



ECKERD COLLEGE

Safe Operating Procedure

(8/06)

Material Safety Data Sheets (MSDS)

Students have a Right-to-Know about the hazards of any chemicals with which they are working. One excellent source of information about hazards of chemicals is the Material Safety Data Sheets (MSDS). The MSDSs are provided by the chemical manufacturer and must be kept on file and available for all chemicals used at an educational institutional. The stockroom supervisor in each of the labs (biology, chemistry, and marine science) can acquaint you with MSDSs.

Actually reading a MSDS can be a bit daunting, given the amount of information typically contained in the document. The MSDS is divided into the following sections:

- Section 1 - Product and Company Identification
- Section 2 - Composition/Information on Ingredients
- Section 3 - Hazards Identification, Including Emergency Overview
- Section 4 - First Aid Measures
- Section 5 - Fire Fighting Measures
- Section 6 - Accidental Release Measures
- Section 7 - Handling and Storage
- Section 8 - Exposure Controls & Personal Protection
- Section 9 - Physical & Chemical Properties
- Section 10 - Stability & Reactivity Data
- Section 11 - Toxicological Information
- Section 12 - Ecological Information
- Section 13 - Disposal Considerations
- Section 14 - MSDS Transport Information
- Section 15 - Regulatory Information
- Section 16 - Other Information

A sample MSDS for hexanes is provided below.

Section 1 - Product and Company Identification
01135 HEXANES

Product Identification: 01135 HEXANES
Date of MSDS: 10/28/1986 **Technical Review Date:** 04/17/2000
FSC: NIIN: EMPTY
Submitter: F BT
Status Code: A
MFN: 01
Article: N
Kit Part: N

Manufacturer's Information

Manufacturer's Name: EASTMAN KODAK COMPANY
Manufacturer's Address1: 343 STATE STREET
Manufacturer's Address2: ROCHESTER, NY 14650
Manufacturer's Country: US
General Information Telephone: 716-722-5151
Emergency Telephone: 800-225-5352
Emergency Telephone: 800-225-5352
Proprietary: N
Reviewed: Y
Published: Y
CAGE: 19139

Contractor Information

Contractor's Name: EASTMAN KODAK CO GOVERNMENT MARKETS
CONTRACTS
Contractor's Address1: 343 STATE ST
Contractor's Address2: ROCHESTER, NY 14650-1115
Contractor's Telephone: 716-722-5151/(800) 242-2424
Contractor's CAGE: 19139

Section 2 - Compositon/Information on Ingredients
01135 HEXANES

Ingredient Name: HEXANE
Ingredient CAS Number: 110-54-3 **Ingredient CAS Code:** T
RTECS Number: MN9275000 **RTECS Code:** T
=WT: 100. **=WT Code:** M
=Volume: **=Volume Code:**
>WT: **>WT Code:**
>Volume: **>Volume Code:**
<WT: **<WT Code:**
<Volume: **<Volume Code:**
% Low WT: **% Low WT Code:**
% High WT: **% High WT Code:**

% Low Volume: % Low Volume Code:
% High Volume: % High Volume Code:
% Text:
% Environmental Weight:
Other REC Limits: N/P
OSHA PEL: 1800 MG/M3;500 PPM OSHA PEL Code: T
OSHA STEL: N/P OSHA STEL Code:
ACGIH TLV: N/P ACGIH TLV Code:
ACGIH STEL: N/P ACGIH STEL Code:
EPA Reporting Quantity: 1 LB
DOT Reporting Quantity: 1 LB
Ozone Depleting Chemical: N

Section 3 - Hazards Identification, Including Emergency Overview
01135 HEXANES

Health Hazards Acute & Chronic: INHALATION: HARMFUL. MAY CAUSE NERVOUS SYSTEM INJURY. SKIN: IRRITATION. HARMFUL IF ABSORBED. EYES: CAUSES IRRITATION. INGESTION: LOW ORAL TOXICITY.

Signs & Symptoms of Overexposure:

DIZZINESS, GIDDINESS, HEADACHE, NAUSEA, BLURRED VISION, LOSS OF APPETITE & WEIGHT, NUMBNESS, WEAKNESS OF ARMS & LEGS, IRRITATION

Medical Conditions Aggravated by Exposure:
N/P

LD50 LC50 Mixture: N/P

Route of Entry Indicators:

Inhalation: YES

Skin: YES

Ingestion: YES

Carcinogenicity Indicators

NTP: N/P

IARC: N/P

OSHA: N/P

Carcinogenicity Explanation: N/P

Section 4 - First Aid Measures
01135 HEXANES

First Aid:

INHALATION: REMOVE TO FRESH AIR. TREAT SYMPTOMATICALLY.
SKIN/EYES: IMMEDIATELY FLUSH W/PLENTY OF WATER FOR 15 MINS.
INGESTION: DON'T INDUCE VOMITING. OBTAIN MEDICAL ATTENTION IN ALL CASES.

Section 5 - Fire Fighting Measures
01135 HEXANES

Fire Fighting Procedures:

WEAR SCBA & PROTECTIVE CLOTHING. USE WATER W/CAUTION. MATERIAL IS LIGHTER THAN WATER & INSOLUBLE IN WATER, THE FIRE COULD EASILY SPREAD BY THE USE OF WATER IN AN AREA WHERE THE WATER COULD NOT BE CONTAINED. WATER MAY BE INEFFECTIVE IN FIGHTING FIRE. USE WATER SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL.

Unusual Fire or Explosion Hazard:

VAPORS ARE HEAVIER THAN AIR & MAY TRAVEL ALONG THE GROUND/BE MOVED BY VENTILATION TO AN IGNITION SOURCE & FLASH BACK. VAPORS MAY IGNITE EXPLOSIVELY. PREVENT BUILDUP OF VAPORS TO EXPLOSIVE CONCENTRATIONS.

Extinguishing Media:

WATER SPRAY, DRY CHEMICAL, CO₂, FOAM

Flash Point: =-28.C, -18.4F **Flash Point Text:** N/P

Autoignition Temperature:

Autoignition Temperature Text: N/P

Lower Limit(s): N/P

Upper Limit(s): N/P

Section 6 - Accidental Release Measures
01135 HEXANES

Spill Release Procedures:

REMOVE ALL SOURCES OF IGNITION. ABSORB MATERIAL IN VERMICULITE/OTHER SUITABLE ABSORBENT & PLACE IN IMPERVIOUS CONTAINER.

Section 7 - Handling and Storage
01135 HEXANES

Handling and Storage Precautions:

Other Precautions:

Section 8 - Exposure Controls & Personal Protection
01135 HEXANES

Respiratory Protection:

USE A NIOSH APPROVED ORGANIC VAPOR RESPIRATOR IF NEEDED.

Ventilation:

GENERAL ROOM VENTILATION SHOULD BE USED. LOCAL EXHAUST MAY BE NECESSARY TO CONTROL VAPOR CONCENTRATION TO ACCEPTABLE LEVELS.

Protective Gloves:

PROTECTIVE

Eye Protection: SAFETY GLASSES, GOGGLES, FACE SHIELD

Other Protective Equipment: PROTECTIVE CLOTHING

Work Hygienic Practices: REMOVE/LAUNDER CONTAMINATED CLOTHING & SHOES BEFORE REUSE.

Supplemental Health & Safety Information: N/P

Section 9 - Physical & Chemical Properties

01135 HEXANES

HCC:

NRC/State License Number:

Net Property Weight for Ammo:

Boiling Point: =68.C, 154.4F **Boiling Point Text:** N/P

Melting/Freezing Point: **Melting/Freezing Text:** N/P

Decomposition Point: **Decomposition Text:** N/P

Vapor Pressure: 119 **Vapor Density:** N/P

Percent Volatile Organic Content:

Specific Gravity: 0.66

Volatile Organic Content Pounds per Gallon:

pH: N/P

Volatile Organic Content Grams per Liter:

Viscosity: N/P

Evaporation Weight and Reference: N/P

Solubility in Water: NEGLIGIBLE

Appearance and Odor: COLORLESS LIQUID

Percent Volatiles by Volume: 100/WT

Corrosion Rate: N/P

Section 10 - Stability & Reactivity Data

01135 HEXANES

Stability Indicator: YES

Materials to Avoid:

OXIDIZERS

Stability Condition to Avoid:

HEAT, SPARKS, FLAME

Hazardous Decomposition Products:

CO₂, CO

Hazardous Polymerization Indicator: NO

Conditions to Avoid Polymerization:

N/P

Section 11 - Toxicological Information
01135 HEXANES

Toxicological Information:
N/P

Section 12 - Ecological Information
01135 HEXANES

Ecological Information:
N/P

Section 13 - Disposal Considerations
01135 HEXANES

Waste Disposal Methods:
DISPOSE BY INCINERATION/CONTRACT W/LICENSED CHEMICAL WASTE DISPOSAL AGENCY. DISCHARGE, TREATMENT/DISPOSE OF IN ACCORDANCE W/LOCAL, STATE & FEDERAL REGULATIONS.

Section 14 - MSDS Transport Information
01135 HEXANES

Transport Information:
FOR INFORMATION REGARDING THE TRANSPORTATION OF THIS PRODUCT, PLEASE PHONE THE EASTMAN KODAK DISTRIBUTION CENTER NEAREST YOU; ROCHESTER, NY 716-254-1300; OAK BROOK IL 312-654-5300; CHAMBLEE GA 404-455- 0123; DALLAS TX 214-241-1611; WHITTIER CA 213-945-1255; HONOLULU HI 808-833-1661.

Section 15 - Regulatory Information
01135 HEXANES

SARA Title III Information:
N/P
Federal Regulatory Information:
N/P
State Regulatory Information:
N/P

Section 16 - Other Information
01135 HEXANES

Other Information:
THE INFORMATION CONTAINED HEREIN IS FURNISHED W/OUT WARRANTY OF ANY KIND. USERS SHOULD CONSIDER THESE DATA ONLY AS A SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM & MUST MAKE INDEPENDENT DETERMINATIONS OF THE SUITABILITY & COMPLETENESS OF INFORMATION FROM ALL SOURCES TO ASSURE PROPER USE & DISPOSAL OF THESE MATERIALS & THE SAFETY & HEALTH OF EMPLOYEES & CUSTOMERS.

HAZCOM Label Information

Product Identification: 01135 HEXANES

CAGE: 19139

Assigned Individual: N

Company Name: EASTMAN KODAK CO GOVERNMENT MARKETS
CONTRACTS

Company PO Box:

Company Street Address1: 343 STATE ST

Company Street Address2: ROCHESTER, NY 14650-1115 US

Health Emergency Telephone: 800-225-5352

Label Required Indicator: Y

Date Label Reviewed: 04/17/2000

Status Code: A

Manufacturer's Label Number:

Date of Label:

Year Procured: N/K

Organization Code: G

Chronic Hazard Indicator: N/P

Eye Protection Indicator: N/P

Skin Protection Indicator: N/P

Respiratory Protection Indicator: N/P

Signal Word: N/P

Health Hazard:

Contact Hazard:

Fire Hazard:

Reactivity Hazard:

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