

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

<u>TRADE NAME (AS LABELED):</u> <u>CODE NUMBERS:</u> <u>U.N. NUMBER:</u> <u>U.N. DANGEROUS GOODS CLASS/SUBSIDIARY RISK:</u> <u>HAZCHEM CODE (AUSTRALIA):</u> <u>POISONS SCHEDULE NUMBER (AUSTRALIA):</u> <u>PRODUCT USE:</u> <u>U.S. SUPPLIER/MANUFACTURER'S NAME:</u> <u>Address:</u> <u>Business Phone:</u>	Mobility Shift Substrates 760444, 760445, 760456, 760457 Not applicable Not applicable Not applicable Schedule 6 Laboratory Biological Research Caliper Life Sciences 68 Elm Street Hopkinton, MA 01748 +1-800-LAB-CHIP (toll-free) +1-800-522-2447 (toll-free) +1-508-435-3439 (outside North America)
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AUSTRALIAN SUPPLIER/DISTRIBUTOR'S NAME:
Address:

Business Phone:

EUROPEAN SUPPLIER/ DISTRIBUTOR'S NAME:
Address:

Business Phone:

EMERGENCY PHONE:

1-800-255-3924 (CHEM-TEL) in U.S., Canada, Puerto Rico, U.S. Virgin Islands

EMAIL ADDRESS/COMPETENT PERSON FOR MSDS:

Technical Support @ Tech.Support@caliperls.com

DATE OF PREPARATION:

September 17, 2008

DATE OF REVISION:

New

NOTE 1: ALL United States Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, Canadian WHMIS [Controlled Products Regulations], European Union [Regulation (EC) 1907/2006 Annex II], Australian [NOHSC:2011 (2003)], and Japanese Industrial Standard (JIS Z 7250: 2000) required information is included in appropriate sections based on the U.S. ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the countries listed above.

NOTE 2: The solutions of this product contain ingredients not in the TSCA Inventory. In accordance with the conditions listed in 40 CFR 720.36 and 721.47, this product must be used only for research and development, pharmaceutical manufacture, or export. It must be used by, or directly under the supervision of, a technically qualified individual. The manufacturer should be consulted prior to using this product for other applications. Other requirements may apply.

2. HAZARD IDENTIFICATION

EU/AUSTRALIAN LABELING AND CLASSIFICATION: This product does not meet the definition of any hazard class as defined by the European Union Council Directive 67/548/EEC and subsequent Directives and by the Australian National Occupational Health and Safety Commission [NOHSC(1008:2004)].

Health Hazards: Inhalation of vapors, mists, or sprays of this product may irritate the nose, throat, and lungs and cause nausea, headache, and vomiting. Depending on the duration and concentration of overexposure, skin contact may cause redness and discomfort, and eye contact may cause redness, tearing, and pain. The Dimethyl Sulfoxide component of this product can be absorbed through the skin and may carry dissolved chemicals with it into the body. Symptoms of skin absorption for a prolonged period of time and a large area of skin may include redness, burning, itching, scaling, vision disturbance, photophobia, headache, and diarrhea. If this product is swallowed, it may cause gastric distress. Large doses may cause nausea, vomiting, chills, cramps, and lethargy. Chronic ingestion of the Dimethyl Sulfoxide component of this product may affect the liver and kidneys. The Dimethyl Sulfoxide component of this product can cause anaphylactic reaction by unspecified exposure routes; symptoms may include rash, abdominal cramps, nausea, chills, and chest pain.

Flammability Hazards: This product is a Class IIIA Combustible liquid.

Reactivity Hazards: This product is not reactive.

Environmental Hazards: Negligible.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	EINECS#	ENCS#	% v/v	EU CLASSIFICATION FOR COMPONENTS
Dimethyl Sulfoxide	67-68-5	200-664-3	2-1553	> 99	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.
Other components. Each of the other components is present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens).				Balance	None of the other constituents in this solution contribute significantly to the hazards associated with this solution.

See Section 16 for full text of Ingredient Risk Phrases

4. FIRST-AID MEASURES

Contaminated individuals must seek medical attention if any adverse effect occurs. Remove or cover gross contamination to avoid exposure to rescuers. Rescuers should be taken for medical attention, if necessary. Take a copy of label and MSDS to physician or health professional with the contaminated individual.

SKIN EXPOSURE: If this product contaminates the skin, begin decontamination with copious amounts of running water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Contaminated clothing must be removed and laundered before re-use. The contaminated individual must seek medical attention if any adverse effect develops after the area is flushed.

EYE EXPOSURE: If this product contaminates the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have the contaminated individual "roll" eyes. Minimum flushing is for 20 minutes. The contaminated individual must seek medical attention if adverse effects occur after flushing.

INHALATION: If vapors, mists or sprays from this product are inhaled, remove contaminated individual to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if adverse effect continues after removal to fresh air.

INGESTION: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING unless directed by medical personnel. Have contaminated individual rinse mouth with water. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. If contaminated individual is convulsing, maintain an open airway and obtain immediate medical attention.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing dermatitis, other skin conditions, respiratory conditions, and liver disorders may be aggravated by overexposure to components of this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT (open cup): 95°C (203°F)

AUTOIGNITION TEMPERATURE: 215°C (419°F)

FLAMMABLE LIMITS (in air by volume, %):

(LEL): 2.2% (UEL): 19.7%

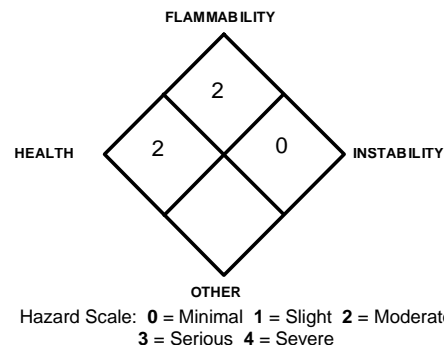
FIRE EXTINGUISHING MATERIALS: In the event of a fire, use suppression methods for surrounding materials (e.g., water spray, dry chemical, carbon dioxide, foam, any "ABC" class extinguisher).

FIRE EXTINGUISHING MATERIALS NOT BE USED: Halon extinguishers should not be used for fires involving this product.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is a Class IIIA Combustible liquid. When involved in a fire, this product will decompose and produce irritating vapors and toxic gases (including carbon oxides, sulfur oxides, and hydrogen sulfide).

SPECIAL FIRE-FIGHTING PROCEDURES: Do not use halogenated extinguishing media. Move containers from fire area if it can be done without risk to personnel. Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Chemical resistant clothing may be necessary. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING



6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Trained personnel using pre-planned procedures should respond to uncontrolled releases. Proper protective equipment should be used. In case of a spill, clear the affected area and protect people. Eliminate all sources of ignition before cleanup begins. Use non-sparking tools. The atmosphere must have levels of constituents lower than those listed in Section 8, (Exposure Controls and Personal Protective Equipment), if applicable, and have at least 19.5 percent oxygen before personnel can be allowed into the area without Self-Contained Breathing Apparatus (SCBA).

Small Spills: Lightweight gloves, a lab coat, and eye protection should be worn. Absorb spilled liquid with paper towels. Wash contaminated area with soap and water, absorb with paper towels, and rinse with water.

Large Spills: Minimum Personal Protective Equipment should be **Level D: lab-gloves, chemical resistant apron, boots, and splash goggles. Respiratory protection should not be necessary.** Absorb spilled liquid with polypads or other suitable absorbent materials. Dike or otherwise contain spill and remove with vacuum truck or pump to storage/salvage vessels. Decontaminate the area thoroughly. Prevent material from entering sewer or confined spaces, waterways, soil or public waters. Monitor area and confirm levels are below exposure limits given in Section 8 (Exposure Controls-Personal Protection), if applicable, before non-response personnel are allowed into the spill area.

Place all spill residue in a double plastic bag or other containment and seal. Decontaminate the area thoroughly. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

7. HANDLING and STORAGE

SAFE WORK AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product's solutions ON YOU or IN YOU. Wash thoroughly after handling this product's solutions. Avoid splashing or spraying this product's solutions. Do not eat or drink while handling this product's solutions.

STORAGE AND HANDLING PRACTICES: All employees who handle this material should be trained to handle it safely. This material must be used by, or directly under the supervision of, a technically qualified individual. Avoid breathing vapors or mists generated by this product's solutions. Ensure containers of this product's solutions are properly labeled. Open containers slowly on a stable surface. Store vials as directed in the product insert. Keep vials tightly closed when not in use. Store away from incompatible materials. Inspect vials containing this product's solutions for leaks or damage. Read instructions provided with the product prior to use.

SPECIFIC USE(S): This product is for use in laboratory biological research. Follow all industry standards for use.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION, ENGINEERING, AND OCCUPATIONAL EXPOSURE CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below, if applicable. If necessary, refer to Australian National Code of Practice for the Control of Workplace Hazardous Substances [NOHSC: 2007 (1994)] for further information. As with all products that contain chemicals, ensure proper decontamination equipment (e.g., eyewash/safety shower stations) are available near areas where this product is used as necessary.

EXPOSURE LIMITS/GUIDELINES:

CHEMICAL NAME	CAS #	EXPOSURE LIMITS IN AIR									
		ACGIH-TLVs		OSHA-PELs		NIOSH-RELs		NIOSH	AIHA WEELs		OTHER
		TWA ppm	STEL ppm	TWA ppm	STEL ppm	TWA ppm	STEL ppm	IDLH ppm	TWA ppm	STEL ppm	ppm
Dimethyl Sulfoxide	67-68-5	NE	NE	NE	NE	NE	NE	NE	250	NE	DFG MAK: Danger of cutaneous absorption

NE = Not Established. See Section 16 for Definitions of Terms Used.

INTERNATIONAL OCCUPATIONAL EXPOSURE LIMITS: Currently the following international exposure limits are in place for the some constituents of this product. Values given may not be the most current; individual country lists should be consulted to determine most current values available.

DIMETHYL SULFOXIDE:

Denmark: TWA = 100 ppm (tentative), OCT 2002
 Russia: STEL = 20 mg/m³, JUN 2003

DIMETHYL SULFOXIDE (continued):

The Netherlands: MAC-TGG = 150 mg/m³, Skin, 2003
 Sweden: TWA = 50 ppm (150 mg/m³), KTV = 150 ppm (500 mg/m³), Skin, JAN 1999

DIMETHYL SULFOXIDE (continued):

Switzerland: MAK-W = 50 ppm (160 mg/m³), Skin, DEC 2006

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132), equivalent standards of Canada (including CSA Standard Z94.4-02 and CSA Standard Z94.3-02), standards of EU member states (including EN 529:2005 for respiratory PPE, CEN/TR 15419:2006 for hand protection, and CR 13464:1999 for face/eye protection), or standards of Australia (including AS/NZS 1715:1994 for respiratory PPE, AS/NZS 4501.2:2006 for protective clothing, AS/NZS 2161.1:2000 for glove selection, and AS/NZS 1336:1997 for eye protection). Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Respiratory protection is not generally needed when using this product. Maintain airborne contaminant concentrations below limits listed in this Section. In instances where inhalable mists or sprays of product may be generated, and respiratory protection is necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), or equivalent U.S. State standards, Canadian CSA Standard Z94.4-02, the European Standard EN 529:2005, and EU member states, or the Australian Standard 1716-Respiratory Protective Devices, the Australian Standard 1715-Selection, Use, and Maintenance of Respiratory Protective Devices, as well as requirements of Japan. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, SAR with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

EYE PROTECTION: Depending on the use of this product, splash goggles or safety glasses may be worn. Use goggles or safety glasses for spill response, as stated in Section 6 (Accidental Release Measures) of this MSDS. If necessary, refer to U.S. OSHA 29 CFR 1910.133, the European Standard CR 13464:1999 and the Canadian CSA Standard Z94.3-07, *Industrial Eye and Face Protectors*, the Australian Standard 1337-Eye Protection for Industrial Applications and Australian Standard 1336-Recommended Practices for Eye Protection in the Industrial Environment, as well as requirements of Japan for further information.

HAND PROTECTION: Wear butyl rubber, neoprene, 4H, or North Silvershield gloves for routine use. If necessary, refer to U.S. OSHA 29 CFR 1910.138 appropriate Standards of Canada, the European Standard CEN/TR 15419:2006 or the Australian Standard 2161-Industrial Safety Gloves and Mittens, and applicable Standards of Japan, for further information.

BODY PROTECTION: Use body protection appropriate for task, such as a lab coat. If necessary, use body protection appropriate for task (e.g., Tyvek suit, rubber apron). If necessary, refer appropriate Standards of Canada, the European Standard CEN/TR 15419:2006 the to Australian Standard 3765-Clothing for Protection Against Hazardous Chemicals, or Japan for further information. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136 and the Canadian CSA Standard Z195-02, *Protective Footwear*.

9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE, ODOR, AND COLOR: Clear, colorless liquid with a garlic-like odor.

HOW TO DETECT THIS SUBSTANCE: The odor may act as a warning property associated with this component.

pH: Not established.

BOILING POINT: 189°C (372°F)

FLASH POINT: Not applicable.

EXPLOSIVE PROPERTIES: Not explosive

VAPOR PRESSURE, mm Hg @ 20°C: 0.37

SOLUBILITY: Miscible in some organic solvents.

COEFFICIENT OF OIL/WATER DISTRIBUTION (PARTITION COEFFICIENT): Not established.

VISCOSITY: Not established.

EVAPORATION RATE (nBuAc = 1): Similar to water.

FREEZING/MELTING POINT: 18.5°C (66°F)

FLAMMABILITY: Combustible.

OXIDIZING PROPERTIES: Not an oxidizer.

SPECIFIC GRAVITY (water = 1): Not established.

SOLUBILITY IN WATER: Completely soluble.

RELATIVE VAPOR DENSITY (air = 1): Not established.

ODOR THRESHOLD: Not available.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: The following information is available for the constituents in constituents in this product present in greater than 1 percent concentration. Only human data and LD₅₀ Oral-Rat, LD₅₀ Oral-Mouse, and irritancy data are provided. Other data are available, but are not provided in this MSDS.

DIMETHYL SULFOXIDE:

TDLo (intravenous, man) = 606 mg/kg;
Gastrointestinal: nausea or vomiting; Liver: jaundice,
other or unclassified
LD₅₀ (oral, rat) = 14500 mg/kg; Eye: hemorrhage,
conjunctive irritation

DIMETHYL SULFOXIDE (continued):

LD₅₀ (oral, mouse) = 7920 mg/kg
Open Irritation Test (skin, rabbit) = 10 mg/24 hours
Standard Draize Test (skin, rabbit) = 500 mg/24 hours;
mild

DIMETHYL SULFOXIDE (continued):

Standard Draize Test (eye, rabbit) = 100 mg
Standard Draize Test (eye, rabbit) = 500 mg/24 hours;
mild

IRRITANCY OF PRODUCT: Depending on the duration and concentration of overexposure, skin and eye contact can irritate contaminated tissue.

SENSITIZATION TO THE PRODUCT: The Dimethyl Sulfoxide component of this product can cause anaphylactic reaction by unspecified exposure routes; symptoms may include rash, abdominal cramps, nausea, chills, and chest pain.

CARCINOGENICITY INFORMATION: The components in this product are not found on the following lists: U.S. EPA, U.S. NTP, U.S. OSHA, U.S. NIOSH, GERMAN MAK, IARC, or ACGIH and therefore are neither considered to be nor suspected to be cancer causing agents by these agencies.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of this product and its components on the human reproductive system.

Mutagenicity: The components of this product are not reported to produce mutagenic effects in humans. Human mutation data are available for the Dimethyl Sulfoxide component of this product; these data were obtained during clinical studies on specific human tissues exposed to high doses of this compound.

Embryotoxicity: The components of this product are not reported to cause human embryotoxic effects.

Teratogenicity: The components of this product are not reported to cause teratogenic effects in humans. Clinical studies on test animals exposed to relatively high doses of the Dimethyl Sulfoxide component of this product indicate teratogenic effects.

Reproductive Toxicity: The components of this product are not reported to cause adverse reproductive effects in humans. Clinical studies on test animals exposed to relatively high doses of the Dimethyl Sulfoxide component of this product indicate adverse reproductive effects.

A *mutagen* is a chemical that causes permanent changes to genetic material (DNA) such that the changes will propagate through generation lines. An *embryotoxin* is a chemical that causes damage to a developing embryo (i.e., within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A *teratogen* is a chemical that causes damage to a developing fetus, but the damage does not propagate across generational lines. A *reproductive toxin* is any substance that interferes in any way with the reproductive process.

BIOLOGICAL EXPOSURE INDICES: Currently, there are no Biological Exposure Indices (BEIs) determined for the components of this product.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY: This product has not been tested for mobility in soil.

PERSISTENCE AND BIODEGRADABILITY: This product has not been tested for persistence or biodegradability. It is expected that the constituents of this product will slowly degrade in the environment and form a variety of organic and inorganic materials; however, no specific information is known. Data for some constituents of this product are available as follows:

DIMETHYL SULFOXIDE:

Biological Half-Life: Dermal application resulted in 50-60 mg % in blood in 4-8 hr; half-life 11-14 hr. 220-340 mg % reported following oral admin of 1,000 mg/kg; half-life 20 hours.
Biodegradation: No degradation of Dimethyl Sulfoxide (%) was noted in a screening test using an activated sludge inoculum. Dimethyl Sulfoxide is considered to be very difficult to degrade in water, based on available data. The data used to make this classification were not indicated. A variety of microorganisms, including some that are found in anaerobic lake mud, have the ability to transform Dimethyl Sulfoxide to dimethyl sulfide.

BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential. No information is available for constituents.

ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. All releases to terrestrial, atmospheric and aquatic environments should be avoided. The following aquatic toxicity data for some constituents of this product are available as follows:

DIMETHYL SULFOXIDE:

TLm (bluegill) 48 hours = 33,500 ppm; fresh water

ENVIRONMENTAL EXPOSURE CONTROLS: Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

OTHER ADVERSE EFFECTS: This product does not contain any constituents with known ozone depletion potential.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Do NOT dispose of any solution of this product by pouring down the drain. It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Shipment of wastes must be done with appropriately permitted and registered transporters.

DISPOSAL CONTAINERS: Waste materials must be placed in and shipped in appropriate 5-gallon or 55-gallon poly or metal waste pails or drums. Permeable cardboard containers are not appropriate and should not be used. Ensure that any required marking or labeling of the containers be done to all applicable regulations.

PRECAUTIONS TO BE FOLLOWED DURING WASTE HANDLING: Wear proper protective equipment when handling waste materials.

U.S. EPA WASTE NUMBER: Not applicable.

EWC WASTE CODE: Wastes from research, diagnoses, treatment, or preventions of disease involving animals: chemicals other than containing dangerous substances: 18-02-06

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

14. TRANSPORTATION INFORMATION (Continued)

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is NOT classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION/ICAO (IATA/ICAO): This product is NOT classified as dangerous goods, per rules of IATA.

INTERNATIONAL MARITIME ORGANIZATION (IMO): This product is NOT dangerous goods, per the rules of IMO.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is NOT classified by the United Nations Economic Commission for Europe to be dangerous goods.

AUSTRALIAN FEDERAL OFFICE OF ROAD SAFETY CODE FOR THE TRANSPORTATION OF DANGEROUS GOODS BY ROAD OR RAIL: This product is NOT dangerous goods, per regulations of the Office of Road Safety.

15. REGULATORY INFORMATION

ADDITIONAL U.S. REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product listed in Section 3 (Composition and Information on Ingredients) are not subject to Sections 302, 304, and 313 reporting requirements under the Superfund Amendment and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

U.S. TSCA INVENTORY STATUS: Components of this product present in less than 0.2% are not included in the TSCA Inventory. In accordance with the conditions listed in 40 CFR 720.36 and 721.47, this product must be used only for research and development, pharmaceutical manufacture, or export. It must be used by, or directly under the supervision of, a technically qualified individual. The manufacturer should be consulted prior to using this product for other applications. Other requirements may apply.

OTHER U.S. FEDERAL REGULATIONS: Not applicable.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): No component of this product listed in Section 2 (Composition and Information on Ingredients) is on the California Proposition 65 lists.

ANSI LABELING (Z129.1; Provided to Summarize Occupational Hazard Information): **CAUTION! MAY CAUSE SENSITIZATION BY UNSPECIFIED ROUTE OF EXPOSURE. MAY CAUSE SKIN, EYE, AND RESPIRATORY TRACT IRRITATION. MAY CAUSE DISCOMFORT IF SWALLOWED.** Do not taste or swallow. Avoid skin or eye contact. Avoid prolonged or repeated skin contact. Avoid breathing mists or sprays. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Wear gloves and goggles. **FIRST-AID:** In case of contact, immediately flush skin or eyes with plenty of water. If inhaled, remove to fresh air. If ingested, do not induce vomiting. Get medical attention if necessary. **IN CASE OF FIRE:** Use water fog, dry chemical, CO₂, or "alcohol" foam. **IN CASE OF SPILL:** Absorb spill with polypads and place in suitable container. Consult Material Safety Data Sheet for additional information.

ADDITIONAL CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The solutions of this product contain ingredients not included in the DSL/NDSL Inventory. This product must be used only for research and development purposes. The manufacturer should be consulted prior to using this product for other applications. Other requirements may apply.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITY SUBSTANCES LISTS: The components of this product are not on the CEPA Priority Substances Lists.

CANADIAN WHMIS CLASSIFICATION AND SYMBOLS: B3 Flammable and combustible material (Contains a B3 material in greater than 99%)



EUROPEAN UNION INFORMATION:

LABELING AND CLASSIFICATION: This product does not meet the definitions of any hazard class as defined by the European Union Council Directive 67/548/EEC or subsequent Directives.

FOR CONSTITUENTS:

Dimethyl Sulfoxide:

An official classification for this substance has not been published in Commission Directives 93/72EEC, 94/69/EC, 96/56/EC, or 98/98/EC.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: The components of this product are on the AICS as indicated in composition tables in Section 3 (Composition and Information on Ingredients). Hydrates of listed compounds and biological materials are exempt from listing. Any chemical not included in AICS is regarded as a new industrial chemical unless it is outside the scope of the Industrial Chemicals (Notification and Assessment) Act 1989 OR is otherwise exempt from notification. New industrial chemicals must be notified and assessed before being manufactured or imported into Australia.

HAZARDOUS SUBSTANCES INFORMATION SYSTEM (HSIS): The constituents in this product's solutions are not listed in the HSIS.

CLASSIFICATION: This product does not meet the definition of hazardous, as defined by the Australian National Occupational Health and Safety Commission [NOHSC (1008:2004)].

POISONS SCHEDULE NUMBER: Schedule 6.

ADDITIONAL LABELING: For advice, contact a Poisons Information Centre (61-2-9845-3111) or a doctor (at once). If swallowed, do NOT induce vomiting. If in eyes, wash out immediately with water. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Not for therapeutic use. Avoid contact with eyes. Avoid contact with skin. Avoid breathing vapour or spray mist. Wear protective gloves when mixing or using.

15. REGULATORY INFORMATION (Continued)**JAPANESE INFORMATION FOR PRODUCT:**

JAPANESE ENCS: The components of this product are on the ENCS Inventory as indicated in composition tables in Section 3 (Composition and Information on Ingredients).

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product listed in Section 3 (Composition and Information on Ingredients) is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

16. OTHER INFORMATION**PREPARED BY:**

CHEMICAL SAFETY ASSOCIATES, Inc.
PO Box 3519, La Mesa, CA 91944-3519
800/441-3365