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according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

**1.1 Product Code:** 600023

**Product Name:** Transcription Factor p53 Primary Antibody

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

**Relevant identified uses:** For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Cayman Chemical Company

1180 E. Ellsworth Rd. Ann Arbor, MI 48108

Web site address: www.caymanchem.com

Information: Cayman Chemical Company +1 (734)971-3335

1.4 Emergency telephone number:

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

CHEMTREC Outside USA and Canada: +1 (703)527-3887

### Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:

Acute Toxicity: Oral, Category 4
Acute Toxicity: Skin, Category 5
Skin Corrosion/Irritation, Category 3

Serious Eye Damage/Eye Irritation, Category 2A

2.1.2 Classification according to Directive 1999/45/EC:

Xn: Harmful

Risk Phrases: R22, R36/37/38, R52

For full text of R- phrases: see SECTION 15.

2.2 Label Elements:

2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:



GHS Signal Word: Warning

**GHS Hazard Phrases:** 

H302: Harmful if swallowed.

H313: May be harmful in contact with skin.

H316: Causes mild skin irritation.

H319: Causes serious eye irritation.

**GHS Precaution Phrases:** 

P264: Wash {hands} thoroughly after handling.

P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

**GHS Response Phrases:** 

P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P312: Call a {POISON CENTER/doctor/...} if you feel unwell.

P332+313: If skin irritation occurs, get medical advice/attention.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+313: If eye irritation persists, get medical advice/attention.



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#### **GHS Storage and Disposal Phrases:**

Please refer to Section 7 for Storage and Section 13 for Disposal information.

### 2.2.2 Labeling according to Directive 1999/45/EC:



Xn

2.3 Adverse Human Health Causes mild skin irritation.

Effects and Symptoms: Causes serious eye irritation.

Harmful if swallowed.

Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation or skin absorption.

May cause respiratory system irritation.

To the best of our knowledge, the toxicological properties have not been thoroughly

investigated.

## Section 3. Composition/Information on Ingredients

CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	Risk Phrases/ GHS Classification
NA NA	Transcription Factor p53 Primary Antibody	0.0 -1.0 %	NA NA	No phrases apply. No data available.
56-81-5 MA8050000	Glycerol	20.0 -50.0 %	200-289-5 NA	No phrases apply. No data available.
9048-46-8 MT6446000	Bovine Serum Albumin (BSA)	0.0 -5.0 %	232-936-2 NA	Xn; R22 Acute Tox.(O) 4: H302
7447-40-7 TS8050000	Potassium chloride	0.0 -1.0 %	231-211-8 NA	R52 Acute Tox.(O) 5: H303 Aquatic (A) 3: H402
7647-14-5 VZ4725000	Sodium chloride	0.0 -5.0 %	231-598-3 NA	Xi; R36 Eye Damage 2A: H319
77-86-1 TY2900000	Trizma base	0.0 -5.0 %	201-064-4 NA	Xi; R36/37/38 Skin Corr. 2: H315 Eye Damage 2A: H319 TOST (SE) 3: H335 H336
7558-79-4 WC4500000	Sodium phosphate, Dibasic	0.0 -1.0 %	231-448-7 NA	Xi; R36 Eye Damage 2A: H319
7778-77-0 TC6615500	Potassium phosphate, Monobasic	0.0 -1.0 %	231-913-4 NA	R52 Acute Tox.(D) 5: H313
7732-18-5 ZC0110000	Water	31.0 -80.0 %	231-791-2 NA	No phrases apply. No data available.



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### Section 4. First Aid Measures

4.1 Description of First AidNo data available.

Measures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

In Case of Skin

Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before

reuse.

In Case of Eye

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes

Contact:

Contact:

examined and tested by medical personnel.

In Case of Ingestion:

Wash out mouth with water provided person is conscious. Never give anything by mouth

to an unconscious person. Get medical attention. Do NOT induce vomiting unless

directed to do so by medical personnel.

4.2 **Important Symptoms**  Exposure may cause: damage to kidneys.

and Effects, Both **Acute and Delayed:**  Prolonged exposure may cause nausea, headache, and vomiting.

### Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Media: Use water spray to cool fire-exposed containers.

A solid water stream may be inefficient. Unsuitable

**Extinguishing Media:** 

5.2

**Flammable Properties** Emits toxic fumes under fire conditions.

and Hazards:

Flash Pt: No data.

LEL: No data. UEL: No data. **Explosive Limits:** 

**Autoignition Pt:** No data.

5.3 Fire Fighting

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes. Instructions:

#### Section 6. Accidental Release Measures

Protective Precautions, Avoid breathing vapors and provide adequate ventilation. 6.1

and Emergency

**Protective Equipment** As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy

rubber gloves). **Procedures:** 

6.2 **Environmental**  Take steps to avoid release into the environment, if safe to do so.

**Precautions:** 

6.3 **Methods and Material**  Contain spill and collect, as appropriate.

For Containment and

Transfer to a chemical waste container for disposal in accordance with local regulations.

Cleaning Up:

# Section 7. Handling and Storage

7.1 **Precautions To Be** Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure. Taken in Handling:

7.2 Keep container tightly closed. **Precautions To Be** 

> Store in accordance with information listed on the product insert. Taken in Storing:



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## Section 8. Exposure Controls/Personal Protection

### 8.1 Exposure Parameters:

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
NA	Transcription Factor p53 Primary Antibody	No data.	No data.	No data.
56-81-5	Glycerol	TWA: 10 mg/m3 () STEL: ()	TWA: 10 mg/m3	No data.
9048-46-8	Bovine Serum Albumin (BSA)	No data.	No data.	No data.
7447-40-7	Potassium chloride	No data.	No data.	No data.
7647-14-5	Sodium chloride	No data.	No data.	No data.
77-86-1	Trizma base	No data.	No data.	No data.
7558-79-4	Sodium phosphate, Dibasic	No data.	No data.	No data.
7778-77-0	Potassium phosphate, Monobasic	No data.	No data.	No data.
7732-18-5	Water	No data.	No data.	No data.
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Transcription Factor p53 Primary Antibody	No data.	No data.	No data.
56-81-5	Glycerol	PEL: 15 (dust); 5 (resp.) mg/m3	TLV: 10 mg/m3	No data.
9048-46-8	Bovine Serum Albumin (BSA)	No data.	No data.	No data.
7447-40-7	Potassium chloride	No data.	No data.	No data.
7647-14-5	Sodium chloride	No data.	No data.	No data.
77-86-1	Trizma base	No data.	No data.	No data.
7558-79-4	Sodium phosphate, Dibasic	No data.	No data.	No data.
				- t
7778-77-0	Potassium phosphate, Monobasic	No data.	No data.	No data.

8.2 Exposure Controls:

**8.2.1 Engineering Controls** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2 Personal protection equipment:

**Eye Protection:** Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Lab coat

Clothing:

**Respiratory Equipment** NIOSH approved respirator, as conditions warrant.

(Specify Type):

Work/Hygienic/Mainten Do not take internally.

ance Practices: Facilities storing or utilizing this material should be equipped with an eyewash and a

safety shower.

Wash thoroughly after handling.



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9.1 Information on Basic Physical and Chemical Properties

Physical States: [ ] Gas [ X ] Liquid [ ] Solid

Appearance and Odor:

Melting Point:

No data.

Boiling Point:

No data.

Flash Pt:

No data.

Evaporation Rate:

No data.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or

mm Hg):

No data.

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Autoignition Pt: No data.

9.2 Other Information

Percent Volatile: No data.

Section 10. Stability and Reactivity

**10.1 Reactivity:** No data available.

**10.2 Stability:** Unstable [ ] Stable [ X ]

**10.3 Stability Note(s):** Stable if stored in accordance with information listed on the product insert.

Polymerization: Will occur [ ] Will not occur [ X ]

10.4 Conditions To Avoid: No data available.10.5 Incompatibility - strong bases

Materials To Avoid: strong oxidizing agents

10.6 Hazardous carbon dioxide

Decomposition Or carbon monoxide

Byproducts:

Section 11. Toxicological Information

**11.1** Information on The toxicological effects of this product have not been thoroughly studied.

Toxicological Effects: Glycerol - Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin (rabbit): 500 mg (24h)

mild;

Chronic Toxicological Glycerol - Investigated as a mutagen, reproductive effector, and tumorigen.

Effects: Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented

here.

See actual entry in RTECS for complete information.

Glycerol RTECS Number: MA8050000

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Section 12. Ecological Information

**12.1 Toxicity:** Avoid release into the environment.

Runoff from fire control or dilution water may cause pollution.



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Multi-region format

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# Section 13. Disposal Considerations

13.1 Waste Disposal Method:

Dispose in accordance with local, state, and federal regulations.

# Section 14. Transport Information

### 14.1 LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Not dangerous goods.

DOT Hazard Class: UN/NA Number:

#### 14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not dangerous goods.

**UN Number:** Hazard Class:

#### 14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not dangerous goods.

Additional Transport Transport in accordance with local, state, and federal regulations.

Information:

## Section 15. Regulatory Information

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
NA	Transcription Factor p53 Primary Antibody	No	No	No
56-81-5	Glycerol	No	No	No
9048-46-8	Bovine Serum Albumin (BSA)	No	No	No
7447-40-7	Potassium chloride	No	No	No
7647-14-5	Sodium chloride	No	No	No
77-86-1	Trizma base	No	No	Yes-Cat. N106
7558-79-4	Sodium phosphate, Dibasic	No	Yes 5000 LB	No
7778-77-0	Potassium phosphate, Monobasic	No	No	No
7732-18-5	Water	No	No	No

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
NA	Transcription Factor p53 Primary Antibody	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
56-81-5	Glycerol	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No
9048-46-8	Bovine Serum Albumin (BSA)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No
7447-40-7	Potassium chloride	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No
7647-14-5	Sodium chloride	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No
77-86-1	Trizma base	CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No
7558-79-4	Sodium phosphate, Dibasic	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No
7778-77-0	Potassium phosphate, Monobasic	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA



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		Caperacaes Revision: 00/00/2000
		PROP.65: No
7732-18-5	Water	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No

### **European Community Hazard Symbol codes:**



Χn

### **European Community Risk and Safety Phrases:**

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R52 Harmful to aquatic organisms. S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Regulatory Information This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and

**Statement:** European Directive 67/548/EEC as amended.

### Section 16. Other Information

**Revision Date:** 02/28/2014

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.