

# HistoChoice® Tissue Fixative, 20X HISTOLOGY 2 Component System

Product No. H102 Version 6.4

Revision date 09.04.2020 Print date 09.04.2020

# **Composition / Information on ingredients**

H102-1 HistoChoice® Tissue Fixative, 20X, Component A HISTOLOGY H102-2 HistoChoice® Tissue Fixative, 20X HISTOLOGY Component B

# **Transport information: Chemical Kit**

# Land transport (TDG)

No dangerous good in sense of this transport regulation.

# Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

# Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.



# Safety Data Sheet

According to Hazardous Products Regulation (SOR/2015-17)

# **SECTION 1: Identification**

### **Product identifier**

Trade name/designation: HistoChoice® Tissue Fixative, 20X, Component A HISTOLOGY

Product No.: H102-1
Synonymes: none/none
CAS No.: not applicable

Other means of identification:

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

Recommended Use: For Further Manufacturing Use Only
Uses advised against: Not for Human or Animal Drug Use

# Details of the supplier of the safety data sheet

# **Supplier**

# **VWR** International

Street 2360 Argentia Road
Postal code/City Mississauga, Ontario

Canada L5N 5Z7

Telephone +1-800-932-5000 toll-free within US/Canada

Telefax: +1-610-728-2103



# **Emergency phone number**

Telephone +1-613-996-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)

# **Preparation Information**

VWR International - Product Information Compliance

E-mail sds@vwr.com

# **SECTION 2: Hazard identification**

# 2.1 Classification of the substance or mixture

Classification according to Hazardous Products Regulation (SOR/2015-17)

Hazard classes and hazard categories	Hazard statements
Acute toxicity, category 4, oral	H302
Skin irritation, category 2	H315
Serious eye damage, category 1	H318

### 2.2 Label elements

Labelling in accordance with (SOR/2015-17)

### **Hazard pictograms**



Signal word: Danger

Hazard statements	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.

Precautionary Statements			
P280	Wear protective gloves/protective clothing/eye protection/face protection.		
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.		
P302+P352	IF ON SKIN: Wash with plenty of water/		
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to		
	Continue rinsing.		
P308+P310	IF exposed or concerned: Immediately call a POISON CENTER/doctor.		

Hazards not otherwise classified (HNOC)

none/none



# SECTION 3: Composition / information on ingredients

#### 3.1 Substances

not applicable

### 3.2 Mixtures

Hazardous ingredients GHS Classification in accordance with (SOR/2015-17)

Substance name	Concentration	Identifier	Hazard classes and hazard categories
5-Sulphosalicylic acid dihydrate	1 - 3%	CAS No.: 5965-83-3	Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335
Zinc sulphate monohydrate	1 - 3%	CAS No.: 7446-19-7	Acute Tox. 4 - H302 Eye Dam. 1 - H318
Sodium hydroxide	1 - 3%	CAS No.: 1310-73-2	Skin Corr. 1A - H314
Methanesulphonic acid	0.1 - 1%	CAS No.: 75-75-2	Met. Corr. 1 - H290 Acute Tox. 4 - H302+H312 Skin Corr. 1B - H314 STOT SE 3 - H335
Glycolic acid	10 - 20%	CAS No.: 79-14-1	Acute Tox. 4 - H302 Skin Corr. 1B - H314

### **SECTION 4: First aid measures**

### 4.1 General information

IF exposed: Immediately call a POISON CENTER/doctor. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

#### In case of inhalation

Immediately call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

### In case of ingestion

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

# 4.2 Most important symptoms/effects, acute and delayed

no data available

# 4.3 Indication of any immediate medical attention and special treatment needed



### 4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

### 4.5 Information to physician

no data available

# **SECTION 5: Fire fighting measures**

### 5.1 Extinguishing media

### Suitable extinguishing media

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

### Extinguishing media which must not be used for safety reasons

no restriction

# 5.2 Specific hazards arising from the chemical

In case of fire may be liberated:

Pyrolysis products, toxic

### 5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives.

Protective equipment and precautions for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

### **Additional information**

Do not allow run-off from fire-fighting to enter drains or water courses.

Do not inhale explosion and combustion gases.

Use water spray/stream to protect personnel and to cool endangered containers.

In case of fire: Evacuate area.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety.

### 6.2 Environmental precautions

Discharge into the environment must be avoided.

### 6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

### 6.4 Additional information

Clear spills immediately.



# **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:

Inhalation

skin contact

Eye contact

Use extractor hood (laboratory).

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

### 7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: Store between 15 °C and 30 °C.

Keep container tightly closed and in a well-ventilated place. Keep/Store only in original container.

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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

### 8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2 Engineering controls

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

### Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection

Eye glasses with side protection

Skin protection

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

#### Additional information

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Environmental exposure controls



# **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

(a) Appearance

Physical state: liquid

Color: no data available
(b) Odour: no data available
(c) Odour threshold: no data available

# Safety relevant basic data

(d) pH: no data available
(e) Melting point/freezing point: no data available
(f) Initial boiling point and boiling range: no data available
(g) Flash point: no data available
(h) Evaporation rate: no data available
(i) Flammability (solid, gas): not applicable

(j) Flammability or explosive limits

Lower explosion limit: no data available
Upper explosion limit: no data available
(k) Vapour pressure: no data available
(l) Vapour density: no data available
(m) Relative density: no data available

(n) Solubility(ies)

Water solubility (g/L):
Soluble (g/L) in Ethanol:
no data available
no data available
no data available
partition coefficient: n-octanol/water:
no data available
partition temperature:
no data available
no data available

(r) Viscosity

Kinematic viscosity: no data available
Dynamic viscosity: no data available
(s) Explosive properties: not applicable
(t) Oxidising properties: not applicable

### 9.2 Other information

Bulk density: no data available
Refraction index: no data available
Dissociation constant: no data available
Surface tension: no data available
Henry's Law Constant: no data available

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity



### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

# 10.6 Hazardous decomposition products

no data available

#### 10.7 Additional information

no data available

# **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### **Acute effects**

Acute oral toxicity:

5-Sulphosalicylic acid dihydrate - LD50: > 1850 mg/kg - Rat - (RTECS)

Zinc sulphate monohydrate - LD50: > 2949 mg/kg - Rat - (IUCLID)

Methanesulphonic acid - LD50: > 200 mg/kg - Rat - (RTECS)

Glycolic acid - LD50: > 1938 mg/kg - Rat - (Merck KGaA)

Acute dermal toxicity:

Sodium hydroxide - LD50: 1350 mg/kg - Rabbit - (IUCLID)

Methanesulphonic acid - LD50: < 200 mg/kg - Rabbit - (IUCLID)

Acute inhalation toxicity:

Glycolic acid - LC50: 7100  $\mu g/m3$  - Rat - (National Library of Medicine ChemID Plus (NLM CIP))

### Irritant and corrosive effects

Primary irritation to the skin:

Causes skin irritation.

Irritation to eyes:

Causes serious eye damage.

Irritation to respiratory tract:

not applicable



### Respiratory or skin sensitization

In case of skin contact: not sensitising In case of inhalation: not sensitising

#### STOT-single exposure

not applicable

### STOT-repeated exposure

not applicable

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

#### Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

no data available	ACGIH	IARC	NTP	OSHA

### Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

### Reproductive toxicity

No indications of human reproductive toxicity exist.

### **Aspiration hazard**

not applicable

### Other adverse effects

no data available

### **Additional information**

no data available

# **SECTION 12: Ecological information**

### 12.1 Ecotoxicity

### Fish toxicity:

Zinc sulphate monohydrate - LC50: 4 mg/l (96 h)

Sodium hydroxide - LC50: 196 mg/I (96 h) - Adema, D.M.M. 1985. Aquatic Toxicity of Compounds that may be Carried by Ships (Marpol 19733 Annex II). A Progress Report for 1985. Tech.Rep.No.R85/217, TNO, The Hague, Netherlands :40 p.

### Daphnia toxicity:

Zinc sulphate monohydrate - EC50: 0.79 mg/l (48 h)

Zinc sulphate monohydrate - LC50: 1.2 mg/l (48 h)

Sodium hydroxide - EC50: 40.4 mg/l (48 h) - Warne, M.S.J., and A.D. Schifko 1999. Toxicity of Laundry Detergent Components to a Freshwater Cladoceran and Their Contribution to Detergent Toxicity. Ecotoxicol.Environ.Saf. 44(2):196-206



### Algae toxicity:

Zinc sulphate monohydrate - EC50: 0.22 mg/l (72 h)

#### **Bacteria toxicity:**

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

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

### 12.4 Mobility in soil:

no data available

### 12.5 Results of PBT/vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6 Other adverse effects

no data available

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

### Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

#### Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

### Additional information

no data available

# **SECTION 14: Transport information**

### Land transport (TDG)

No dangerous good in sense of this transport regulation.

### Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant



# Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.

# **SECTION 15: Regulatory information**

### Safety, health and environmental regulations/legislation specific for the substance or mixture

Domestic Substance List:

# **SECTION 16: Other information**

#### Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

**DOT - Department of Transportation** 

IARC - International Agency for Research on Cancer

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

PEL - Permissible Exposure Limit

STV - Short Term Value

SVHC - Substances of Very High Concern

TDG - Transport of Dangerous Goods

TLV - Threshold Limit Value

vPvB - very Persistent, very Bioaccumulative

#### **Additional information**

Indication of changes: general update

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safty precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.



# Safety Data Sheet

According to Hazardous Products Regulation (SOR/2015-17)

# **SECTION 1: Identification**

### **Product identifier**

Trade name/designation: HistoChoice® Tissue Fixative, 20X HISTOLOGY Component B

Product No.: H102-2
Synonymes: none/none
CAS No.: 107-22-2

Other means of identification:

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

Recommended Use: For Further Manufacturing Use Only
Uses advised against: Not for Human or Animal Drug Use

# Details of the supplier of the safety data sheet

# **Supplier**

# **VWR** International

Street 2360 Argentia Road
Postal code/City Mississauga, Ontario

Canada L5N 5Z7

Telephone +1-800-932-5000 toll-free within US/Canada

Telefax: +1-610-728-2103



# **Emergency phone number**

Telephone +1-613-996-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)

# **Preparation Information**

VWR International - Product Information Compliance

E-mail sds@vwr.com

# **SECTION 2: Hazard identification**

# 2.1 Classification of the substance or mixture

Classification according to Hazardous Products Regulation (SOR/2015-17)

Hazard classes and hazard categories	Hazard statements
Acute toxicity, category 4, inhalation	H332
Skin irritation, category 2	H315
Skin sensitization, category 1	H317
Eye irritation, category 2	H319
Germ cell mutagenicity, category 2	H341

# 2.2 Label elements

Labelling in accordance with (SOR/2015-17)

# **Hazard pictograms**





Signal word: Warning

Hazard statements	
H332	Harmful if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.



Precautionary Statements			
P201	Obtain special instructions before use.		
P280	Wear protective gloves/protective clothing/eye protection/face protection.		
P302+P352	IF ON SKIN: Wash with plenty of water/		
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		
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+P311	IF exposed or concerned: Call a POISON CENTER/doctor/		

#### Hazards not otherwise classified (HNOC)

none/none

# SECTION 3: Composition / information on ingredients

### 3.1 Substances

not applicable

### 3.2 Mixtures

Hazardous ingredients GHS Classification in accordance with (SOR/2015-17)

Substance name	Concentration	Identifier	Hazard classes and hazard categories
Glyoxal	40 - 50%	CAS No.: 107-22-2	Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Skin Sens. 1 - H317
			Eye Irrit. 2 - H319 Muta. 2 - H341

# **SECTION 4: First aid measures**

### 4.1 General information

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

### In case of inhalation

Call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

# After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

### In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.



### 4.2 Most important symptoms/effects, acute and delayed

no data available

# 4.3 Indication of any immediate medical attention and special treatment needed

no data available

### 4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

### 4.5 Information to physician

no data available

# **SECTION 5: Fire fighting measures**

### 5.1 Extinguishing media

### Suitable extinguishing media

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

### Extinguishing media which must not be used for safety reasons

no restriction

### 5.2 Specific hazards arising from the chemical

In case of fire may be liberated:

Pyrolysis products, toxic

### **5.3 Advice for firefighters**

DO NOT fight fire when fire reaches explosives.

Protective equipment and precautions for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

### **Additional information**

Do not allow run-off from fire-fighting to enter drains or water courses.

Do not inhale explosion and combustion gases.

Use water spray/stream to protect personnel and to cool endangered containers.

In case of fire: Evacuate area.

### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety.

### **6.2 Environmental precautions**

Discharge into the environment must be avoided.

### 6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

### 6.4 Additional information

Clear spills immediately.



# **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:

Inhalation

skin contact

Eye contact

Use extractor hood (laboratory).

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

### 7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: Store between 15 °C and 30 °C.

Keep container tightly closed and in a well-ventilated place. Keep/Store only in original container.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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

### 8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2 Engineering controls

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

### Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection

Eye glasses with side protection

#### Skin protection

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

#### Additional information

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Environmental exposure controls



# **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

(a) Appearance

Physical state: liquid

Color: no data available
(b) Odour: no data available
(c) Odour threshold: no data available

# Safety relevant basic data

(d) pH: no data available
(e) Melting point/freezing point: no data available
(f) Initial boiling point and boiling range: no data available
(g) Flash point: no data available
(h) Evaporation rate: no data available
(i) Flammability (solid, gas): not applicable

(j) Flammability or explosive limits

Lower explosion limit:
Upper explosion limit:
no data available
(k) Vapour pressure:
no data available
(l) Vapour density:
no data available
no data available
1.14 g/cm³ (20 °C)

(n) Solubility(ies)

Water solubility (g/L):

Soluble (g/L) in Ethanol:

(o) Partition coefficient: n-octanol/water:

(p) Auto-ignition temperature:

no data available

no data available

no data available

no data available

(r) Viscosity

Kinematic viscosity: no data available
Dynamic viscosity: no data available
(s) Explosive properties: not applicable
(t) Oxidising properties: not applicable

### 9.2 Other information

Bulk density: no data available
Refraction index: no data available
Dissociation constant: no data available
Surface tension: no data available
Henry's Law Constant: no data available

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity



### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

# 10.6 Hazardous decomposition products

no data available

### 10.7 Additional information

no data available

# **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### **Acute effects**

Acute oral toxicity:

Glyoxal - LD50: 200 mg/kg - Rat - (Japan GHS Basis for Classification Data)

Acute dermal toxicity:

Glyoxal - LD50: 12700 mg/kg - Rabbit - (Japan GHS Basis for Classification Data)

Acute inhalation toxicity:

Glyoxal - LC50: 2.44 mg/l - Rat - (Japan GHS Basis for Classification Data)

### Irritant and corrosive effects

Primary irritation to the skin:

Causes skin irritation.

Irritation to eyes:

Causes serious eye irritation.

Irritation to respiratory tract:

not applicable

### Respiratory or skin sensitization

In case of skin contact: sensitising In case of inhalation: not sensitising

# STOT-single exposure

not applicable

### STOT-repeated exposure

not applicable



# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

no data available	ACGIH	IARC	NTP	OSHA

### Germ cell mutagenicity

Suspected of causing genetic defects.

### Reproductive toxicity

No indications of human reproductive toxicity exist.

### **Aspiration hazard**

not applicable

#### Other adverse effects

no data available

### **Additional information**

no data available

# **SECTION 12: Ecological information**

# 12.1 Ecotoxicity

### Fish toxicity:

no data available

# Daphnia toxicity:

no data available

### Algae toxicity:

no data available

### **Bacteria toxicity:**

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

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

### 12.4 Mobility in soil:

no data available

### 12.5 Results of PBT/vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



### 12.6 Other adverse effects

no data available

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

### **Appropriate disposal / Product**

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

### Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

### **Additional information**

no data available

# **SECTION 14: Transport information**

# Land transport (TDG)

No dangerous good in sense of this transport regulation.

### Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant  $\,$ 

# Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.

# **SECTION 15: Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

Domestic Substance List:



# **SECTION 16: Other information**

### Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

**DOT - Department of Transportation** 

IARC - International Agency for Research on Cancer

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

PEL - Permissible Exposure Limit

STV - Short Term Value

SVHC - Substances of Very High Concern

TDG - Transport of Dangerous Goods

TLV - Threshold Limit Value

vPvB - very Persistent, very Bioaccumulative

#### **Additional information**

Indication of changes: general update

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safty precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.