# SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Identification of the substance or mixture

Product code

K0702COMPONENTA

**Product name** 

Binding Buffer

#### Company/undertaking identification

#### Manufacturer/Supplier

Thermo Fisher Scientific Baltics UAB V.Graiciuno 8 LT-02241 Vilnius Lithuania

Tel.: +370 5 2602131 Fax.: +370 5 2602142

#### Emergency telephone number

For Chemical Emergency (Spill, Leak, Fire, Exposure or Accident), call CHEMTREC Domestic North America: 1-800-424-9300 (24 hours) CHEMTREC International: 1-703-527-3887 (collect calls accepted)

### Country specific Emergency Number (if available):

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

# SECTION 2: Hazards identification

#### GHS - Classification

#### Signal Word WARNING



#### Health hazards

TOURT HOLDING	
Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ systemic toxicity (single exposure)	Category 3

#### Physical hazards

Not Hazardous

#### **Hazard Statements**

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H412 - Harmful to aquatic life with long lasting effects

H402 - Harmful to aquatic life

#### **Precautionary Statements**

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P273 - Avoid release to the environment

P264 - Wash hands thoroughly after handling

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P337 + P313 - If eye irritation persists: Get medical advice/attention

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

P330 - Rinse mouth

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

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

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

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

P362 + P364 - Take off all contaminated clothing and wash it before reuse

### Principle Routes of Exposure

#### Potential Health Effects

eyes Irritating to eyes.

SkinHarmful in contact with skin.inhalationMay be harmful by inhalation.

Ingestion Harmful if swallowed.

#### Specific effects

Carcinogenic effects None.

Mutagenic effects None.

Reproductive toxicity None.

Sensitization None.

Target Organ Effects None under normal use conditions.

#### **HMIS**

Health	2
Flammability	0
Reactivity	0

# SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight%
Thiocyanic acid, compound with	593-84-0	209-812-1	30 - 60
guanidine (1:1)			
593-84-0 ( 30 - 60 )			

Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product. We recommend handling all chemicals with caution.

#### SECTION 4: First ald measures

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Take off all

contaminated clothing and wash it before reuse. Immediate medical attention is

required.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Immediate medical attention is required.

Ingestion Call a physician or poison control center immediately. Never give anything by

mouth to an unconscious person. Do not induce vomiting without medical advice.

inhalation Remove to fresh air. If not breathing, give artificial respiration. Call a physician or

poison control center immediately.

Most important symptoms and effects, both acute and delayed

H302 - Harmful if swallowed, H315 - Causes skin irritation, H319 - Causes serious eye irritation, H335 - May cause respiratory irritation, H412 - Harmful to aquatic life with long lasting effects, H402 - Harmful to aquatic life

Notes to Physician Treat symptomatically.

# SECTION 5: Firefighting measures

Suitable extinguishing media

Special protective equipment for firefighters

Water spray. Carbon dioxide (CO2). Foam. Dry chemical. Wear self-contained breathing apparatus and protective

suit.

Specific hazards arising from the chemical

Not known

### SECTION 6: Accidental release measures

Personal precautions

Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use

personal protection equipment.

Methods for cleaning up

Soak up with inert absorbent material.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

See Section 12 for more information.

### SECTION 7: Handling and storage

Handling

Always wear reccommended Personal Protective Equipment. No special handling

advices are necessary.

Storage

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

### SECTION 8: Exposure controls/personal protection

Exposure Limits

Revision date Product code 22-Apr-2016

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Chemical Name	OSHA PEL	OSHA PEL (Celling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Thiocyanic acld,	None	None	None	None
compound with guanidine				I TONE
(1:1)				

### Engineering measures

Ensure adequate ventilation, especially in confined areas.

#### Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Impervious gloves.

Eye protection

Goggles.

Skin and Body Protection

Lightweight protective clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure

controls

Prevent product from entering drains. Do not allow material to contaminate ground water system.

°F No data available

°F No data available

°F No data available

°F No data available

# SECTION 9: Physical and chemical properties

#### General information

Form Liquid
Appearance Colorless
Odor odorless

Odor Threshold Mixture has not been tested Boiling point / boiling range °C No data available

Melting point / melting range

°C No data available °C No data available

flash point Autoignition Temperature

°C No data available
°C No data available
No data available

Evaporation rate Flammability (solid, gas)

No data available
Mixture has not been tested

Oxidizing properties

soluble

Water solubility
Upper explosion limit

No data available

Lower explosion limit

No data available

Partition coefficient:

No data available

n-octanol/water Vapor Pressure vapor density

No data available No data available

Viscosity

Mixture has not been tested

No data available

### SECTION 10: Stability and reactivity

Stability

pH value

Stable under normal conditions. Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.

Materials to avoid

Strong oxidizing agents. Strong acids. Cyanide compounds, sodium hypochlorite.

Revision date Product code 22-Apr-2016

K0702COMPONENTA

Page 4/6 Product name Binding Buffer Possibility of hazardous

reactions

Hazardous reaction has not been reported

Hazardous decomposition

products

Carbon oxides, Nitrogen Oxides, Sulphur oxides,

polymerization

None under normal processing.

Conditions to avoid

None under normal processing.

### SECTION 11: Toxicological information

### Acute Toxicity

Chemical Name	LD50 (oral,rat/mouse)	The state of the s	LC50 (inhalation,rat/mouse)
Thiocyanic acid, compound with	593 mg/kg	No data available	No data available
guanidine (1:1)			

### Principle Routes of Exposure

Potential Health Effects

eyes

Irritating to eyes.

Skin inhalation Harmful in contact with skin. May be harmful by inhalation.

Ingestion

Harmful if swallowed.

Carcinogenic effects Mutagenic effects Reproductive toxicity None. None. None.

Reproductive tox Sensitization

None.

**Target Organ Effects** 

None under normal use conditions

# SECTION 12: Ecological Information

**Ecotoxicity** 

Hazardous to the Aquatic Environment.

Acute aquatic toxicity Chronic aquatic toxicity Category 3. Category 3.

Mobility Biodegradation

Bioaccumulation

No information available.
No information available.
No information available.

# SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

### SECTION 14: Transport information

IATA

**Proper Shipping Name** 

No dangerous good in sense of these transport regulations

Hazard Class Subsidiary class

None None

Packing group

None

Revision date Product code

22-Apr-2016

K0702COMPONENTA

Page 5/6 Product name Binding Buffer UN-No Environmental hazards

none None

### SECTION 15: Regulatory Information

Component	US TSCA
Thiocyanic acid, compound with guanidine (1:1)	Listed
593-84-0 ( 30 - 60 )	

### **US Federal Regulations**

#### **SARA 313**

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

#### **US State Regulations**

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### WHMIS Hazard Class

D2B - Toxic materials



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

### SECTION 16: Other Information

Reason for revision

SDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"

**End of Safety Data Sheet** 

# Thermo Fisher

# **Safety Data Sheet**

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Identification of the substance or mixture

Product code

K0702COMPONENTO

**Product name** 

**Elution Buffer** 

#### Company/undertaking identification

#### Manufacturer/Supplier

Thermo Fisher Scientific Baltics UAB V.Graiciuno 8 LT-02241 Vilnius Lithuania

Tel.: +370 5 2602131 Fax.: +370 5 2602142

### **Emergency telephone number**

For Chemical Emergency (Spill, Leak, Fire, Exposure or Accident), call CHEMTREC Domestic North America: 1-800-424-9300 (24 hours) CHEMTREC International: 1-703-527-3887 (collect calls accepted)

# Country specific Emergency Number (if available):

For Research Use Only.Not for use in diagnostic procedures.

### SECTION 2: Hazards Identification

#### GHS - Classification

#### Signal Word

None

#### Health hazards

Not classified

#### Physical hazards

Not classified

#### **Hazard Statements**

Not Applicable

#### **Precautionary Statements**

Not Applicable

### Principle Routes of Exposure

Potential Health Effects

Revision date Product code 22-Apr-2016

K0702COMPONENTC

eyes May cause eye irritation with susceptible persons.

Skin May cause skin irritation in susceptible persons.

inhalation May be harmful by inhalation. Ingestion May be harmful if swallowed.

Specific effects

Carcinogenic effects None.

Mutagenic effects None.

Reproductive toxicity None.

Sensitization None.

Target Organ Effects No known effects under normal use conditions.

**HMIS** 

Health	0
Flammability	0
Reactivity	0

# SECTION 3: Composition/information on ingredients

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

### SECTION 4: First aid measures

Skin contact Rinse cautiously with water for several minutes. Immediate medical attention is not

required.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do.

Ingestion Not expected to present a significant ingestion hazard under anticipated conditions

of normal use. If you feel unwell, seek medical advice.

inhalation Not expected to be an inhalation hazard under anticipated conditions of normal

use of this material. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Not Applicable

Notes to Physician Treat symptomatically.

### SECTION 5: Firefighting measures

Suitable extinguishing media

Special protective equipment for firefighters Specific hazards arising from the chemical Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

Standard procedure for chemical fires.

Not known

### SECTION 6: Accidental rejease measures

Personal precautions Always wear reccommended Personal Protective Equipment, Use personal

protection equipment.

Methods for cleaning up Soak up with inert absorbent material.

Environmental precautions

Revision date Product code 22-Apr-2016

K0702COMPONENTC

Page 2/5
Product name Elution Buffer

No special environmental precautions required.

See Section 12 for more information.

### SECTION 7: Handling and storage

Handling Always wear reccommended Personal Protective Equipment, No special handling

advices are necessary.

Storage Keep in a dry, cool and well-ventilated place.

### SECTION 8: Exposure controls/personal protection :-

#### Exposure Limits

We are not aware of any national exposure limit.

**Engineering measures** Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Impervious gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Lightweight protective clothing.

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

Environmental exposure

controls

No special environmental precautions required.

# SECTION 9: Physical and chemical properties

#### General information

Form Liquid
Appearance Colorless
Odor odorless

Odor ThresholdNo data availableBoiling point / boiling range°C No data available°F No data availableMelting point / melting range°C No data available°F No data availableflash point°C No data available°F No data availableAutoignition Temperature°C No data available°F No data available

Autoignition Temperature °C No data available
Evaporation rate No data available
Flammability (solid, gas) No data available

Oxidizing properties No data available Water solubility soluble

Upper explosion limitNo data availableLower explosion limitNo data available

Partition coefficient: No data available

n-octanol/water

Vapor PressureNo data availablevapor densityNo data available

Revision date Product code 22-Apr-2016 K0702COMPONENTC

Page 3/5 Product name Elution Buffer Viscosity No data available

pH value 8.5

### SECTION 10: Stability and reactivity

Stability Stable under normal conditions.

Materials to avoid No dangerous reaction known under conditions of normal use.

Possibility of hazardous

reactions

Hazardous reaction has not been reported

Hazardous decomposition

products

None under normal use conditions.

polymerization Hazardous polymerization does not occur.

Conditions to avoid None under normal processing.

### SECTION 11: Toxicological Information

### Acute Toxicity

No toxicology information is available.

### Principle Routes of Exposure

#### Potential Health Effects

eyes May cause eye irritation with susceptible persons.

Skin May cause skin irritation in susceptible persons.

inhalation May be harmful by inhalation.
Ingestion May be harmful if swallowed.

Carcinogenic effects None.

Mutagenic effects None.

Reproductive toxicity None.

Sensitization None.

### SECTION 12: Ecological Information

Ecotoxicity Contains no substances known to be hazardous to the environment or not

degradable in waste water treatment plants.

MobilityNo information available.BiodegradationInherently biodegradable.

Bioaccumulation Material does not bioaccumulate.

### SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

### SECTION 14: Transport Information

Revision date Product code

Section 19

22-Apr-2016

K0702COMPONENTC

Page 4/5 Product name Elution Buffer IATA

**Proper Shipping Name** 

No dangerous good in sense of these transport regulations

Hazard Class Subsidiary class None None

Packing group UN-No None

Environmental hazards

None None

### SECTION 15: Regulatory Information

### US Federal Regulations

#### **SARA 313**

This product is not regulated by SARA.

### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

#### **US State Regulations**

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### **WHMIS Hazard Class**

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

### SECTION 16: Other Information

Reason for revision

SDS sections updated.

For Research Use Only. Not for use in diagnostic procedures.

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**End of Safety Data Sheet** 



# **Safety Data Sheet**

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### Identification of the substance or mixture

Product code

K0702COMPONENTB

**Product name** 

Wash Buffer

#### Company/undertaking identification

### Manufacturer/Supplier

Thermo Fisher Scientific Baltics UAB V.Graiciuno 8 LT-02241 Vilnius Lithuania

Tel.: +370 5 2602131 Fax.: +370 5 2602142

#### Emergency telephone number

For Chemical Emergency (Spill, Leak, Fire, Exposure or Accident), call CHEMTREC Domestic North America: 1-800-424-9300 (24 hours) CHEMTREC International: 1-703-527-3887 (collect calls accepted)

#### Country specific Emergency Number (if available):

For Research Use Only.Not for use in diagnostic procedures.

# SECTION 2: Hazards identification

#### GHS - Classification

#### Signal Word

None

#### Health hazards

Not classified

#### Physical hazards

Not classified

#### **Hazard Statements**

Not Applicable

#### **Precautionary Statements**

Not Applicable

#### Principle Routes of Exposure

Potential Health Effects

eves May cause eye irritation with susceptible persons. Skin May cause skin irritation in susceptible persons.

inhalation May be harmful by inhalation. Ingestion May be harmful if swallowed.

Specific effects

Carcinogenic effects None. Mutagenic effects None. Reproductive toxicity None. Sensitization None.

**Target Organ Effects** No known effects under normal use conditions.

**HMIS** 

111110	
Health	0
Flammability	0
Reactivity	O

### SECTION 3: Composition/information on ingredients

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

### SECTION 4: First ald measures

Skin contact Rinse cautiously with water for several minutes. Immediate medical attention is not

required.

Eve contact Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do.

Ingestion Not expected to present a significant ingestion hazard under anticipated conditions

of normal use. If you feel unwell, seek medical advice.

inhalation Not expected to be an inhalation hazard under anticipated conditions of normal

use of this material. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Not Applicable

Notes to Physician Treat symptomatically.

### SECTION 5: Firefighting measures

Suitable extinguishing media

Special protective equipment for firefighters Specific hazards arising from the chemical

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

Standard procedure for chemical fires.

Not known

### SECTION 6: Accidental release measures

Personal precautions Always wear reccommended Personal Protective Equipment, Use personal

protection equipment.

Soak up with inert absorbent material. Methods for cleaning up

Environmental precautions

Revision date Product code

22-Apr-2016 K0702COMPONENTB

Page 2/5 Product name Wash Buffer No special environmental precautions required.

See Section 12 for more information.

### SECTION 7: Handling and storage

Handling Always wear reccommended Personal Protective Equipment. No special handling

advices are necessary.

Storage Keep in a dry, cool and well-ventilated place.

### SECTION 8: Exposure controls/personal protection

#### Exposure Limits

We are not aware of any national exposure limit.

**Engineering measures** Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Impervious gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Lightweight protective clothing.

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

Environmental exposure

controls

No special environmental precautions required.

# SECTION 9: Physical and chemical properties

#### General information

Form Liquid
Appearance Colorless
Odor odorless

Odor ThresholdNo data availableBoiling point / boiling range°C No data available°F No data availableMelting point / melting range°C No data available°F No data availableflash point°C No data available°F No data availableAutoignition Temperature°C No data available°F No data available

Evaporation rate
Plammability (solid, gas)
Oxidizing properties
Water solubility
Upper explosion limit
Lower explosion limit
No data available

Partition coefficient: No data available

n-octanol/water

Vapor PressureNo data availablevapor densityNo data available

Revision date Product code 22-Apr-2016 K0702COMPONENTB

Page 3/5 Product name Wash Buffer Viscosity No data available pH value No data available

SECTION for Stability and reactivity

Stability Stable under normal conditions.

Materials to avoid No dangerous reaction known under conditions of normal use.

Possibility of hazardous

reactions

Hazardous reaction has not been reported

Hazardous decomposition

products

None under normal use conditions.

polymerization Hazardous polymerization does not occur.

Conditions to avoid None under normal processing.

## SECTION 11: Toxicological Information

### Acute Toxicity

No toxicology information is available.

### Principle Routes of Exposure

#### Potential Health Effects

eyes May cause eye irritation with susceptible persons.
Skin May cause skin irritation in susceptible persons.

inhalation May be harmful by inhalation.
Ingestion May be harmful if swallowed.

Carcinogenic effects None.

Mutagenic effects None.

Reproductive toxicity None.

Sensitization None.

### SECTION 12: Ecological information

Ecotoxicity Contains no substances known to be hazardous to the environment or not

degradable in waste water treatment plants.

MobilityNo information available.BiodegradationInherently biodegradable.

Bioaccumulation Material does not bioaccumulate.

### SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

### SECTION 14: Transport Information

Revision date Product code 22-Apr-2016 K0702COMPONENTB

Page 4/5 Product name Wash Buffer IATA

**Proper Shipping Name** 

No dangerous good in sense of these transport regulations

Hazard Class Subsidiary class Packing group None None

Packing group UN-No

None

Environmental hazards

None None

# SECTION 15: Regulatory Information

### **US Federal Regulations**

#### **SARA 313**

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

### **US State Regulations**

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

### **WHMIS Hazard Class**

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

### SECTION:16: Other information

Reason for revision

SDS sections updated.

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End of Safety Data Sheet