

MATERIAL SAFETY DATA SHEET

Hampford Research, Inc.

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

Acridine Dimer

CHEMICAL FORMULA: C33H30N2

CAS NUMBER: 141946-28-3

CHEMICAL NAME: 1,7-bis(9-acridinyl)heptane

REVISED: 11/30/2001

MANUFACTURER: Hampford Research, Inc
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Stratford, CT 06615

EMERGENCY TELEPHONE NUMBERS: OFFICE (203) 375-1137
CHEMTREC (800) 424-9300

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

COMPONENT	CAS #	% BY WEIGHT	EXPOSURE LIMITS
1,7-bis(9-acridinyl)heptane	141946-28-3	99%	

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

EYES: Prolonged exposure may cause eye irritation.

SKIN: Prolonged exposure may cause skin irritation.

SWALLOWING: No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of ingestion.

INHALATION: No significant health hazards identified.

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

EYE CONTACT:
Flush immediately with large amounts of water for at least 15 minutes.

SKIN CONTACT:
Wash with plenty of soap and water. Do not use organic solvents.

INGESTION:
Induce vomiting and get medical attention.

INHALATION:
Remove affected person to fresh air and call a physician.

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

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Not highly flammable.

FIRE EXTINGUISHING MEDIA:
Foam CO2, dry powder

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SPECIAL FIREFIGHTING INSTRUCTIONS:

Do not use a straight stream of water. Water spray can be used to cool fire-exposed containers to protect personnel and to disperse vapors and spills.

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

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Firemen should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

SPILL CLEANUP MEASURES:

LARGE SPILL: Incinerate or place in a suitable container for disposal by a licensed contractor. (Follow all Federal, State and Local regulation in your country).

SMALL SPILL: Mop up, wipe up or soak up immediately.

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

HANDLING AND STORAGE REQUIREMENTS:

Avoid contact with eyes. Keep container closed. Use with adequate ventilation. Avoid prolonged or repeated contact with skin. Do not eat, drink or smoke at the workplace. Avoid dust formation. Keep away from ignition sources. Keep away from food and drink. Store in the original container securely closed under cool and dry condition. Avoid contact with peroxide, oxidizing agent and protect from direct sunlight.

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

EYE/FACE PROTECTION: Wear safety glasses, splash goggles. Contact lenses should not be worn.

SKIN PROTECTION: Chemical resistant gloves. Protective clothing should cover the whole body.

RESPIRATORY PROTECTION: Wear suitable particle filter mask when exposed to dust.

ENGINEERING CONTROLS: Avoid generating and inhaling dusts. Local exhaust ventilation should be used. Keep container closed when not in use.

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

PHYSICAL STATE: Powder

MELTING POINT: 143-149 C

BOILING POINT: No data available.

SPECIFIC GRAVITY: 0.55

APPEARANCE: Yellow powder

ODOR: None

OTHER:

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

INCOMPATIBILITIES:

Strong oxidizing agents and strong acid.

HAZARDOUS DECOMPOSITION:

Thermal decomposition or combustion may produce carbon dioxide, carbon monoxide and oxide of nitrogen.

CHEMICAL STABILITY:

Stable under recommended conditions of storage and handling.

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HAZARDOUS POLYMERIZATION:

No risk of specific hazardous reactions of fire under normal condition.

SECTION 11. -----TOXICOLOGICAL INFORMATION-----

TOXICOLOGICAL EFFECTS:

Eye Effects: May cause eye irritation.

Skin Effects: May cause skin irritation.

Acute Oral Effects: No specific hazard known.

Acute Inhalation Effects: The systematic toxicity of this product has not been determined.

Chronic Effects/Carcinogenicity: No data available.

Mutagenicity: This product was negative in the Ames test with or without metabolic activation. (TA-98, TA-100, TA-1538, TA-1537, TA-1535) *

Others: Subacute 28-days oral toxicity(rat): NOBL 200mg/kg/day *

In chromosomal aberration test. This product induced week numerical aberration. *

* = Our data obtained from GLP laboratory.

SECTION 12. -----ECOLOGICAL INFORMATION-----

ECOLOGICAL EFFECTS:

Semi static acute LC for orange-red killifish is reported to be > 50mg/l.

8 weeks bioconcentration factor for carp.

< 2.6 (exposing level 0.1 mg/l)

< 16 (exposing level 0.01 mg/l)

= Our data obtained from GLP laboratory.

SECTION 13. -----DISPOSAL INFORMATION-----

WASTE MANAGEMENT PROCEDURES:

This product may be burned in chemical incinerator equipped with an after burner and scrubber.

SECTION 14. -----TRANSPORT INFORMATION-----

TRANSPORTATION INFORMATION:

Contact Hampford Research, Inc. for transportation information.

-----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 PACKARD (s):

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

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Chemical Name: 1,7-bis(9-acridinyl)heptane

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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:

On ENCS NO 5-6380
Japanese Gazette, March 10, 1998

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

ADDITIONAL INFORMATION:

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.