L-311

World Headquarters
Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

Date Printed 2/24/09
MSDS No: M00841

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Thermometer, 0 to 200 Degrees
Catalog Number: 4565500

Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

Emergency Telephone Numbers:
(Medical and Transportation)
(303) 623-5716 24 Hour Service
(515)232-2533 8am - 4pm CST

MSDS Number: M00841
Chemical Name: Not applicable
CAS No.: Not applicable
Chemical Formula: Not applicable
Chemical Family: Not applicable
Hazard: Flammable. Causes irritation.
Date of MSDS Preparation:
Day: 17
Month: August
Year: 2007

2. COMPOSITION / INFORMATION ON INGREDIENTS

Aniline
CAS No.: 62-53-3
TSCA CAS Number: 62-53-3
Percent Range: < 10.0
Percent Range Units: volume / volume
LD50: Oral rat LD50 = 250 mg/kg; Unk-Human LDLo = 357 mg/kg; Unk-Man LDLo = 150 mg/kg;
LC50: Inhalation Mouse LC50 = 175 ppm/7H; Inhalation rat LCLo = 250 ppm/4H
TLV: 2 ppm (skin)
PEL: 2 ppm (skin)
Hazard: Toxic. Causes severe eye irritation. May cause irritation. Flammable.

Kerosene
CAS No.: 8008-20-6
TSCA CAS Number: 8008-20-6
Percent Range: > 90.0
Percent Range Units: weight / weight
LD50: Oral rat LD50 > 5 g/kg; Oral Man LDLo = 500 mg/kg
LC50: Inhalation rat LC50 > 5g/m^3/4H
TLV: Not established
PEL: Not established
Hazard: Flammable. Causes irritation.

3. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Dark red liquid
Odor: None
HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN CAUSES EYE AND SKIN IRRITATION

FLAMMABLE

HMIS:
Health: 3
Flammability: 2
Reactivity: 0
Protective Equipment: X - See protective equipment, Section 8.
NFPA:
Health: 3
Flammability: 2
Reactivity: 0
Symbol: Not applicable
Potential Health Effects:
Eye Contact: Causes severe irritation
Skin Contact: Causes severe irritation
Skin Absorption: Toxic. May cause liver damage
Target Organs: Liver
Ingestion: May cause: somnolence hallucinations distorted perceptions coughing nausea fever vomiting cyanosis (a reduction of the blood's ability to carry oxygen, giving a bluish discoloration) Aspiration of vomitus can cause serious pneumonitis.
Target Organs: Central nervous system Red blood cells Bone marrow
Inhalation: May cause: headache respiratory tract irritation
Target Organs: Central nervous system
Medical Conditions Aggravated: Pre-existing: Eye conditions Skin conditions Liver conditions
Chronic Effects: Chronic overexposure may cause loss of appetite weight loss headache visual disturbances skin lesions
Cancer / Reproductive Toxicity Information:
O.S.H.A. Listed: No

IARC Group 2A: Suspected Carcinogen IARC Group 3: Non-classifiable
Kerosene Aniline
NTP Listed: No

Additional Cancer / Reproductive Toxicity Information: Contains: a suspected carcinogen. Tests performed on this product / components gave insufficient evidence to classify for carcinogenicity. A component of this product has produced benign tumors in laboratory animals.
Toxicologically Synergistic Products: Kerosene increased the reactivity of guinea pig skin to 2,4-dinitrochlorobenzene (DNCB), a sensitizing agent.

4. FIRST AID

Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.
Skin Contact (First Aid): Remove contaminated clothing. Wash skin with soap and plenty of water for 15 minutes. Call physician immediately.
Ingestion (First Aid): Do not induce vomiting. Call physician immediately.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. Call physician.

5. FIRE FIGHTING MEASURES

Flammable Properties: Flammable Liquid
Flash Point: 79°C (175°F)
Method: Closed cup
Flammability Limits:
Lower Explosion Limits: ~0.7%
Upper Explosion Limits: ~5%
Autoignition Temperature: ~210°C (~410°F)
Hazardous Combustion Products: Toxic fumes of: carbon monoxide, carbon dioxide. nitrogen oxides. sulfur oxides.
Fire / Explosion Hazards: Flammable Liquid Do not expose to sparks or other ignition sources. Closed containers may explode if heated. Liquid can float on water and may travel to distant locations and/or spread fire.
Static Discharge: Liquid can accumulate static charge by flow or agitation due to its low electrical conductivity. Vapour can be ignited by a static discharge.
Mechanical Impact: None reported
Extinguishing Media: Dry chemical. Alcohol foam. Carbon dioxide Water spray to cool containers
Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear. Containers can build up pressure if exposed to heat. Evacuate area and fight fire from a safe distance.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.
Containment Technique: Cover spilled liquid with a commercially available flammable liquid sorbent such as vapor barrier blanket or activated carbon to avoid evolution of fumes. Dike the material to create a barrier to combustibles. Remove all ignition and spark-creating sources from the spill area.
Clean-up Technique: Absorb spilled liquid with non-reactive sorbent material. Sweep up spilled material and absorbent with non-sparking tools. Incinerate material at an E.P.A. approved hazardous waste facility. Decontaminate the area of the spill with a soap solution.
Evacuation Procedure: Evacuate general area (50 foot radius or as directed by your facility's emergency response plan) when: any quantity is spilled. If conditions warrant, increase the size of the evacuation.
Special Instructions (for accidental release): Not applicable
304 EHS RQ (40 CFR 355): Aniline - RQ 5000 lbs
D.O.T. Emergency Response Guide Number: Not applicable

7. HANDLING / STORAGE

Handling: Avoid contact with eyes skin clothing Do not breathe mist or vapors. Use with adequate ventilation. Maintain general industrial hygiene practices when using this product.
Storage: Keep away from: sparks, flames and other ignition sources Store away from: oxidizers combustible materials
Flammability Class: Class IB

8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

Engineering Controls: Have an eyewash station nearby. Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment:
Eye Protection: safety glasses with top and side shields
Skin Protection: lab coat
Inhalation Protection: adequate ventilation
Precautionary Measures: Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Keep away from: combustible material oxidizers
TLV: Not established
PEL: Not established

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: Dark red liquid
Physical State: Liquid
Molecular Weight: Not applicable
Odor: None
pH: Not applicable
Vapor Pressure: Not determined
Vapor Density (air = 1): Not determined
Boiling Point: Not determined
Melting Point: Not determined
Specific Gravity (water = 1): ~0.8
Evaporation Rate (water = 1): Not determined
Volatile Organic Compounds Content: Not available
Partition Coefficient (n-octanol / water): Not available
Solubility:
Water: Insoluble
Acid: Insoluble
Other: Liquid is soluble in other petroleum solvents
Metal Corrosivity:
Steel: Not determined
Aluminum: Not determined

10. STABILITY / REACTIVITY

Chemical Stability: Stable when stored under proper conditions.
Conditions to Avoid: Contact with heat, sparks, open flames or other ignition sources.
Reactivity / Incompatibility: Incompatible with: oxidizers
Hazardous Decomposition: Toxic fumes of: carbon monoxide carbon dioxide nitrogen oxides
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Product Toxicological Data:
LD50: None reported
LC50: None reported
Dermal Toxicity Data: Aniline: Skin Rat LD50 = 1400 mg/kg
Skin and Eye Irritation Data: Kerosene: Skin rabbit, 500 mg - SEVERE; Aniline: Skin Rabbit, 500 mg/24H - MODERATE; Eye effects-Rabbit, 102 mg - SEVERE
Mutation Data: Kerosene: Oral Man TDLo=3570 mg/kg - Pulmonary system effects, Gastrointestinal tract effects; Aniline: Oral Rat TDLo=11/kg/29W-C: Neoplastic effects; Oral Rat TDLo72.8 g/kg/2Y-C: Neoplastic effects.

Reproductive Effects Data: Aniline: Oral Mouse TDLo: 4480 mg/kg (female 6-13D post): Reproductive effects
Ingredient Toxicological Data: Kerosene: Oral rat LD50 > 5 g/kg; Oral man LDLo = 500 mg/kg; Aniline: Oral rat LD50 = 250 mg/kg; Unk-Human LDLo = 357 mg/kg; Unk-Man LDLo = 150 mg/kg.

12. ECOLOGICAL INFORMATION

Product Ecological Information: --
No ecological data available for this product.
Ingredient Ecological Information: Aniline: LC50 clawed tead (4-4 wks after hatching) 560 mg/l/48H; LC50 Daphnia pulex 0.10 mg/l/48H; fathead minnow 33 D 134 mg/l/96H; rainbow trout 8.2 mg/l, max exposure 7 days.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: None
Special Instructions (Disposal): Incinerate material at an E.P.A. approved hazardous waste facility.
Empty Containers: Rinse three times with an appropriate solvent. Rinsate from empty containers is hazardous waste and should be disposed of at an E.P.A. approved facility.
NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

14. TRANSPORT INFORMATION

D.O.T.:
D.O.T. Proper Shipping Name: Not Currently Regulated
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DOT Hazard Class: NA
DOT Subsidiary Risk: NA
DOT ID Number: NA
DOT Packing Group: NA
I.C.A.O.:
I.C.A.O. Proper Shipping Name: Not Currently Regulated
--
ICAO Hazard Class: NA
ICAO Subsidiary Risk: NA
ICAO ID Number: NA
ICAO Packing Group: NA
I.M.O.:
I.M.O. Proper Shipping Name: Not Currently Regulated
--
I.M.O. Hazard Class: NA
I.M.O. Subsidiary Risk: NA
I.M.O. ID Number: NA
I.M.O. Packing Group: NA
Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.: This product does not meet the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Fire Hazard Immediate (Acute) Health Hazard

S.A.R.A. Title III Section 313 (40 CFR 372): This product contains a chemical(s) subject to the reporting requirements of Section 313 of Title III of SARA.

Aniline

302 (EHS) TPQ (40 CFR 355): Aniline 1000 lbs.

304 CERCLA RQ (40 CFR 302.4): Aniline 5000 lbs.

304 EHS RQ (40 CFR 355): Aniline - RQ 5000 lbs

Clean Water Act (40 CFR 116.4): Aniline - RQ 5000 lbs.

RCRA: Contains no RCRA regulated substances.

C.P.S.C.: Not applicable

State Regulations:

California Prop. 65: WARNING - This product contains a chemical known to the State of California to cause cancer.

Identification of Prop. 65 Ingredient(s): Aniline

California Perchlorate Rule CCR Title 22 Chap 33:

Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

TSCA CAS Number: Not applicable

16. OTHER INFORMATION

Intended Use: Laboratory Reagent

References: 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. In-house information. Sax, N. Irving and Richard J. Lewis, Sr., revised by. Hawley's Condensed Chemical Dictionary, Eleventh Ed. New York: Van Nostrand Reinhold Co., 1987. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Technical Judgment.

Revision Summary: Updates in Section(s) 14,

Legend:

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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