Date: 16th June 2008 Revision: 8



## **Material Safety Data Sheet**

## 1. Name of substance/preparation and company

1.1. Commercial product: ExpressArt mRNA Amplification kit

Cat.-nos.: 5199-A30, 5299-A15, 5399-A15,

6199-A30, 6299-A15, 6399-A15, 7199-A30, 7299-A15, 7399-A15

1.2. Company: AmpTec GmbH

Koenigstr. 4a D-22767 Hamburg

Germany

Phone: ++49 (0) 40 - 636 747 22

**1.3. Emergency contact:** AmpTec GmbH ++49 (0) 40 – 636 747 22

or ++49 (0) 40 - 636 747 21

Centre for Detoxification Berlin ++49 (0) 30 1 92 40 Centre for Detoxification Munich ++49 (0) 89 1 92 40

## 2. Composition/Information on constituents

2.1. constituents:

Box I Classification: not necessary

Contains: No hazardous substances in reportable quantities.

Box II Bottle Binding Buffer (1x)

Classification: Xn; F; R: 11-20/21/22-32; S: 7-13-16.

Contains: 5 % Ethanol (CAS-Nr.: 0000064-17-5; F; R: 11; S: 7-16) and 35 % Guanidinium thiocyante (CAS-Nr.: 0000059-38-4; Xn;

R:20/21/22-32;S: 13)

Bottle Washing buffer (1x) I Classification: not necessary

Contains: No hazardous substances in reportable quantities.

Bottle Elution Buffer (1x) I Classification: not necessary

Contains: No hazardous substances in reportable quantities.

Notes: Is to be classified according to EEC directive 67/548 and 88/379 as hazardous.

Classification: Harmful

Highly flammable

#### 3. Hazards identification

Warnings: 11 Highly flammable

20/21/22 Harmful by inhalation, in contact with skin and if swallowed

32 Contact with acids liberates very toxic gas

Notes: Substance hazardous to water and ground water

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#### 4. First aid measures

First aid: Call a doctor immediately if allergic signs,

particularly involving the airways, are observed.

Skin contact: wash off with water. Get medical advice

if irritation occurs

Eye contact: flush eyes with water for at least 15 minutes.

Get medical advice if irritation occurs.

Ingestion: drink plenty of water. Seek medical advice

Instructions for physician: No known symptoms to date. Treat symptomatically.

# 5. Fire-fighting measures

Extinguishing media: no restriction

Thermal decomposition: Gases which are damaging to health do not form in dangerous

quantities.

#### 6. Accidental release measures

After spillage: Absorb and clean with water

Absorbent media: no restriction

Special measures to limit damage are not necessary.

# 7. Handling and storage

7.1. handling Combustible substance.

When handling the product, usual precautions taken

when handling chemicals should be observed.

Wear gloves and eye protection.

7.2. storage no restrictions for safety reasons;

Box I: store at -20°C to preserve product quality

## 8. Exposure controls/personal

8.1. exposure controls no monitoring required

8.2. respiratory protection
8.3. hand protection
8.4. eye protection
8.5. body protection
9.7. not required protective gloves protective glasses laboratory coat

Wash hands before breaks and at the end of work.

# 9. Physical and chemical properties

Physical state liquid
Miscible with water yes
Colour colourless
Odor odorless
pH 7,0 – 9,0
flash point not determined
density not determined

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## 10. Stability and reactivity

Hazardous reactions: None known when used appropriately.

Hazardous decomposition products: Only small concentrations.

## 11. Toxicology

## **Bottle Binding Buffer**

**Ethanol** 

LD50 oral 7060 mg/kg (rat) LD50 intraperitoneal 4070 mg/kg (rat) LD50 skin not known

LD50 inhal 19000 ppm (mouse)

## **Guanidinium thiocyanate**

LD50 oral not known

LD50 intraperitoneal 300 mg/kg (mouse)

LD50 skin not known LD50 inhal not known

## 12. Ecological information

Hazards: Substance hazardous to water and ground water.

# **Bottle Binding Buffer**

**Ethanol** 

LC Daphnia 7800 mg/l

## 13. Disposal information

Waste should be burnt in a chemical incinerator. Observe all local regulations.

## 14. Transport information

Notes: This product is not subject to current regulations for transportation of hazardous goods (GGVS/ADR, GGVE/RID, IMDG, IATA/ICAO).

## 15. Regulatory

This product does not require labelling.

#### 16. Other information

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features. AmpTec is not held liable for any damage resulting from handling or from contact with the above products. MSDS has been prepared in accordance with EU Directive 67/548/EEC, 88/379/EEC, 91/155/EEC, 2001/58/EG and other EU Community legislations in force.