

MATERIAL SAFETY DATA SHEET

FILE NO.: MSDS-MAXPAR-169Tm Version: 2.0

MSDS DATE: 10/17/2011

MAXPAR® Antibody Labeling Kit (¹⁶⁹Tm)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MAXPAR® X8 Antibody Labeling Kit (¹⁶⁹Tm)

SYNONYMS:

PRODUCT CODES: 201169A; 201169B

MANUFACTURER: DVS Sciences Inc.

DIVISION:

ADDRESS: 70 Esna Park Drive, Unit 12
Markham, ON L3R 6E7

TECHNICAL PHONE: (905) 513-1704

PRODUCT USE:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

DESCRIPTION: Mixture of the substances listed below with non-hazardous additions.

<u>PRODUCT NAME</u>	<u>CAS NO.</u>	<u>%WT</u>	<u>%VOL.</u>
MAXPAR® X8 Antibody Labeling Kit (¹⁶⁹ Tm)	None	N/A	N/A
<u>HAZARDOUS COMPONENTS</u>			
Thulium (III) Chloride	13537-18-3	N/A	<1%
Ammonium Acetate	631-61-8	N/A	<1%
<u>CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION</u>			
Deionized water (Gradient, >18MΩ)	7732-18-5		~98%
Polymer Tag with DTPA + Linker	None	N/A	N/A

SECTION 2 NOTES:

Thulium (III) Chloride is present in the mixture at <1%. According to 29CFR1910.1200(d) ingredients at less than 1% concentration are not considered hazardous.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Causes eye and skin irritation. May be toxic if swallowed. In case of contact with eyes or skin rinse immediately with plenty of water and seek medical advice.

POTENTIAL HEALTH EFFECTS

EYES: Causes eye irritation.

SKIN: May be harmful if absorbed through the skin. Causes skin irritation.

INGESTION: May be harmful if swallowed.

CARCINOGENICITY

OSHA: None

ACGIH: None

NTP: None

IARC: None

OTHER: N/A

SECTION 3 NOTES: No component of this product present at level greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA; ACGIH; NTP or IARC.

SECTION 4: FIRST AID MEASURES

EYES: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

MATERIAL SAFETY DATA SHEET

FILE NO.: MSDS-MAXPAR-169Tm Version: 2.0

MSDS DATE: 10/17/2011

MAXPAR® Antibody Labeling Kit (¹⁶⁹Tm)

SKIN: Wash off with soap and plenty of water. Consult a physician.

INGESTION: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 4 NOTES: In general, consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY: Not flammable or combustible.

EXTINGUISHING MEDIA: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus for fire fighting if necessary.

UNUSUAL FIRE AND EXPLOSION HAZARDS: No data available.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides; nitrogen oxides (NOx); hydrogen chloride gas, thulium oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

SECTION 6 NOTES: Do not let product enter drains. Keep in suitable, close containers for disposal.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid contact with skin and eyes. Avoid formation of aerosols.

OTHER PRECAUTIONS: None.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use mechanical exhaust or laboratory fumehood to avoid exposure.

VENTILATION : N/A

RESPIRATORY PROTECTION: N/A

EYE PROTECTION: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

HAND PROTECTION: 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.

SKIN PROTECTION: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

WORK HYGIENIC PRACTICES: Handle in accordance with good industrial hygiene and safety practice. Wash hands after use.

EXPOSURE GUIDELINES: Contains no substances with occupational exposure limit values.

MATERIAL SAFETY DATA SHEET

FILE NO.: MSDS-MAXPAR-169Tm Version: 2.0

MSDS DATE: 10/17/2011

MAXPAR® Antibody Labeling Kit (¹⁶⁹Tm)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Buffers and Metal Solution: Clear, colorless. **Polymer:** White

ODOR: No odor

PHYSICAL STATE: Buffer and Metal Solution: Liquid. **Polymer:** Amorphous solid

pH AS SUPPLIED: No data available.

pH (Other):

BOILING POINT: No data available.

F:

C:

MELTING POINT: No data available.

F:

C:

FREEZING POINT: No data available.

F:

C:

VAPOR PRESSURE (mmHg): No data available.

@

F:

C:

VAPOR DENSITY (AIR = 1): No data available.

@

F:

C:

SPECIFIC GRAVITY (H₂O = 1): No data available.

@

F:

C:

EVAPORATION RATE: No data available.

BASIS (=1): No data available.

SOLUBILITY IN WATER: Fully soluble.

PERCENT SOLIDS BY WEIGHT: No data available.

PERCENT VOLATILE: N/A

BY WT/ BY VOL @

F:

C:

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER: LBS/GAL
WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT: No data available.

VISCOSITY: No data available.

@

F:

C:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID (STABILITY): N/A

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing agents, strong acids.

MATERIAL SAFETY DATA SHEET

FILE NO.: MSDS-MAXPAR-169Tm Version: 2.0

MSDS DATE: 10/17/2011

MAXPAR® Antibody Labeling Kit (¹⁶⁹Tm)

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon oxides; nitrogen oxides (NOx); hydrogen chloride gas, thulium oxides.

HAZARDOUS POLYMERIZATION: No data available.

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: CAS #13537-18-3 LD50 Oral – mouse – 4294 mg/kg

SKIN IRRITATION: Skin – rabbit – moderate skin irritation – 24h – Draize test

EYE IRRITATION: Eyes – rabbit – moderate eye irritation – 24h – Draize test

GERM CELL MUTAGENICITY – CARCINOGENICITY:

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.

SIGNS AND SYMPTOMS OF EXPOSURE: Burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Rare earth compounds may cause delayed blood clotting leading to hemorrhages.

RTECS: CAS #13537-18-3 XP0525000

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: CAS #631-61-8: Toxicity to fish LC50 - Cyprinus carpio (Carp) - 56 mg/l - 48 h

SECTION 13: DISPOSAL CONSIDERATIONS

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

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

CAS# #631-61-8

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Ammonium acetate)

Reportable Quantity (RQ):

Marine pollutant: No

Poison Inhalation Hazard: No

SECTION 15: REGULATORY INFORMATION

INTERNATIONAL REGULATIONS: CAS #13537-18-3 is listed on the Canadian NDSL.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The statements contained herein are offered for informational purposes only and are based upon technical data. DVS Sciences Inc. believes them to be accurate at the date of publication, but does not purport to be all-inclusive. The above-stated product is intended for use only by persons having the necessary technical skills and facilities for handling the product at their discretion and risk. Since conditions and manner of use are outside our control, we (DVS Sciences Inc.) make no warranty of merchantability or any such warranty,

MATERIAL SAFETY DATA SHEET

FILE NO.: MSDS-MAXPAR-169Tm Version: 2.0

MSDS DATE: 10/17/2011

MAXPAR® Antibody Labeling Kit (¹⁶⁹Tm)

express or implied with respect to information and we assume no liability resulting from the above product or its use. Users should perform their own investigations to determine suitability of information and product for their particular purposes.