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MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 12149

NAME: Pyr-His-OH

SYNONYMS:

24 HOUR EMERGENCY TELEPHONE: (800) 535-5053(USA)

352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER SERVICE: (630) 766-2112

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 32159-22-1

MF: $C_{11}H_{14}N_4O_4$

SECTION 3. HAZARDS IDENTIFICATION

NOT AVAILABLE.

POTENTIAL HEALTH EFFECTS

THE TOXICOLOGICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN INVESTIGATED. USE APPROPRIATE PROCEDURES TO PREVENT OPPORTUNITIES FOR DIRECT CONTACT WITH THE SKIN OR EYES AND TO PREVENT INHALATION.

SECTION 4. FIRST-AID MEASURES

EYES: NOT AVAILABLE.

SKIN: NOT AVAILABLE.

INHALATION: NOT AVAILABLE.

INGESTION: DO NOT INDUCE VOMITING. IF CONSCIOUS AND ALERT. RINSE

MOUTH AND DRINK 2-4 CUPFULS OF MILK OR WATER.

NOTES FOR

TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

PHYSICIAN:

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT: NOT AVAILABLE

AUTOIGNITION TEMPERATURE:

NOT AVAILABLE

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FLAMMABLE LIMITS IN AIR, BY % VOLUME

UPPER: NOT AVAILABLE LOWER: NOT AVAILABLE

EXTINGUISHING

MEDIA:

NOT AVAILABLE.

GENERAL

AS IN ANY FIRE, WEAR A SELF-CONTAINED BREATHING

INFORMATION:

APPARATUS IN PRESSURE-DEMAND, MSHA/NIOSH

(APPROVED OR EQUIVALENT), AND FULL PROTECTIVE GEAR.

SECTION 6. ACCIDENTAL RELEASE MEASURES

USE PROPER PERSONAL PROTECTIVE EQUIPMENT AS INDICATED IN SECTION 8.

SPILLS AND LEAKS: SWEEP UP, THEN PLACE INTO A SUITABLE CONTAINER FOR

DISPOSAL.

SECTION 7. HANDLING AND STORAGE

HANDLING NOT AVAILABLE.

STORAGE KEEP COOL AND DRY

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

USE ADEQUATE GENERAL OR LOCAL EXHAUST VENTILATION

TO KEEP AIRBORNE CONCENTRATIONS BELOW THE

PERMISSIBLE EXPOSURE LIMITS.

EYES: WEAR SAFETY GLASSES AND CHEMICAL GOGGLES IF

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SPLASHING IS POSSIBLE.

SKIN AND WEAR APPROPRIATE PROTECTIVE GLOVES AND CLOTHING TO

CLOTHING: PREVENT SKIN EXPOSURE.

WEAR APPROPRIATE PROTECTIVE CLOTHING TO MINIMIZE

CONTACT WITH SKIN.

RESPIRATORS: WEAR A NIOSH/MSHA OR EUROPEAN STANDARD EN 149

APPROVED FULL-FACEPIECE AIRLINE RESPIRATOR IN THE

POSITIVE PRESSURE MODE WITH EMERGENCY ESCAPE

PROVISIONS.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:

pH: NOT AVAILABLE

VAPOR PRESSURE: NEGLIGIBLE.

VISCOSITY: NOT AVAILABLE

BOILING POINT:

FREEZING / MELTING

POINT

SECTION 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:

STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

CONDITIONS TO

INCOMPATIBLE MATERIALS.

AVOID

INCOMPATIBILITY

OXIDIZING AGENTS, REDUCING AGENTS, BASES, ALKALI METALS.

WITH OTHER MATERIALS:

HAZARDOUS DECOMPOSITION CARBON MONOXIDE, CARBON DIOXIDE.

PRODUCTS:

HAZARDOUS

HAS NOT BEEN REPORTED.

POLYMERIZATION:

SECTION 11. TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 32159-22-1

LD50/LC50:

CAS# 32159-22-1: NOT AVAILABLE.

CARCINOGENICITY:

CAS# 32159-22-1: NOT LISTED BY ACGIH, IARC, NIOSH, NTP, OR OSHA. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

SECTION 12. ECOLOGICAL INFORMATION

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSE OF IN A MANNER CONSISTENT WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

SECTION 14. TRANSPORT INFORMATION

NO INFORMATION AVAILABLE.

SECTION 15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

TSCA:

CAS# 32159-22-1 IS LISTED ON THE TSCA INVENTORY.

EUROPEAN/INTERNATIONAL REGULATIONS EUROPEAN LABELING IN ACCORDANCE WITH EC DIRECTIVES HAZARD SYMBOLS: NOT AVAILABLE.

RISK PHRASES:

SAFETY PHRASES:

S 24/25 AVOID CONTACT WITH SKIN AND EYES.

WGK (WATER DANGER/PROTECTION)

CAS# 32159-22-1: NO INFORMATION AVAILABLE.

UNITED KINGDOM OCCUPATIONAL EXPOSURE LIMITS

UNITED KINGDOM MAXIMUM EXPOSURE LIMITS

CANADA - DSL/NDSL

CAS# 32159-22-1 IS LISTED ON CANADA'S DSL LIST.

CANADIAN INGREDIENT DISCLOSURE LIST

CAS# 32159-22-1: IS NOT LISTED ON CANADA'S INGREDIENT DISCLOSURE LIST.

EXPOSURE LIMITS

SECTION 16. OTHER INFORMATION

MSDS LEGEND:

MW: MOLECULAR WEIGHT
MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL

HYGIENISTS

CAS: CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV: THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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