SAFETY DATA SHEET

Cat# K696-50 Phospho-ERK MAPK (Thr202 Tyr204) Translocation Assay Kit (Cell-Base)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Phospho-ERK MAPK (Thr202 Tyr204) Translocation Assay Kit
PRODUCT CODES: Cat# K696-50
MANUFACTURER: BioVision, Inc.
DIVISION: ADDRESS: 155 S. Milpitas Boulevard, Milpitas, CA 95035
EMERGENCY PHONE: 858-373-8066
CHEMTREC PHONE: OTHER CALLS: 408-493-1800
FAX PHONE: 408-493-1801

SECTION 2: HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Volume</th>
<th>Safety Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixative Solution</td>
<td>Solution (Contains formaldehyde)</td>
<td>10 ml</td>
<td>See below</td>
</tr>
<tr>
<td>Blocking Buffer</td>
<td>Liquid</td>
<td>10 ml</td>
<td>No hazards</td>
</tr>
<tr>
<td>Wash Buffer</td>
<td>Liquid</td>
<td>75 ml</td>
<td>No hazards</td>
</tr>
<tr>
<td>Phospho-ERK1/2 Primary Antibody (100X)</td>
<td>Liquid</td>
<td>50 μl</td>
<td>No hazards</td>
</tr>
<tr>
<td>Secondary Antibody (100X)</td>
<td>Liquid</td>
<td>50 μl</td>
<td>No hazards</td>
</tr>
<tr>
<td>Tamoxifen (1000X)</td>
<td>Tamoxifen in DMSO</td>
<td>30 μl</td>
<td>See below</td>
</tr>
<tr>
<td>DAPI (1000X)</td>
<td>Liquid</td>
<td>20 μl</td>
<td>No hazards</td>
</tr>
</tbody>
</table>

Formaldehyde:
Emergency Overview
OSHA Hazards: Target organ effect, Toxic by ingestion, Toxic by skin absorption, Skin and respiratory sensitizer, Corrosive, Carcinogen
Target Organs: Eyes, Kidney, Liver, Heart
GHS Classification:
Acute toxicity, Oral (Category 3)
Acute toxicity, Dermal (Category 3)
Serious eye damage (Category 1)
Skin irritiation (Category 2)
Respiratory sensitization (Category 1)
Skin sensitization (Category 1)
Carcinogenicity (Category 2)
Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements
Pictogram:

Signal word:
Hazard statement(s):
H302: Harmful if swallowed.
H312: Harmful in contact with skin
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351: Suspected of causing cancer.
H402: Harmful to aquatic life.

Precautionary statement(s):
P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P311 Call a POISON CENTER or doctor/physician.

HMIS Classification
Health hazard: 3
Chronic health hazard: *
Flammability: 0
Physical hazards: 0
SAFETY DATA SHEET

Cat# K696-50 Phospho-ERK MAPK (Thr202 Tyr204) Translocation Assay Kit (Cell-Base)

NFPA Rating
- Health Hazard: 3
- Fire: 0
- Reactivity Hazard: 0

Potential Health Effects
- Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
- Skin: Toxic if absorbed through skin. Causes skin burns.
- Eyes: Causes eye burns.
- Ingestion: Toxic if swallowed.

Tamoxifen citrate:

Emergency Overview
- OSHA Hazards: Target organ effect, Harmful by ingestion, Carcinogen, Teratogen, Reproductive hazard
- Target Organs: Male reproductive system, Female reproductive system, Eyes, Liver
- GHS Classification: Acute toxicity, Oral (Category 4)
  - Carcinogenicity (Category 1B)
  - Reproductive toxicity (Category 1B)

GHS Label elements, including precautionary statements
- Pictogram:
- Signal word: Danger
- Hazard statement(s):
  - H302 Harmful if swallowed.
  - H350 May cause cancer.
  - H360 May damage fertility or the unborn child.
- Precautionary statement(s):
  - P201 Obtain special instructions before use.
  - P308+P313 IF exposed or concerned: Get medical advice/attention.

HMIS Classification
- Health hazard: 1
- Chronic health hazard: *
- Flammability: 0
- Physical hazards: 0

NFPA Rating
- Health Hazard: 1
- Fire: 0
- Reactivity Hazard: 0

Potential Health Effects
- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Skin: Harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.
- Ingestion: Harmful if swallowed.

DMSO:

Emergency Overview
- OSHA Hazards: Combustible liquid, Target organ effect
- Target Organs: Eyes, Skin
- GHS Classification: Flammable liquids (Category 4)

GHS Label elements, including precautionary statements
- Pictogram: none
- Signal word: Warning
- Hazard statement(s):
  - H227 Combustible liquid
- Precautionary statement(s): none

HMIS Classification
- Health hazard: 0
- Chronic Health Hazard: *
- Flammability: 2
- Physical hazards: 0

NFPA Rating
- Health hazard: 0
- Fire: 2
- Reactivity Hazard: 0

Potential Health Effects
- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Skin: May be harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.
- Ingestion: May be harmful if swallowed.

Aggravated Medical Condition: Avoid contact w/DMSO solutions containing toxic materials or materials with unknown toxicological properties. DMSO is readily absorbed through skin and may carry such materials into the body.
SAFETY DATA SHEET
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>EC-No.</th>
<th>Molecular Weight</th>
<th>Chemical Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>200-001-8</td>
<td>30.03</td>
<td>HCHO</td>
</tr>
<tr>
<td>Tamoxifen citrate</td>
<td>54965-24-1</td>
<td>259-415-2</td>
<td>563.64</td>
<td>C_{26}H_{35}NO.C_{6}H_{12}O_{7}</td>
</tr>
<tr>
<td>DMSO</td>
<td>67-68-5</td>
<td>200-664-3</td>
<td>78.13</td>
<td>C2H6OS</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

DMSO:
Suitable extinguishing media: For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.
Hazardous combustion products: Hazardous combustion products formed under fire conditions – no data available.
Further information: Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods for cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for safe storage:
Keep container tightly closed in a dry and well-ventilated place.
Never allow product to get in contact with water during storage; do not store near acids (Potassium ferrocyanide).
Recommended storage temperature: -20 °C

SECTION 8: EXPOSURE CONTROLS/PERSOMAL PROTECTION

Formaldehyde:

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>C</td>
<td>0.3 ppm</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
</tbody>
</table>

Remarks:
Eye & upper respiratory tract irritation. Suspected human carcinogen. Sensitizer
Substance listed, for more information see OSHA document 1910.1048
See 1910.1048

- TWA 0.016 ppm USA. NIOSH Recommended Exposure Limits
- Potential occupational carcinogen. See Appendix A, 15 minutes ceiling value.

DMSO:

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl sulfoxide</td>
<td>67-68-5</td>
<td>TWA</td>
<td>250 ppm</td>
<td>USA. Workplace Environmental Exposure Levels (WEEL)</td>
</tr>
</tbody>
</table>

Personal protective equipment
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection
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Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Formaldehyde</th>
<th>Tamoxifen</th>
<th>DMSO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Clear liquid</td>
<td>White crystals</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>pH:</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility:</td>
<td>No data available</td>
<td>No data available</td>
<td>Completely miscible</td>
</tr>
<tr>
<td>Other Solubility:</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point (°C):</td>
<td>No data available</td>
<td>No data available</td>
<td>189 °C (372 °F)</td>
</tr>
<tr>
<td>Flash Point (°C):</td>
<td>No data available</td>
<td>No data available</td>
<td>16-19 °C (61-66 °F)</td>
</tr>
<tr>
<td>Ignition Temperature (°C):</td>
<td>No data available</td>
<td>No data available</td>
<td>87 °C (189 °F)</td>
</tr>
<tr>
<td>Density:</td>
<td>No data available</td>
<td>No data available</td>
<td>301 °C (574 °F)</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Formaldehyde</th>
<th>Tamoxifen</th>
<th>DMSO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability:</td>
<td>Stable under recommended storage conditions</td>
<td>Stable under recommended storage conditions</td>
<td>Heat, Flames, Sparks</td>
</tr>
<tr>
<td>Conditions to avoid:</td>
<td>No data available</td>
<td>No data available</td>
<td>Acid chlorides, Phosphorus halides, Strong acids, Strong oxidizing agents, Strong reducing agents</td>
</tr>
<tr>
<td>Materials to avoid:</td>
<td>Strong oxidizing agents</td>
<td>Strong oxidizing agents</td>
<td>Carbon oxides, sulfur oxides</td>
</tr>
<tr>
<td>Hazardous decomposition products:</td>
<td>Carbon oxides</td>
<td>Carbon oxides, nitrogen oxides</td>
<td>Carbon oxides, sulfur oxides</td>
</tr>
</tbody>
</table>

SECTION 11: TOXICOLOGICAL INFORMATION

Formaldehyde:
Acute toxicity: no data available
Skin corrosion/irritation: no data available
Serious eye damage/eye irritation: Eyes: no data available
Respiratory or skin sensitization: no data available
Germ cell mutagenicity: no data available
Carcinogenicity:
  IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde)
  NTP: Reasonably anticipated to be a human carcinogen (Formaldehyde)
Reproductive toxicity: no data available
Teratogenicity: no data available
Specific target organ toxicity - single exposure (Globally Harmonized System): no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available
Aspiration hazard: no data available
Potential Health Effects
  Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
  Skin: Toxic if absorbed through skin. Causes skin burns.
  Eyes: Causes eye burns.
  Ingestion: Toxic if swallowed.
Signs and Symptoms of Exposure: Exposure may cause burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Tamoxifen citrate:
Acute toxicity: LD50 Oral – rat – 1,190 mg/kg
Skin corrosion/irritation: no data available
Serious eye damage/eye irritation: no data available
Respiratory or skin sensitization: no data available
Germ cell mutagenicity: no data available
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Carcinogenicity:
This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen.

IARC: 1 – Group 1: Carcinogenic to humans ((Z)-[2-[4-(1,2-Diphenylbut-1-enyl)phenoxy]ethyl]dimethylammonium dihydrogen 2-hydroxypropane-1,2,3-tricarboxylate)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: May cause reproductive disorders.

Teratogenicity: May cause congenital malformation in the fetus. Presumed human reproductive toxicant.

Specific target organ toxicity – single exposure (GHS): no data available

Specific target organ toxicity – repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: Harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: Harmful if swallowed.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic Effects: no data available

Additional information: RTECS: KH2387000

DMSO:

Acute toxicity: LD50 Oral – rat – 14,500 mg/kg
LC50 Inhalation – rat – 4 h – 40250 ppm
LD50 Dermal – rabbit – >5,000 mg/kg

Skin corrosion/irritation: Skin – rabbit – no skin irritation – 4h

Serious eye damage/eye irritation: Eyes – rabbit – mild eye irritation

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: Genotoxicity in vitro – mouse – lymphocyte: Cytogenetic analysis

Genotoxicity in vitro – mouse – lymphocyte: Mutation in mammalian somatic cells

Genotoxicity in vivo – rat – Intraperitoneal: Cytogenetic analysis

Genotoxicity in vivo – mouse – Intraperitoneal: DNA damage


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

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Reproductive toxicity – rat – Intraperitoneal: Effects on fertility: abortion

Reproductive toxicity – rat – Intraperitoneal: Effects on fertility: post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants)

Reproductive toxicity – rat – Subcutaneous: Effects on fertility: post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants).

Reproductive toxicity – mouse – Oral: Effects on fertility: post-implantation mortality (e.g. reduction in number of implants per female; total number of implants per corpora lutea).

Effects on embryo/fetus: Fetotoxicity (except death, e.g. stunted fetus). Specific developmental abnormalities: musculoskeletal system.

Teratogenicity: Developmental toxicity – mouse – Intraperitoneal: Effects on embryo/fetus: Fetotoxicity (except death, e.g. stunted fetus). Specific developmental abnormalities: musculoskeletal system

Specific target organ toxicity – single exposure (GHS): no data available

Specific target organ toxicity – repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

Aggravated Medical Condition: Avoid contact w/DMSO solutions containing toxic materials or materials with unknown toxicological properties. DMSO is readily absorbed through skin and may carry such materials into the body.

Signs and Symptoms of Exposure: Effects due to ingestion may include: nausea, fatigue, and/or headache.

Additional information: RTECS: PV6210000
Formaldehyde:
Persistence and degradability: no data available
Toxicity: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available
PBT and vPvB assessment: no data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

**SARA 311/312 Hazards**

**LC50**
Pinephales promelas (fathead minnow) - 34,000 mg/l - 96 h

**LC50**
Oncorhynchus mykiss (rainbow trout) - 35,000 mg/l - 96 h

**Toxicity to daphnia and other aquatic invertebrates**
EC50 - Daphnia pulex (Water flea) - 27,500 mg/l

**Toxicity to algae**
EC50 - Lepomis macrochirus (Bluegill) - > 400,000 mg/l - 96 h

Further information on ecology: no data available

**SARA 313 Components**

**Formaldehyde**

**SARA 302 Components**

Formaldehyde
CAS-No. 50-00-0; Revision Date: 2007-07-01

**SARA 313 Components**

Formaldehyde
CAS-No. 50-00-0; Revision Date: 2007-07-01

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

Formaldehyde
CAS-No. 50-00-0; Revision Date: 2007-07-01

**Pennsylvania Right To Know Components**

Formaldehyde
CAS-No. 50-00-0; Revision Date: 2007-07-01

**New Jersey Right To Know Components**

Formaldehyde
CAS-No. 50-00-0; Revision Date: 2007-07-01

**California Prop. 65 Components**

**WARNING!** This product contains a chemical known to the State of California to cause cancer:
Formaldehyde, CAS-No. 50-00-0; Revision Date: 2007-09-28

**Tamoxifen citrate**

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

**DMSO**

DOT (US): UN-Number: 1993 Class: CBL Packing group: III; Proper shipping name: Combustible liquid, n.o.s. (Dimethyl sulfoxide); Marine pollutant: No; Poison Inhalation Hazard: No

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

**SECTION 14: TRANSPORT INFORMATION**

Formaldehyde:

DOT (US): UN number: 2209, Class: 8, Packing group: III; Proper shipping name: Formaldehyde solutions; Reportable Quantity (RQ): 200 lbs; Marine pollutant: No; Poison Inhalation Hazard: No

IMDG: UN number: 2209, Class: 8, Packing group: III; EMS-No: F-A, S-B; Proper shipping name: FORMALDEHYDE SOLUTION; Marine pollutant: No

IATA: UN number: 2209, Class: 8, Packing group: III; Proper shipping name: Formaldehyde solution

Tamoxifen citrate:

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

**SECTION 15: REGULATORY INFORMATION**

Formaldehyde:

SARA 302 Components: The following components are subject to reporting levels established by SARA Title III, Section 302:
Formaldehyde, CAS-No. 50-00-0; Revision Date: 2007-07-01

SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313:
Formaldehyde, CAS-No. 50-00-0; Revision Date: 2007-07-01

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: Formaldehyde, CAS-No. 50-00-0; Revision Date: 2007-07-01

Pennsylvania Right To Know Components: Formaldehyde, CAS-No. 50-00-0; Revision Date: 2007-07-01

New Jersey Right To Know Components: Formaldehyde CAS-No. 50-00-0; Revision Date: 2007-07-01

California Prop. 65 Components: WARNING! This product contains a chemical known to the State of California to cause cancer:
Formaldehyde, CAS-No. 50-00-0; Revision Date: 2007-09-28

Tamoxifen citrate:

OSHA Hazards: Target organ effect, Harmful by ingestion, Carcinogen, Teratogen, Reproductive hazard

SARA 302 Components: SARA 302: No chemical in this material is subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: 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 II, Section 313.

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components: (Z)-[2-[4-(1,2-Diphenylbut-1-enyloxy)ethyl]dimethylammonium dihydrogen 2-hydroxypropane-1,2,3-tricarboxylate, CAS-No. 54965-24-1, Revision Date: 2009-07-17

New Jersey Right To Know Components: (Z)-[2-[4-(1,2-Diphenylbut-1-enyloxy)ethyl]dimethylammonium dihydrogen 2-hydroxypropane-1,2,3-tricarboxylate, CAS-No. 54965-24-1, Revision Date: 2009-07-17
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California Prop. 65 Components: WARNING! This product contains a chemical known to the State of California to cause cancer. (Z)-[2-[(1,2-Diphenylbut-1-enyl)phenoxy]ethyl]dimethylammonium dihydrogen 2-hydroxypropane-1,2,3-tricarboxylate, CAS-No. 54965-24-1, Revision Date: 2007-09-28

DMSO:
SARA 302 Components: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components: 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.
SARA 311/312 Hazards: Fire Hazard, Chronic Health Hazard
Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components: Dimethyl sulfoxide CAS-No. 67-68-5; Revision Date: 2007-03-01
New Jersey Right To Know Components: Dimethyl sulfoxide CAS-No. 67-68-5; Revision Date: 2007-03-01
California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

EU regulations:

<table>
<thead>
<tr>
<th>Component</th>
<th>Risk Phrases</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>R24/25, R35, R40, R42/43</td>
<td>S26, S36/37/39, S45, S51</td>
</tr>
<tr>
<td>Tamoxifen citrate</td>
<td>R22, R45</td>
<td>S45, S53</td>
</tr>
<tr>
<td>DMSO</td>
<td>R10, R36/37/38</td>
<td>S24/25, S36/37/39, S45</td>
</tr>
</tbody>
</table>

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:
PREPARATION INFORMATION:

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