

BDH INC.

M A T E R I A L   S A F E T Y   D A T A   S H E E T

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SECTION I   PRODUCT IDENTIFICATION AND USE  
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MANUFACTURER:

BDH INC.

EMERGENCY TELEPHONE NO.:

350 EVANS AVENUE

416-201-6383 (24 HR.)

TORONTO

INFORMATION TELEPHONE NO.:

ONTARIO

416-255-8521 (0830-1630)

M8Z 1K5

PRODUCT NAME: SCHIFF'S REAGENT

PRODUCT CODE(S): R01299, VW3460

CHEMICAL NAME/OTHER NAME: SCHIFF'S REAGENT FOR FORMALDEHYDE; SCHIFF'S REAGENT  
FOR PAS

CHEMICAL FORMULA: C20H19N3.HCL, NA2S2O5, H2O, HCL

CHEMICAL FAMILY: MIXTURE

TDG SHIPPING NAME/UN: NOT REGULATED

TDG CLASSIFICATION/PACKING GROUP: NOT REGULATED

USE: LABORATORY REAGENT

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SECTION II HAZARDOUS INGREDIENTS

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CHEMICAL NAME	CAS NO.	LD50	%
HYDROCHLORIC ACID	7647-01-0	900 MG/KG (ORL-RBT)	0.1-1.0
SODIUM METABISULPHITE	7681-57-4	115 MG/KG (IVR-RAT)	0.1-1.0

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SECTION III PHYSICAL DATA

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PHYSICAL STATE: LIQUID

APPEARANCE AND ODOUR: CLEAR LIQUID

ODOUR THRESHOLD: NOT AVAILABLE

SPECIFIC GRAVITY: APPROXIMATELY 1.0

VAPOUR PRESSURE: NOT AVAILABLE

VAPOUR DENSITY: NOT AVAILABLE

EVAPORATION RATE: NOT AVAILABLE

BOILING POINT: APPROXIMATELY 100 C

FREEZING POINT: APPROXIMATELY 0OC

PH: NOT AVAILABLE

COEFFICIENT OF WATER/OIL DISTRIBUTION: NOT AVAILABLE

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SECTION IV FIRE OR EXPLOSION HAZARD

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CONDITIONS OF FLAMMABILITY: NONCOMBUSTIBLE

EXTINGUISHING MEDIA: USE AN EXTINGUISHER APPROPRIATE TO THE SURROUNDING  
MATERIAL THAT IS BURNING

FLASH POINT / METHOD: NOT APPLICABLE

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UEL: NOT APPLICABLE

LEL: NOT APPLICABLE

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

HAZARDOUS COMBUSTION PRODUCTS: COX, SOX

EXPLOSION DATA - SENSITIVITY TO MECHANICAL IMPACT: NO

- SENSITIVITY TO STATIC DISCHARGE: NO

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SECTION V REACTIVITY DATA  
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CONDITIONS OF INSTABILITY: NORMALLY STABLE, DISCARD PRODUCT IF IT BECOMES  
DISCOLOURED

INCOMPATIBILITIES: SODIUM NITRATE, METALS

CONDITIONS OF REACTI1 Er5AtLw

CARCINOGENICITY: NO INFORMATION AVAILABLE

REPRODUCTIVE TOXICITY: NO INFORMATION AVAILABLE

TERATOGENICITY: MAY CAUSE TERATOGENIC EFFECTS, REFERENCES CITED: RTECS#

MW025000 (HCL)

MUTAGENICITY: NO INFORMATION AVAILABLE

TOXICOLOGICALLY SYNERGISTIC PRODUCTS: NONE FOUND

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SECTION VII FIRST AID MEASURES

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SKIN: FLUSH THE CONTACT AREA WITH LUKEWARM RUNNING WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING, TAKING CARE NOT TO SPREAD THE CHEMICAL.

IF CONTAMINATION IS EXTENSIVE, REMOVE CLOTHING UNDER RUNNING WATER. DISCARD OR

DECONTAMINATE CLOTHING UNDER RUNNING WATER. DISCARD OR DECONTAMINATE CLOTHING

BEFORE USE. UNLESS CONTACT HAS BEEN SLIGHT, SEEK MEDICAL ATTENTION. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.

EYE: FLUSH THE CONTAMINATED EYE(S) FOR AT LEAST 15 MINUTES WITH LUKEWARM

RUNNING WATER, HOLDING THE EYELIDS OPEN. TAKE CARE NOT TO RINSE CONTAMINATED WATER INTO THE NON-AFFECTED EYE. ALWAYS SEEK MEDICAL ATTENTION FOR ACCIDENTS INVOLVING THE EYES.

INHALATION: TAKE PROPER PRECAUTIONS TO ENSURE YOUR OWN SAFETY BEFORE ATTEMPTING RESCUE. REMOVE SOURCE OF CONTAMINATION OR MOVE VICTIM TO FRESH AIR.

IF

BREATHING HAS STOPPED, TRAINED PERSONNEL SHOULD BEGIN ARTIFICIAL RESPIRATION,

OR IF THE HEART HAS STOPPED, CARDIOPULMONARY RESUSCITATION (CPR) IMMEDIATELY.

SEEK MEDICAL ATTENTION.

INGESTION: NEVER GIVE ANYTHING BY MOUTH IF VICTIM IS RAPIDLY LOSING CONSCIOUSNESS, OR IS UNCONSCIOUS OR CONVULSING. RINSE MOUTH THOROUGHLY WITH WATER. DO NOT INDUCE VOMITING. HAVE VICTIM DRINK 200-400 ML OF WATER TO DILUTE. IF BREATHING HAS STOPPED, TRAINED PERSONNEL SHOULD BEGIN ARTIFICIAL RESPIRATION,

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SECTION VIII PREVENTIVE MEASURES

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ENGINEERING CONTROLS: ENGINEERING CONTROL METHODS TO REDUCE HAZARDOUS EXPOSURES ARE PREFERRED. METHODS INCLUDE MECHANICAL VENTILATION (DILUTION AND LOCAL EXHAUST), PROCESS OR PERSONNEL ENCLOSURE, CONTROL OF PROCESS CONDITIONS, AND PROCESS MODIFICATION. ADMINISTRATIVE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT MAY ALSO BE REQUIRED.

PERSONAL PROTECTIVE EQUIPMENT:

- GLOVES: RUBBER OR PLASTIC
- RESPIRATORY PROTECTION: FUME HOOD AS APPROPRIATE
- EYE PROTECTION: CHEMICAL SAFETY GOGGLES OR FACE SHIELD
- CLOTHING: PLASTIC APRON, SLEEVES, AND BOOTS AS APPROPRIATE

STORAGE REQUIREMENTS: STORE IN SUITABLE LABELLED CONTAINERS. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE AND WHEN EMPTY. PROTECT FROM DAMAGE. STORE IN A COOL, DRY, WELL-VENTILATED AREA, OUT OF DIRECT SUNLIGHT. STORE AWAY FROM INCOMPATIBLE MATERIALS.

HANDLING PROCEDURES AND EQUIPMENT: AVOID GENERATING MIST. FOLLOW ROUTINE SAFE HANDLING PROCEDURES.

LEAK OR SPILL CLEAN-UP: BEFORE DEALING WITH SPILLAGES TAKE NECESSARY

PROTECTIVE MEASURES, INFORM OTHERS TO KEEP AT A SAFE DISTANCE AND, FOR

FLAMMABLE

MATERIALS, SHUT OFF ALL POSSIBLE SOURCES OF IGNITION. TRANSFER TO CONTAINER

AND ARRANGE REMOVAL BY DISPOSAL COMPANY. WASH SITE OF SPILLAGE THOROUGHLY

WITH

WATER AND DETERGENT.

DISPOSAL: FOLLOW ALL FEDERAL, PROVINCIAL AND LOCAL REGULATIONS FOR DISPOSAL.

USE ONLY LICENSED DISPOSAL AND WASTE HAULING COMPANIES. DISPOSAL OF SMALL

AMOUNTS OF SPILLED MATERIAL MAY BE HANDLED AS DESCRIBED UNDER "LEAK OR SPILL

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CLEANUP". LARGE SPILLS MUST BE DEALT WITH SEPARATELY AND MUST BE HANDLED BY

QUALIFIED DISPOSAL COMPANIES.

SPECIAL SHIPPING INFORMATION: FOLLOW ALL TDG REGULATIONS AND SEE

CLASSIFICATION IN SECTION I



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SECTION IX PREPARATION INFORMATION

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PREPARED BY: TECHNICAL AFFAIRS DEPARTMENT, BDH INC. ,

TORONTO, ONTARIO

(416)255-8521

DATE: NOV 9, 1988

REVISION DATE: MAR 8, 1989; MAY 30, 1989; JULY 15, 1994; APR 24, 1995

WHMIS CLASSIFICATION: D2B







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MAY BE IRRITATING TO SKIN, EYES AND MUCOUS MEMBRANES

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POTENTIAL HEALTH EFFECTS (ACUTE & CHRONIC)

SYMPTOMS OF EXPOSURE: MAY CAUSE IRRITATION ON CONTACT WITH THE SKIN, EYES OR MUCOUS MEMBRANES.

MEDICAL CONDITION AGGRAVATED BY EXPOSURE: NONE IDENTIFIED

ROUTES OF ENTRY: INHALATION, INGESTION

CARCINOGENICITY: THIS MATERIAL IS NOT LISTED (IARC, NTP, OSHA) AS A CANCER CAUSING AGENT.

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## SECTION IV FIRST AID MEASURES

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EYE: IN CASE OF EYE CONTACT, FLUSH WITH PLENTY OF WATER FOR AT LEAST  
MINUTES WHILE HOLDING THE EYELIDS OPEN. HAVE EYES EXAMINED BY  
MEDICAL PERSONNEL.

SKIN: IN CASE OF SKIN CONTACT, WASH WITH SOAP AND WATER. GET MEDICAL  
ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.



RELEASES. REFER TO REGULATORY INFORMATION FOR REPORTABLE QUANTITY AND OTHER  
REGULATORY DATA.

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SECTION VII HANDLING & STORAGE

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HANDLING & STORAGE: STORE IN A COOL, DRY AREA AWAY FROM METALS. KEEP  
CONTAINER CLOSED. DO NOT BREATHE SOLUTION MIST.

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SECTION VIII EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING CONTROLS: ENGINEERING AND/OR ADMINISTRATIVE CONTROLS SHOULD BE



IMPLEMENTED TO REDUCE EXPOSURE.

PERSONAL PROTECTIVE EQUIPMENT

GLOVES: NEOPRENE, PVC OR EQUIVALENT

RESPIRATORY PROTECTION: FUME HOOD AS APPROPRIATE

SAFETY ASSES

SIX P

PHYSICIAN STORY: LI D

RESEARCH: CLEAR LI D

PH: NOT AVAILABLE

SOLUBILITY IN WATER: SOLUBLE

OCTANOL/WATER PARTITION COEFFICIENT: NOT AVAILABLE

PER CENT VOLATILE BY VOL (%): NOT AVAILABLE

MOLECULAR WEIGHT: THIS PRODUCT IS A DILUTE AQUEOUS SOLUTION

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SECTION X STABILITY & REACTIVITY

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CHEMICAL STABILITY: NORMALLY STABLE

CONDITIONS TO AVOID: HEAT

MATERIALS TO AVOID: BASES, POWDERED METALS

HAZARDOUS POLYMERIZATION: DOES NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

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SECTION XI TOXICOLOGICAL INFORMATION

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SODIUM METABISULFITE	-	-	-
BASIC FUCHSIN	-	-	-
WATER	-	-	-

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COMPONENT	OSHA FLOOR LIST	SARA 313	DEMINIMIS (SARA 313)(%)
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HYDROCHLORIC ACID	Y	Y	1.0
SODIUM METABISULFITE	Y	-	-
BASIC FUCHSIN	-	-	-
WATER	-	-	-

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SECTION XV OTHER INFORMATION

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NFPA HAZARD RATINGS (0-4)

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY:

0

NFPA SPECIAL WARNINGS: NONE

PREPARATION DATE: OCTOBER 22, 1993

REVISION HISTORY: OCTOBER 22, 1993

COMMENTS: NONE

PREPARED BY: TECHNICAL AFFAIRS DEPARTMENT, BDH INC.,

TORONTO, ONTARIO, CANADA

(416) 255-8521

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