

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Shandon Instant Hematoxylin

PART NUMBER: 230022 Part A and Part B

GENERAL USE: Prepare nuclear stain for histology and cytology specimens.

PRODUCT DESCRIPTION: Part A - White Powder, Part B - Light tan to purplish-tan powder



MANUFACTURER'S NAME (Distributor in the Americas) Thermo Electron Corporation		DATE PREPARED: June 26, 2003 SUPERSEDES: December 1, 2001	Page 1 of 4
ADDRESS (NUMBER, STREET, P.O. BOX) 171 Industry Drive (CITY, STATE AND ZIP CODE) Pittsburgh, PA 15275		TELEPHONE NUMBER FOR INFORMATION (412) 788-1133	
COUNTRY USA		EMERGENCY TELEPHONE NUMBER CHEM • TEL (800) 255-3924 Outside USA (813) 248-0585	
DISTRIBUTOR'S NAME (Outside the Americas) Thermo Electron Corporation			
ADDRESS (NUMBER, STREET, P.O. BOX) 93/96 Chadwick Road, Astmoor (CITY, STATE AND ZIP CODE) Runcorn, Cheshire WA7 1PR		TELEPHONE NUMBER FOR INFORMATION +44 (0) 1928 562547	
COUNTRY United Kingdom		EMERGENCY TELEPHONE NUMBER CHEM • TEL (813) 248-0585	

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	% (by weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES Full Text Section 16
Part A					
Aluminum ammonium sulfate dodecahydrate	> 99	7784-26-1	not found	Xi	R-36/37/38
Part B					
Aluminum ammonium sulfate dodecahydrate	90 - 95	7784-26-1	not found	Xi	R-36/37/38
Hematoxylin	3 - 7	517-28-2	208-237-3	Xi	R-36/37/38

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Granular powder, airborne dust particles are irritating to respiratory tract. Contact with eyes and skin may cause irritation. May be harmful if inhaled, ingested or absorbed through the skin. Hazard symbols for this product: Xi. Risk Phrases - R 36/37/38

POTENTIAL HEALTH EFFECTS

INHALATION: Inhalation of airborne dust particles is harmful and irritating to respiratory tract.

SKIN: Contact with skin may cause irritation. Material is harmful if absorbed through the skin.

EYES: Contact with eyes may cause irritation.

INGESTION: Material is harmful if swallowed. May cause gastric distress, stomach pains, vomiting and diarrhea.

CARCINOGENICITY NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Shandon® Instant Hematoxylin
June 26, 2003

Page 2 of 4

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove affected person to fresh air; wash mouth and nasal passages with water repeatedly; if breathing difficulties persist seek medical attention.

SKIN: Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

EYES: Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

INGESTION: Give two glasses of water for dilution; DO NOT induce vomiting; never give anything by mouth to an unconscious person; seek medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS: Product is not considered flammable or combustible. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

EXTINGUISHING MEDIA
Carbon dioxide, water, water fog, dry chemical, chemical foam

FIRE FIGHTING PROCEDURES
None

UNUSUAL FIRE AND EXPLOSION HAZARDS
None

HAZARDOUS COMBUSTION PRODUCTS
Smoke, fumes, oxides of carbon

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Small spills - wash to sanitary sewer with plenty of water. Large spills - Recover and segregate product for reuse; shovel product into approved container for disposal.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; store containers in cool, dry area.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH			
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
Part A Aluminum ammonium sulfate dodecahydrate				not established				not established
Part B Aluminum ammonium sulfate dodecahydrate Hematoxylin				not established not established				not established not established

PERSONAL PROTECTION:
RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentrations due to secondary operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 CFR 1910.134 or European Standard EN 149 for regulations.

PROTECTIVE GLOVES: Neoprene or rubber gloves.

EYE PROTECTION: Protective eyeglasses or chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyebath nearby

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Shandon® Instant Hematoxylin
June 26, 2003

Page 3 of 4

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR Part A - White powder; Part B - purple powder; odorless	VAPOR PRESSURE Not applicable
pH Not specified	SPECIFIC GRAVITY (WATER = 1) Approximately 1.6
BOILING POINT / BOILING RANGE Not applicable	SOLUBILITY IN WATER Complete
FLASH POINT Non-flammable	VISCOSITY Not applicable
FLAMMABLE LIMITS LEL: Not applicable UEL: Not applicable	VAPOR DENSITY (AIR = 1) Not applicable
AUTOIGNITION TEMPERATURE Not determined	EVAPORATION RATE (WATER = 1) Not applicable

SECTION 10 - STABILITY AND REACTIVITY

STABILITY UNSTABLE: STABLE: XXX	CONDITIONS TO AVOID: Avoid generating airborne dust
---------------------------------------	---

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.

HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: XXX	CONDITIONS TO AVOID: None
---	---------------------------

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Part A			
Aluminum ammonium sulfate dodecahydrate	7784-26-1 not found	Not established	Not established
Part B			
Aluminum ammonium sulfate dodecahydrate	7784-26-1 not found	Not established	Not established
Hematoxylin	517-28-2 208-237-3	Not established	Not established

SECTION 12 - ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used. Dispose of in accordance with Local, State, and Federal Regulations. Product is classified as non-hazardous, however, non-hazardous materials may become hazardous waste upon contact with other products. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not Regulated	IATA HAZARD CLASS / Pack Group: Not regulated
DOT HAZARD CLASS / Pack Group: Not regulated	IMDG HAZARD CLASS: Not regulated
REFERENCE: Not Applicable	RID/ADR Dangerous Goods Code: Not regulated
UN / NA IDENTIFICATION NUMBER: None	UN TDG Class / Pack Group: Not regulated
LABEL: None Required	
HAZARD SYMBOLS: None	

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Shandon Instant Hematoxylin
June 26, 2003

SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories
Immediate health hazard

313 Reportable Ingredients:
None

CERCLA (USA - Comprehensive Response Compensation and Liability Act)

None

CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL and may or may not be listed in Section 2 of this document. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

WGK Water Quality Index: 1

RISK PHRASES:

R36/37/38 Irritating to eyes, respiratory system and skin

SYMBOL(S) REQUIRED FOR LABEL

Irritant



SAFETY PHRASES:

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36 Wear suitable protective clothing.

SECTION 16 - OTHER INFORMATION

Notes & full R-Phrase text

R36/37/38 Irritating to eyes, respiratory system and skin

HMIS HAZARD RATINGS

HEALTH	1	0 = INSIGNIFICANT	3 = HIGH
FLAMMABILITY	0	1 = SLIGHT	4 = EXTREME
REACTIVITY	0	2 = MODERATE	
PERSONAL PROTECTIVE EQUIPMENT	E	Safety Glasses, Gloves, Dust Respirator	

REVISION SUMMARY:

This MSDS has been revised in the following sections: No revisions available

MSDS Prepared by: Chem-Tel, Inc.
1305 N. Florida Ave.
Tampa, Florida USA 33602 (800) 255-3924 Outside USA (813) 248-0573

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.