

MATERIAL SAFETY DATA SHEET

Hampford Research, Inc.

SECTION 1. -----CHEMICAL PRODUCT AND COMPANY IDENTIFICATION-----

IR 813 TOSYLATE

CHEMICAL FORMULA: C40 H40 CL N2 . C7 H7 O3 S

CAS NUMBER: 134127-48-3

CHEMICAL NAME: 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid

REVISED: 9/14/2006

MANUFACTURER: Hampford Research, Inc
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EMERGENCY TELEPHONE NUMBERS: OFFICE (203) 375-1137
CHEMTREC (800) 424-9300

SECTION 2. -----COMPOSITION / INFORMATION ON INGREDIENTS-----

COMPONENT	CAS #	% BY WEIGHT	EXPOSURE LIMITS
1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid	134127-48-3	100%	

SECTION 3. -----HAZARDS IDENTIFICATION-----

EYES: Do not get in eyes effects unknown.

SKIN: May be asorbed through skin.

SWALLOWING: May be harmful if swallowed.

INHALATION: May be harmful if inhaled.

SECTION 4. -----FIRST AID MEASURES-----

EYE CONTACT:

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. May cause irritation. Call a physician.

SKIN CONTACT:

Flush skin with water after contact. Wash contaminated clothing before reuse.

INGESTION:

All cases of ingestion should be referred immediately to a physician or Poison Control Center. Vomiting should be induced only as advised and by the means specified.

INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SECTION 5. -----FIRE FIGHTING MEASURES-----

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UNUSUAL FIRE AND EXPLOSION HAZARDS:

Like most organic powder or crystals, under severe dusting conditions, this material may form explosive mixtures in air. No unusual fire or explosion hazards.

FIRE EXTINGUISHING MEDIA:

Foam, dry chemical.

SPECIAL FIREFIGHTING INSTRUCTIONS:

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

SECTION 6. -----ACCIDENTAL RELEASE MEASURES-----

PERSONAL PROTECTIVE EQUIPMENT (PPE):

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

SPILL CLEANUP MEASURES:

Sweep up. Avoid creating dust. Place in suitable container and hold for proper disposal.

SECTION 7. -----HANDLING AND STORAGE-----

HANDLING AND STORAGE REQUIREMENTS:

Avoid contact with eyes, skin or clothing. Avoid breathing dust. Wash thoroughly after handling. Wash contaminated clothing prior to reuse. Keep container tightly closed. Store in a cool, dry, well-ventilated area.

SECTION 8. -----PERSONAL PROTECTION/EXPOSURE CONTROLS-----

EYE/FACE PROTECTION: Wear coverall chemical splash goggles when the possibility exists for eye or face contact from airborne material.

SKIN PROTECTION: Wear impervious clothing, such as gloves, apron, boots, or whole bodysuit as appropriate.

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with a dust/mist cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirator may not provide adequate protection.

ENGINEERING CONTROLS: Follow site specific work practice instructions for protective equipment.

SECTION 9. -----PHYSICAL AND CHEMICAL PROPERTIES-----

PHYSICAL STATE: Solid

MELTING POINT: decomposes at 173°C

BOILING POINT: N/A

SPECIFIC GRAVITY: N/A

APPEARANCE: Reddish-brown to dark-green

ODOR: N/A

OTHER:

SECTION 10. -----STABILITY AND REACTIVITY-----

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INCOMPATIBILITIES:

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION:

Decomposition does not occur under normal use conditions but will occur at elevated temperatures.

CHEMICAL STABILITY:

Light sensitive.

HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

SECTION 11. -----TOXICOLOGICAL INFORMATION-----**TOXICOLOGICAL EFFECTS:**

May cause skin and eye irritation. Inhalation of dust may be harmful. Ingestion may irritate gastrointestinal tract.
LD50 (rat) .5,000mg/kg. Salmonella/Mammalian-Microsome Reverse Mutation Screening Assay: (TA98, TA100):
negative (in presence of activation)

SECTION 12. -----ECOLOGICAL INFORMATION-----**ECOLOGICAL EFFECTS:**

Date not yet available.

SECTION 13. -----DISPOSAL INFORMATION-----**WASTE MANAGEMENT PROCEDURES:**

Landfill or incinerate in accordance with all Federal, State and Local environmental regulations.

SECTION 14. -----TRANSPORT INFORMATION-----**TRANSPORTATION INFORMATION:**

Not regulated for all modes of transportation

-----DOT (DOMESTIC SURFACE)-----

PROPER SHIPPING NAME:
HAZARD CLASS OR DIVISION:
UN / NA NUMBER:
PACKING GROUP:
DOT PRODUCT RQ lbs (kgs):
HAZARD LABEL (s):
HAZARD PLACARD (s):

-----IMO / IMDG CODE (OCEAN)-----

PROPER SHIPPING NAME:
HAZARD CLASS DIVISION NUMBER:
UN NUMBER:
PACKAGING GROUP:
HAZARD LABEL (s):
HAZARD PLACARD (s):

-----ICAO / IATA (AIR)-----

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PROPER SHIPPING NAME:
HAZARD CLASS DIVISION NUMBER:
UN NUMBER:
SUBSIDIARY RISK:
PACKING GROUP:
HAZARD LABEL (s):
RADIOACTIVE?:
PASSENGER AIR - MAX QTY:
PASSENGER PACKING INSTRUCTION:
CARGO AIR - MAX QTY:
CARGO AIR PACKAGING INSTRUCTION:

SECTION 15. -----REGULATORY INFORMATION-----

REGULATORY INFORMATION:

Not listed on TSCA for research only. Section 5 of the Toxic Substance Control Act (TSCA) provides that a chemical substance, manufactured or imported for commercial purposes, must be listed on the TSCA Chemical Substance Inventory (Inventory), have completed, Premanufacture Notice (PMN) review by the U.S. Environmental Protection Agency (EPA), or be otherwise exempt. To be eligible for the R&D Exemption, the chemical substance must be manufactured exclusively for research and development purposes and all research must be supervised by a "technically qualified individual," as defined in 40 CFR 720.3(ee). The regulatory requirements of the R&D Exemption are given at 40 CFR 720.36.

SECTION 16. -----ADDITIONAL INFORMATION-----

ADDITIONAL INFORMATION:

ENCS No.: 5-6789 On Asia-PAC

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Hampford Research, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. Hampford Research grants permission to make unlimited paper copies for internal use only.