MATERIAL SAFETY DATA SHEET

Part Number/Trade Name: v-Coelenterazine (v-CTZ) Cat# 370

General Information

Company's Name: Prolume Ltd., NanoLight Division
Company's Street: 163 W. White Mountain Blvd., Suite B
Company's City: Pinetop
Company's State: Arizona
Company's Country: United States
Company's zip code: 85935
Company's Emergency Phone: 928-358-1343
Company's Information Phone: 928-367-1200
Record No. for Safety Entry: 001
Tot. Safety Entries This Stk #: 001
Status: SMJ
MSDS Serial Number: VCTZ CAT# 370
Hazard Characteristic Code: NK

Ingredients/Identity Information

Proprietary: NO
Ingredient: v-COELENTERAZINE
Ingredient Sequence Number: 02
Percent: >95
NIOSH (RTECS) Number: NONE
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Physical/Chemical Characteristics

Appearance and Odor: PALE YELLOW POWDER
Melting Point: 178-180°C
Solubility in Water: slightly to insoluble

Fire and Explosion Hazard Data

Flash Point: NOT VERY FLAMMABLE, NOT EASILY IGNITED IN ROOM AIR
Extinguishing Media: WATER, DRY CHEMICAL, CARBON DIOXIDE, HALON, OR STANDARD FOAM.
Special Fire Fighting Proc: USE NOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE
EQUIPMENT (FP N). NO ACUTE HAZ. MOVE CNTNR FROM FIRE AREA IF POSS. AVOID
BREATHING VAPORS/DUST; KEEP UPWIND.
Unusual Fire and Expl. Hazards: MINIMAL FIRE HAZARD WHEN EXPOSED TO HEAT/FLAME.
Reactivity Data

Stability: YES
Cond. To Avoid (Stability): STORE -20C to -70C KEEP AWAY FROM AIR AND LIGHT
Materials To Avoid: NONE KNOWN.
Hazardous Decomp. Products: THERMAL DECOMPOSITION MAY RELEASE ACRID SMOKE AND IRRITATING FUMES.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NOT RELEVANT

Health Hazard Data

LD50-LC50 Mixture: >UNKNOWN
Route Of Entry – Inhalation: YES
Route Of Entry – Skin: YES
Route Of Entry – Ingestion: YES
Health Haz Acute And Chronic: USE GOOD LABORATORY TECHNIQUE WHEN HANDLING THIS PRODUCT. MATERIALS & MIXTURES MAY PRESENT UNKNOWN HAZARDS & SHOULD BE USED W/CAUTION. ACUTE HEALTH HAZARDS: INHAL: MAY BE IRRITATING TO RESPIRATORY TRACT & MUCOUS MEMBRANES. EYES: CAN BE EXPECTED TO BE IRRITATING IN DUST FORM. INGEST: MAY BE IRRITATING TO THE GASTROINTESTINAL TRACT.
CHRONIC: (EFTS OF OVEREXP): NONE REPORTED
Suppl. Safety & Health Data: Carcinogenicity – Mini-Ames, Ames, and Micronucleus tests NEAGATIVE
Explanation Carcinogenicity: NOT CARCINOGENIC
Signs/Symptoms of Overexp.: HLTH HAZ: SKIN: MAY PRODUCE ALLERGIC REACTIONS & DERMATITIS IN SUSCEPTIBLE INDIVIDUALS
Med. Cond. Aggravated By Exp: NONE REPORTED, UNLIKELY UNLESS ALLERGIC
Emergency/First Aid Proc: INHAL: REMOVE TO FRESH AIR IMMED. IF BRTHG STOPPED, PERFORMED ARTF RESP. KEEP PERSON WARM & REST. TREAT SYMP & SUPPORTIVELY. GET MED ATTN IMMED. NOT A SKIN IRRI.
Precautions for Safe Handling and Use

Steps If Matl Released/Spill: NO SPECIAL PRECAUTIONS INDICATED
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS (FP N). NOT AN ENVIRONMENTAL HAZARD
Precautions-Handling/Storing: NONE SPECIFIED BY MANUFACTURER.

Control Measures

Respiratory Protection: NO SPECIFIC PRECAUTIONS.
Ventilation: NO SPECIFIC PRECAUTIONS.
Protective Gloves: NO SPECIFIC PRECAUTIONS.
Eye Protection: DRAIZE TEST RESULTS: MILD IRRITATION CLEARING IN 24 HOURS IN 6 RABBITS 1.0 mg APPLIED DIRECTLY INTO CONJUNCTIVE NO SEQUELAE AFTER 24 HOURS
Other Protective Equipment: WASH WITH SOAP AND WATER. OR ANY DETERGENT
Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
Suppl. Safety & Health Data: NO SPECIFIC TREATMENT REQUIRED IN NON-ALLERGIC INDIVIDUALS. IF SWALLOWED NO TREATMENT REQUIRED. ALLERGIC POTENTIAL SMALL.
Transportation Data

NOT FLAMMABLE
NOT EXPLOSIVE
DOES NOT REQUIRE ANY SPECIAL HANDLING PRECAUTIONS

Disposal Data

NOT AN ENVIRONMENTAL HAZARD
(NATURALLY OCCURRING PRODUCT IN MARINE ENVIRONMENT)
DISPOSAL OF IN SINK OR GENERAL WASTE

Label Data

Label Required: YES
Technical Review Date: 01.28.2014
Label Date: January 2014
Label Status: G
Common Name: v-Coelenterazine
Chronic Hazard: UNKNOWN
Signal Word: NO KNOWN TOXICITY
Acute Health Hazard – Minimal to Nil
Contact Hazard – Minimal to Nil
Fire Hazard – Minimal to Nil
Reactivity Hazard – Avoid direct contact with strong oxidizing agents
Special Hazard Precautions: ACUTE – INHALATION: MAY BE IRRITATING TO RESPIRATORY TRACT & MUCOUS MEMBRANES. EYES: MAY BE IRRITATING IN DUST FORM. INGEST: MAY BE SLIGHTLY IRRITATING TO THE GASTROINTESTINAL & MAY PRODUCE ALLERGIC REACTIONS IN CERTAIN INDIVIDUALS.
Protect Eye: Not required
Protect Skin: Not required
Protect Respiratory: Not required
Label Name: PROLUME LTD. NANOLIGHT DIVISION
Label Street: PO Box 2746
Label City: PINETOP
Label State: ARIZONA
Label Zip Code: 85935
Label Country: USA
Label Emergency Number: (928) 358-1343