves

 Remarks : Wear appropriate protective gloves to prevent skin contact.
Replace torn or punctured gloves promptly.

 Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

 Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

 Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
Proteinase K (PK)

 Appearance : liquid
 Color : clear, colorless
 Odor : very faint
 Odor Threshold : No data available
 pH : 7.5

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (liquids)	:	The product is not flammable. Does not sustain combustion.
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.126 g/cm ³
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

Lysis/Binding Buffer

Appearance	:	liquid
Color	:	colorless
Odor	:	none

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Odor Threshold	:	No data available
pH	:	6.0 - 7.0
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	The product is not flammable.
Flammability (liquids)	:	Does not sustain combustion.
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	Hazardous decomposition products formed under fire conditions.
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

Magnetic Glass Particles (MGPs) Suspension

Appearance : suspension

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Color	:	black
Odor	:	strong
Odor Threshold	:	No data available
pH	:	No data available
Melting point/range	:	-89 °C / -89 °C
Boiling point/boiling range	:	82 °C / 82 °C
Flash point	:	12 °C / 12 °C
Evaporation rate	:	No data available
Self-ignition	:	485 °C / 485 °C
Upper explosion limit / Upper flammability limit	:	12 %(V)
Lower explosion limit / Lower flammability limit	:	2 %(V)
Vapor pressure	:	42 hPa (20 °C / 20 °C)
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	0.78 g/cm ³
Solubility(ies)		
Water solubility	:	partly miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	Hazardous decomposition products formed under fire conditions.
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015***Wash Buffer I (WB I) / Inhib. Removal Buffer***

Appearance	:	liquid
Color	:	colorless
Odor	:	characteristic
Odor Threshold	:	No data available
pH	:	6.6 (25 °C / 25 °C)
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	29 °C / 29 °C
Evaporation rate	:	No data available
Self-ignition	:	425 °C / 425 °C
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	43 hPa
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.057 g/cm ³
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Wash Buffer II**

Appearance	:	liquid
Color	:	colorless
Odor	:	alcohol-like
Odor Threshold	:	No data available
pH	:	4.0
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	24 °C / 24 °C
Evaporation rate	:	No data available
Self-ignition	:	425 °C / 425 °C
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	43 hPa
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	0.95 g/cm ³ (25 °C / 25 °C)
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Wash Buffer III

Appearance : liquid

Color : colorless

Odor : none

Odor Threshold : No data available

pH : 4.0

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : The product is not flammable.

Flammability (liquids) : Does not sustain combustion.

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : No data available

Solubility(ies)

 Water solubility : completely miscible

 Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

 Viscosity, dynamic : No data available

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Viscosity, kinematic : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Elution Buffer

Appearance : liquid

Color : colorless

Odor : none

Odor Threshold : No data available

pH : 5 - 9

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : No data available

Solubility(ies)

 Water solubility : completely miscible

 Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

 Viscosity, dynamic : No data available

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Viscosity, kinematic : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Reacts with the following substances:
Acids
sodium hypochlorite
Strong oxidizing agents
No decomposition if stored and applied as directed.
Vapors may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong acids
Strong oxidizing agents
Cyanides
sodium hypochlorite

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
Carbon oxides
Nitrogen oxides (NO_x)
Sulfur oxides
Hydrogen cyanide (hydrocyanic acid)

SECTION 11. TOXICOLOGICAL INFORMATION***Proteinase K (PK)*****Acute toxicity**

Not classified based on available information.

Ingredients:**glycerol:**

Acute oral toxicity : LD50 Oral (Rat): 12,600 mg/kg
LD50 Oral (Mouse): 4,090 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 30 mg/l
Test atmosphere: vapor
Method: Expert judgment

Acute dermal toxicity : LD50 Dermal (Rabbit): 10,000 mg/kg

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Skin corrosion/irritation**

Not classified based on available information.

Ingredients:**Proteinase K:**Result : Irritating to skin.
Remarks : May cause skin irritation and/or dermatitis.**Serious eye damage/eye irritation**

Not classified based on available information.

Ingredients:**Proteinase K:**Result : Irritating to eyes.
Remarks : May cause irreversible eye damage.**Respiratory or skin sensitization****Skin sensitization**

May cause an allergic skin reaction.

Respiratory sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Ingredients:**glycerol:**

Assessment : Mild eye irritant, Mild respiratory irritant, No skin irritation

Proteinase K:Assessment : May cause sensitization by skin contact.
Remarks : Causes sensitization.

Assessment : May cause sensitization by inhalation.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity**

Not classified based on available information.

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**STOT-single exposure**

Not classified based on available information.

Ingredients:**Proteinase K:**

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Not classified based on available information.

Ingredients:**Proteinase K:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Ingredients:**glycerol:**

Repeated dose toxicity - Assessment : Mild eye irritant, Mild respiratory irritant, No skin irritation

Aspiration toxicity

Not classified based on available information.

Ingredients:**Proteinase K:**

No data available

Lysis/Binding Buffer**Acute toxicity**

Harmful if swallowed or if inhaled.

Ingredients:**Thiocyanic acid, compd. with guanidine (1:1):**Acute oral toxicity : LD50 Oral (Rat): 593 mg/kg
Symptoms: VomitingAcute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l
Test atmosphere: dust/mist
Method: Expert judgmentAcute dermal toxicity : Acute toxicity estimate: 1,100 mg/kg
Method: Expert judgment**Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-:**

Acute oral toxicity : LD50 Oral (Rat): 1,900 - 5,000 mg/kg

Acute toxicity estimate: 500 mg/kg

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Method: Expert judgment

Acute dermal toxicity : LD50 Dermal (Rabbit): > 3,000 mg/kg

Skin corrosion/irritation

Causes severe burns.

Ingredients:**Thiocyanic acid, compd. with guanidine (1:1):**

Result : Causes burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Ingredients:**Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-:**

Result : Risk of serious damage to eyes.

Remarks : May cause irreversible eye damage.

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Ingredients:**Thiocyanic acid, compd. with guanidine (1:1):**

Remarks : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity**

Not classified based on available information.

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**STOT-single exposure**

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Magnetic Glass Particles (MGPs) Suspension**Acute toxicity**

Not classified based on available information.

Ingredients:**2-Propanol:**

Acute oral toxicity : LD50 Oral (Rat): 4,570 mg/kg
LD50 Oral (Mouse): 3,600 mg/kg
LD50 Oral (Rabbit): 6,410 mg/kg

Acute inhalation toxicity : LC50 (Rat): 30 mg/l, 16000 ppm
Exposure time: 4 h
Test atmosphere: vapor
LC50 (Mouse): 53 mg/l
Test atmosphere: vapor

Acute dermal toxicity : LD50 Dermal (Rabbit): 13,400 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Ingredients:**2-Propanol:**

Remarks : May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Causes serious eye irritation.

Ingredients:**2-Propanol:**Result : Irritating to eyes.
Remarks : May cause irreversible eye damage.**Respiratory or skin sensitization****Skin sensitization**

Not classified based on available information.

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Respiratory sensitization**

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity**

Not classified based on available information.

STOT-single exposure

May cause drowsiness or dizziness.

Ingredients:**2-Propanol:**

Assessment : May cause drowsiness or dizziness.

STOT-repeated exposure

Not classified based on available information.

Ingredients:**2-Propanol:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Not classified based on available information.

Further information***Wash Buffer I (WB I) / Inhib. Removal Buffer*****Acute toxicity**

Harmful if swallowed.

Ingredients:**Guanidine, hydrochloride (1:1):**

Acute oral toxicity : LD50 Oral (Rat): 475 mg/kg

LD50 Oral (Mouse): 571 mg/kg

LD50 Oral (Rat): 1,120 mg/kg

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Acute inhalation toxicity : LC50 (Rat, female): 3.2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

LC50 (Rat, male and female): 5.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

LC50 (Rat, male): 7.7 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2,001 mg/kg

Ethanol:

Acute oral toxicity : LD50 Oral (Rat): 7,060 mg/kg
LD50 Oral (Mouse): 3,450 mg/kg

Acute inhalation toxicity : LC50 (Rat): 20000 ppm
Exposure time: 10 h
Test atmosphere: vapor

LC50 (Mouse): 39 g/m³
Exposure time: 4 h
Test atmosphere: vapor

Skin corrosion/irritation

Causes skin irritation.

Ingredients:**Guanidine, hydrochloride (1:1):**

Species : Rabbit
Result : Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Ingredients:**Guanidine, hydrochloride (1:1):**

Species : Rabbit
Result : Irritating to eyes.

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

MPC Nucleic Acid Isolation Kit I

Version
1.4

Revision Date:
08-02-2018

Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Ingredients:

Guanidine, hydrochloride (1:1):

Assessment : Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Guanidine, hydrochloride (1:1):

Germ cell mutagenicity - Assessment : Not mutagenic in Ames Test.

Carcinogenicity

May cause cancer.

IARC Group 1: Carcinogenic to humans
Ethanol 64-17-5

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Wash Buffer II

Acute toxicity

Not classified based on available information.

Ingredients:

Ethanol:

Acute oral toxicity : LD50 Oral (Rat): 7,060 mg/kg
LD50 Oral (Mouse): 3,450 mg/kg

Acute inhalation toxicity : LC50 (Rat): 20000 ppm
Exposure time: 10 h
Test atmosphere: vapor

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015LC50 (Mouse): 39 g/m³
Exposure time: 4 h
Test atmosphere: vapor**Skin corrosion/irritation**

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

May cause cancer.

IARC Group 1: Carcinogenic to humans
Ethanol

64-17-5

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity**

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information**Wash Buffer III****Acute toxicity**

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Respiratory or skin sensitization****Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity**

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Elution Buffer**Acute toxicity**

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Carcinogenicity**

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity**

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION
Proteinase K (PK)**Ecotoxicity****Ingredients:****glycerol:**Toxicity to fish : LC50: > 100 mg/l
Exposure time: 96 h

Toxicity to algae : EC0 (Scenedesmus quadricauda (Green algae)): > 10,000 mg/l

Toxicity to fish (Chronic toxicity) : > 1 mg/l

Toxicity to microorganisms : EC0 (Pseudomonas putida): > 10,000 mg/l
Exposure time: 16 h**Ecotoxicology Assessment**

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : No data available

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Proteinase K:****Ecotoxicology Assessment**

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to
the environment : No data available**Persistence and degradability****Ingredients:****glycerol:**

Biodegradability : Remarks: The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

Bioaccumulative potential**Ingredients:****glycerol:**Partition coefficient: n-
octanol/water : log Pow: -2.66**Proteinase K:**Partition coefficient: n-
octanol/water : Remarks: No data available**Mobility in soil**

No data available

Other adverse effects***Lysis/Binding Buffer*****Ecotoxicity****Ingredients:****Thiocyanic acid, compd. with guanidine (1:1):**Toxicity to fish : LC50 (Poecilia reticulata (guppy)): 89.1 mg/l
Exposure time: 96 hNOEC (Poecilia reticulata (guppy)): 25 mg/l
Exposure time: 96 hToxicity to daphnia and other
aquatic invertebrates : EC50 (Daphnia): 42.4 mg/l
Exposure time: 48 hNOEC (Daphnia magna (Water flea)): 6.25 mg/l
Exposure time: 48 h

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Ecotoxicology Assessment**

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to
the environment : No data available**Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-:**Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 4 - 8.9 mg/l
Exposure time: 96 hToxicity to daphnia and other
aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 18 - 26 mg/l
Exposure time: 48 h**Ecotoxicology Assessment**

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to
the environment : No data available**Persistence and degradability****Ingredients:****Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-:**Biodegradability : Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
Remarks: According to the results of tests of biodegradability
this product is not readily biodegradable.**Bioaccumulative potential****Ingredients:****Thiocyanic acid, compd. with guanidine (1:1):**Partition coefficient: n-
octanol/water : log Pow: -1.38**Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-:**

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n-
octanol/water : Remarks: No data available**Mobility in soil**

No data available

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015
Other adverse effects
Magnetic Glass Particles (MGPs) Suspension
Ecotoxicity
Ingredients:
2-Propanol:

- Toxicity to fish : LC0 (Oncorhynchus mykiss (rainbow trout)): 10,000 mg/l
Method: OECD Test Guideline 203
- LC50 (Oncorhynchus mykiss (rainbow trout)): 12,250 mg/l
Method: OECD Test Guideline 203
- LC100 (Oncorhynchus mykiss (rainbow trout)): 15,000 mg/l
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 9,500 mg/l
Exposure time: 24 h
- Toxicity to algae : EC0 (Scenedesmus quadricauda (Green algae)): 1,800 mg/l
Exposure time: 168 h
Method: OECD Test Guideline 201
- Toxicity to microorganisms : EC0 (Pseudomonas putida): 1,050 mg/l
Exposure time: 16 h

Ecotoxicology Assessment

- Toxicity Data on Soil : Not expected to adsorb on soil.
- Other organisms relevant to the environment : No data available

Persistence and degradability
Ingredients:
2-Propanol:

- Biodegradability : Biodegradation: 99 %
Exposure time: 11 d
Method: OECD Test Guideline 302
- Biodegradation: 57 %
Exposure time: 5 d
Method: OECD Test Guideline 302

Bioaccumulative potential
Ingredients:
2-Propanol:

- Partition coefficient: n-octanol/water : log Pow: 0.05

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Mobility in soil**

No data available

Other adverse effects**Wash Buffer I (WB I) / Inhib. Removal Buffer****Ecotoxicity****Ingredients:****Guanidine, hydrochloride (1:1):**Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 1,759 mg/l
Exposure time: 48 hToxicity to microorganisms : EC50 (Pseudomonas putida): 89 mg/l
Exposure time: 18 h**Ecotoxicology Assessment**

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to
the environment : No data available**Ethanol:**Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8,100 mg/l
Exposure time: 48 hLC50 (Oncorhynchus mykiss (rainbow trout)): 7,100 mg/l
Method: OECD Test Guideline 203
GLP: noToxicity to daphnia and other
aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 5,400 mg/l
Exposure time: 48 h
GLP: noToxicity to algae : EC0 (Scenedesmus quadricauda (Green algae)): 5,000 mg/l
Exposure time: 7 dToxicity to microorganisms : EC0 (Pseudomonas putida): 6,500 mg/l
Exposure time: 16 h**Ecotoxicology Assessment**

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to
the environment : No data available

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Persistence and degradability****Ingredients:****Guanidine, hydrochloride (1:1):**

Biodegradability : Biodegradation: < 70 %
Remarks: According to the results of tests of biodegradability this product is not readily biodegradable.

Impact on Sewage Treatment : Do not discharge product into the aquatic environment without pretreatment (biological treatment plant).

Ethanol:

Biodegradability : Biodegradation: 97 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
Remarks: Readily biodegradable, according to appropriate OECD test.

Bioaccumulative potential**Ingredients:****Guanidine, hydrochloride (1:1):**

Partition coefficient: n-octanol/water : log Pow: ca. -1.7 (20 °C / 20 °C)

Ethanol:

Partition coefficient: n-octanol/water : Remarks: No data available

Mobility in soil

No data available

Other adverse effects***Wash Buffer II*****Ecotoxicity****Ingredients:****Ethanol:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8,100 mg/l
Exposure time: 48 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 7,100 mg/l
Method: OECD Test Guideline 203
GLP: no

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 5,400 mg/l
Exposure time: 48 h
GLP: no

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015Toxicity to algae : EC0 (Scenedesmus quadricauda (Green algae)): 5,000 mg/l
Exposure time: 7 dToxicity to microorganisms : EC0 (Pseudomonas putida): 6,500 mg/l
Exposure time: 16 h**Ecotoxicology Assessment**

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to
the environment : No data available**Persistence and degradability****Ingredients:****Ethanol:**Biodegradability : Biodegradation: 97 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
Remarks: Readily biodegradable, according to appropriate
OECD test.**Bioaccumulative potential****Ingredients:****Ethanol:**Partition coefficient: n-
octanol/water : Remarks: No data available**Mobility in soil**

No data available

Other adverse effects***Wash Buffer III*****Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects***Elution Buffer***

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

UN number : UN 3316
Proper shipping name : CHEMICAL KIT
Class : 9
Packing group : II
Labels : 9

IATA-DGR

UN/ID No. : UN 3316
Proper shipping name : Chemical kit
Class : 9
Packing group : II
Labels :
Packing instruction (cargo aircraft) : 960
Packing instruction (passenger aircraft) : 960

IMDG-Code

UN number : UN 3316
Proper shipping name : CHEMICAL KIT

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Class : 9
 Packing group : II
 Labels : 9
 EmS Code : F-A, S-P
 Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Domestic regulation
49 CFR

UN/ID/NA number : UN 3316
 Proper shipping name : Chemical kit

Class : 9
 Packing group : II
 Labels : Class 9 - Miscellaneous Dangerous Goods
 ERG Code : 171
 Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION
Proteinase K (PK)
EPCRA - Emergency Planning and Community Right-to-Know
CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Respiratory or skin sensitization

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

glycerol 56-81-5 >= 50 - < 70 %

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations
Massachusetts Right To Know

glycerol 56-81-5

Pennsylvania Right To Know

glycerol 56-81-5
Water 7732-18-5

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California Permissible Exposure Limits for Chemical Contaminants

glycerol 56-81-5

The ingredients of this product are reported in the following inventories:

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

Proteinase K

AICS : Not in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

TCSI : On the inventory, or in compliance with the inventory

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

TSCA : Not On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Lysis/Binding Buffer**EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Thiocyanic acid, compd. with guanidine (1:1)	593-84-0
Water	7732-18-5
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	9002-93-1

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Magnetic Glass Particles (MGPs) Suspension**EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SAFETY DATA SHEET



MPC Nucleic Acid Isolation Kit I

Version
1.4

Revision Date:
08-02-2018

Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

2-Propanol	67-63-0	>= 90 - <= 100 %
------------	---------	------------------

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCOMI Intermediate or Final VOC's (40 CFR 60.489):

2-Propanol	67-63-0	>= 90 - <= 100 %
------------	---------	------------------

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

2-Propanol	67-63-0
------------	---------

Pennsylvania Right To Know

2-Propanol	67-63-0
Magnetic glass particles (MGP)	Not Assigned

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California List of Hazardous Substances

2-Propanol	67-63-0
------------	---------

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015
California Permissible Exposure Limits for Chemical Contaminants

2-Propanol

67-63-0

The ingredients of this product are reported in the following inventories:

DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL. Magnetic glass particles (MGP)
AICS	:	Not in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
TCSI	:	Not in compliance with the inventory
TSCA	:	Not On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Wash Buffer I (WB I) / Inhib. Removal Buffer
EPCRA - Emergency Planning and Community Right-to-Know
CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation Carcinogenicity
-----------------------------	---	--

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Ethanol	64-17-5	>= 20 - < 30 %
---------	---------	----------------

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations
Massachusetts Right To Know

Ethanol	64-17-5
---------	---------

Pennsylvania Right To Know

Guanidine, hydrochloride (1:1)	50-01-1
Water	7732-18-5
Ethanol	64-17-5

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California List of Hazardous Substances

Ethanol	64-17-5
---------	---------

California Permissible Exposure Limits for Chemical Contaminants

Ethanol	64-17-5
---------	---------

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Wash Buffer II**EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Carcinogenicity

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCOMI Intermediate or Final VOC's (40 CFR 60.489):

Ethanol	64-17-5	>= 30 - < 50 %
---------	---------	----------------

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015
Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations
Massachusetts Right To Know

Ethanol	64-17-5
---------	---------

Pennsylvania Right To Know

Water	7732-18-5
Ethanol	64-17-5

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California List of Hazardous Substances

Ethanol	64-17-5
---------	---------

California Permissible Exposure Limits for Chemical Contaminants

Ethanol	64-17-5
---------	---------

The ingredients of this product are reported in the following inventories:

DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: On TSCA Inventory

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Wash Buffer III**EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCOMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Water

7732-18-5

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

DSL	:	All components of this product are on the Canadian DSL
AICS	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Elution Buffer
EPCRA - Emergency Planning and Community Right-to-Know
CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015
Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations
Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Water

7732-18-5

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

DSL	:	All components of this product are on the Canadian DSL
AICS	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	On the inventory, or in compliance with the inventory

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

TSCA : On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Proteinase K (PK)**GHS label elements**

Hazard pictograms

:



Signal Word

: Danger

Hazard Statements

: H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements

:
Prevention:
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves.
P285 In case of inadequate ventilation wear respiratory protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.***Lysis/Binding Buffer***

MPC Nucleic Acid Isolation Kit I

Version
1.4

Revision Date:
08-02-2018

Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

GHS label elements

Hazard pictograms



Signal Word

: Danger

Hazard Statements

: H302 + H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.

Precautionary Statements

: **Prevention:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Magnetic Glass Particles (MGPs) Suspension

GHS label elements

Hazard pictograms



Signal Word

: Danger

Hazard Statements

: H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.

MPC Nucleic Acid Isolation Kit I
Version
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

H336 May cause drowsiness or dizziness.

Precautionary Statements

:

Prevention:P210 Keep away from heat/sparks/open flames/hot surfaces.
No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/
equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

Response:P303 + P361 + P353 IF ON SKIN (or hair): Take off immediate-
ly all contaminated clothing. Rinse skin with water/shower.P304 + P340 + P312 IF INHALED: Remove person to fresh air
and keep comfortable for breathing. Call a POISON
CENTER/doctor if you feel unwell.P305 + P351 + P338 IF IN EYES: Rinse cautiously with water
for several minutes. Remove contact lenses, if present and
easy to do. Continue rinsing.P337 + P313 If eye irritation persists: Get medical advice/ at-
tention.P370 + P378 In case of fire: Use dry sand, dry chemical or
alcohol-resistant foam to extinguish.**Storage:**P403 + P233 Store in a well-ventilated place. Keep container
tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:P501 Dispose of contents/ container to an approved waste
disposal plant.
Wash Buffer I (WB I) / Inhib. Removal Buffer
GHS label elements

Hazard pictograms

:



Signal Word

:

Danger

Hazard Statements

:

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H350 May cause cancer.

MPC Nucleic Acid Isolation Kit I

Version
1.4

Revision Date:
08-02-2018

Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
 P362 Take off contaminated clothing and wash before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Wash Buffer II

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.

MPC Nucleic Acid Isolation Kit IVersion
1.4Revision Date:
08-02-2018Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

H350 May cause cancer.

Precautionary Statements

:

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Wash Buffer III**GHS label elements**

Not a hazardous substance or mixture.

Elution Buffer**GHS label elements**

Not a hazardous substance or mixture.

SECTION 16. OTHER INFORMATION**Further information**

MPC Nucleic Acid Isolation Kit I

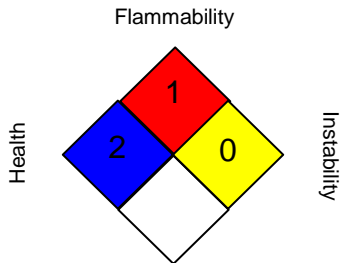
Version
1.4

Revision Date:
08-02-2018

Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Proteinase K (PK)

NFPA:



Special hazard.

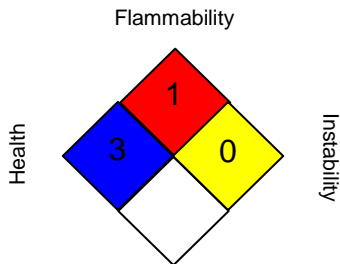
HMIS® IV:

HEALTH	*	2
FLAMMABILITY	0	
PHYSICAL HAZARD	0	

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Lysis/Binding Buffer

NFPA:



Special hazard.

HMIS® IV:

HEALTH	/	3
FLAMMABILITY	0	
PHYSICAL HAZARD	0	

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

MPC Nucleic Acid Isolation Kit I

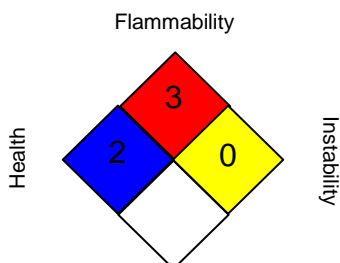
Version
1.4

Revision Date:
08-02-2018

Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Magnetic Glass Particles (MGPs) Suspension

NFPA:



Special hazard.

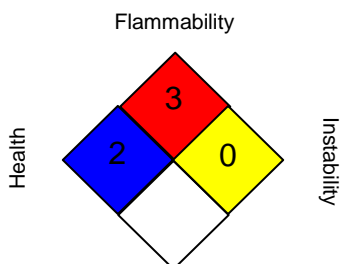
HMIS® IV:

HEALTH	/	2
FLAMMABILITY	3	
PHYSICAL HAZARD	0	

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Wash Buffer I (WB I) / Inhib. Removal Buffer

NFPA:



Special hazard.

HMIS® IV:

HEALTH	*	2
FLAMMABILITY	3	
PHYSICAL HAZARD	0	

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

MPC Nucleic Acid Isolation Kit I

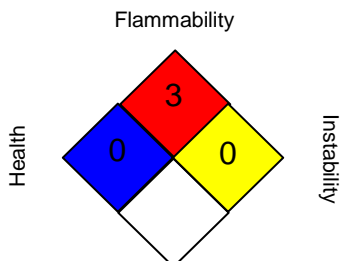
Version
1.4

Revision Date:
08-02-2018

Date of last issue: 06-15-2018
Date of first issue: 11-20-2015

Wash Buffer II

NFPA:



Special hazard.

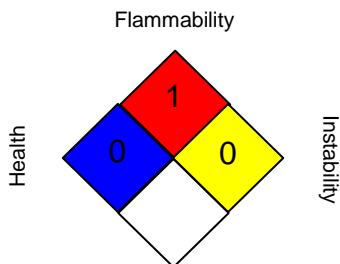
HMIS® IV:

HEALTH	*	0
FLAMMABILITY		3
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Wash Buffer III

NFPA:



Special hazard.

HMIS® IV:

HEALTH	/	0
FLAMMABILITY		0
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

MPC Nucleic Acid Isolation Kit I

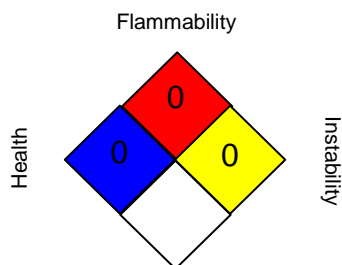
Version
1.4

Revision Date:
08-02-2018

Date of last issue: 06-15-2018
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Elution Buffer

NFPA:



Special hazard.

HMIS® IV:

HEALTH	/	0
FLAMMABILITY		0
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECS - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative



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