

MATERIAL SAFETY DATA SHEET

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CHEMICAL IDENTIFICATION:

PRODUCT NAME Peroxidase Substrate Kit (3-amino-9-ethyl-carbazole) (AEC)
CATALOG NO. SK-4200

COMPOSITION/INFORMATION ON INGREDIENTS:

MATERIAL 3-amino-9-ethylcarbazole
% BY WEIGHT 1.2

TOXICOLOGICAL INFORMATION:

ori-rat LD50 : 144mg/kg
ipr-mus LD50 : 150mg/kg

TRANSPORT INFORMATION:

RTECS # FE3590000
CAS # 132-32-1

PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE Reddish brown liquid
SOLUBILITY IN WATER low, <1mg/ml
SPECIFIC GRAVITY n/a
MELTING POINT n/a
BOILING POINT n/a
EVAPORATION RATE n/a

FIRE FIGHTING MEASURES:

FLASH POINT n/a
FLAMMABLE LIMITS IN AIR n/a
EXTINGUISHING MEDIA Dry powder, carbon dioxide (NOT WATER)
SPECIAL FIREFIGHTING PROCEDURES Use respirator. Toxic gases can be evolved: carbon monoxide, carbon dioxide, nitrogen oxides.
UNUSUAL FIRE AND EXPLOSION HAZARDS None

HAZARDS IDENTIFICATION:

THRESHOLD LIMIT VALUE None reported. CAUTION POSSIBLE CARCINOGEN
ACUTE EFFECTS OF OVEREXPOSURE Harmful if placed on skin, in eyes ingested or inhaled.

FIRST AID MEASURES:

EMERGENCY AND FIRST AID PROCEDURES Wash affected area thoroughly with water. Irrigate eyes for at least 15 min. If inhaled, remove to fresh air. Call a physician.

ACCIDENTAL RELEASE MEASURES:

SKIN CONTACT Harmful
EYE CONTACT Harmful
INHALATION Harmful
INGESTION Harmful if swallowed

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CHEMICAL IDENTIFICATION (continued)

PRODUCT NAME Peroxidase Substrate Kit (3-amino-9-ethyl-carbazole) (AEC)
CATALOG NO. SK-4200

REACTIVITY DATA

STABILITY Stable
MATERIALS TO AVOID Strong oxidizers, acids
CONDITIONS TO AVOID Heat, sparks, or open flame
HAZARDOUS POLYMERIZATION Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS Carbon monoxide, carbon dioxide, nitrogen oxides.

DISPOSAL CONSIDERATIONS:

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED Collect on absorbent and hold for hazardous waste site.
WASTE DISPOSAL METHOD Burn in a chemical incinerator equipped with an afterburner and scrubber or dispose in approved hazardous waste site in accordance with all federal, state, and local laws.

EXPOSURE CONTROLS/PERSONAL PROTECTION:

RESPIRATORY PROTECTION Approved organic vapor respirator.
VENTILATION Use only with adequate ventilation.
PROTECTIVE GLOVES NEEDED Yes
EYE PROTECTION NEEDED Yes

HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE Store in refrigerator.

OTHER INFORMATION:

The information contained in this Material Safety Data Sheet is believed to be accurate but it is the responsibility of the user to determine the applicability of these data to the formulation of necessary safety precautions. Vector Laboratories Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Material Safety Data Sheet.

ECOLOGICAL INFORMATION:

Data not yet available.

REGULATORY INFORMATION:

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CHEMICAL IDENTIFICATION (continued)

PRODUCT NAME Peroxidase Substrate Kit (Hydrogen Peroxide)
CATALOG NO. SK-4200

COMPOSITION/INFORMATION ON INGREDIENTS:

MATERIAL Hydrogen Peroxide
% BY WEIGHT 1.5

TOXICOLOGICAL INFORMATION:

skn-rat LD50 : 4060mg/kg
orl-mus LD50 : 2gm/kg

TRANSPORT INFORMATION:

RTECS # MXO900000
CAS # 7722-84-1

PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE Colorless liquid **MELTING POINT** n/a
SOLUBILITY IN WATER miscible **BOILING POINT** 152 C
SPECIFIC GRAVITY 1.00 **EVAPORATION RATE** n/a

FIRE FIGHTING MEASURES:

FLASH POINT n/a **FLAMMABLE LIMITS IN AIR** n/a
EXTINGUISHING MEDIA Water
SPECIAL FIREFIGHTING PROCEDURES Use self-contained respirator and protective clothing. Avoid contact with skin.
UNUSUAL FIRE AND EXPLOSION HAZARDS Explosion may occur under fire conditions.

HAZARDS IDENTIFICATION:

THRESHOLD LIMIT VALUE 1 ppm
ACUTE EFFECTS OF OVEREXPOSURE May cause minor to severe burns if placed on skin, in eyes, ingested or inhaled.

FIRST AID MEASURES:

EMERGENCY AND FIRST AID PROCEDURES Wash affected area thoroughly with water. Irrigate eyes for at least 15 min. If inhaled, remove to fresh air. Call a physician.

ACCIDENTAL RELEASE MEASURES:

SKIN CONTACT May be harmful
EYE CONTACT Harmful
INHALATION Harmful
INGESTION Harmful if swallowed

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CHEMICAL IDENTIFICATION (continued)

PRODUCT NAME Peroxidase Substrate Kit (Hydrogen Peroxide)
CATALOG NO. SK-4200

STABILITY AND REACTIVITY:

STABILITY Unstable
MATERIALS TO AVOID Strong reducing agents, organic materials, metals
CONDITIONS TO AVOID Heat, sparks, or open flame. Avoid contamination with metals or dust that may cause rapid decomposition generating large quantities of oxygen.
HAZARDOUS POLYMERIZATION Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS Oxygen

DISPOSAL CONSIDERATIONS:

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED Flush to sewer if allowed or collect on absorbent and dispose in approved land fill.
WASTE DISPOSAL METHOD Flush to sewer if allowed or dispose according to federal, state, or local law.

EXPOSURE CONTROLS/PERSONAL PROTECTION:

RESPIRATORY PROTECTION Approved organic respirator
VENTILATION Use only with adequate ventilation.
PROTECTIVE GLOVES NEEDED Yes
EYE PROTECTION NEEDED Yes

HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE Store in refrigerator.

OTHER INFORMATION:

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ECOLOGICAL INFORMATION:

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REGULATORY INFORMATION:

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CHEMICAL IDENTIFICATION (continued)

PRODUCT NAME Peroxidase Substrate Kit (Dimethyl formamide)
CATALOG NO. SK-4200

COMPOSITION/INFORMATION ON INGREDIENTS:

MATERIAL Dimethylformamide (DMF) (Reagent 1 is in DMF)
% BY WEIGHT 98

TOXICOLOGICAL INFORMATION:

orl-rat LD50 : 2800mg/kg
orl-mus LD50 : 3750mg/kg
ivn-mus LD50 : 3500mg/kg

TRANSPORT INFORMATION:

RTECS # LQ2100000
CAS # 68-12-2

PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE Colorless liquid **MELTING POINT** -61 C
SOLUBILITY IN WATER Soluble **BOILING POINT** 153 C
SPECIFIC GRAVITY 0.94 (H₂O-1) **EVAPORATION RATE** n/a

FIRE FIGHTING MEASURES:

FLASH POINT 67 C **FLAMMABLE LIMITS IN AIR** n/a
EXTINGUISHING MEDIA Water, foam, carbon dioxide
SPECIAL FIREFIGHTING PROCEDURES Use respirator. Toxic gases can be evolved: carbon monoxide, carbon dioxide, nitrogen oxides.
UNUSUAL FIRE AND EXPLOSION HAZARDS Flammable liquid. Container could explode under fire conditions.

HAZARDS IDENTIFICATION:

THRESHOLD LIMIT VALUE 10 ppm
ACUTE EFFECTS OF OVEREXPOSURE Vapor or mist irritates eyes, mucous membranes and respiratory tract. May cause stomach pains, vomiting, diarrhea, nausea, dizziness and headache.

FIRST AID MEASURES:

EMERGENCY AND FIRST AID PROCEDURES Wash affected area thoroughly with water. Irrigate eyes for at least 15 min. If inhaled, remove to fresh air. Call a physician.

ACCIDENTAL RELEASE MEASURES:

SKIN CONTACT May cause local discomfort
EYE CONTACT May cause blindness
INHALATION May cause irritation
INGESTION Harmful if swallowed

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MATERIAL SAFETY DATA SHEET

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CHEMICAL IDENTIFICATION (continued)

PRODUCT NAME Peroxidase Substrate Kit (Dimethyl formamide)
CATALOG NO. SK-4200

STABILITY AND REACTIVITY:

STABILITY Stable
MATERIALS TO AVOID Strong oxidizers, inorganic nitrate, or halogenated hydrocarbons.
CONDITIONS TO AVOID Acidic pH, heat, sparks, or open flame.
HAZARDOUS POLYMERIZATION Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS Carbon monoxide, carbon dioxide, nitrogen oxides

DISPOSAL CONSIDERATIONS:

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED Flush to sewer if allowed or collect on absorbent and dispose in approved land fill.
WASTE DISPOSAL METHOD Flush to sewer if allowed or dispose according to federal, state, or local law.

EXPOSURE CONTROLS/PERSONAL PROTECTION:

RESPIRATORY PROTECTION Approved organic vapor respirator.
VENTILATION Use only with adequate ventilation.
PROTECTIVE GLOVES NEEDED Yes
EYE PROTECTION NEEDED Yes

HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE Store in refrigerator.

OTHER INFORMATION:

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