

Harcros Chemicals Inc
 Kansas City, Kansas

PRODUCT NAME : BORAX 5 MOL
 PRODUCT CODE : 05525

Date: 4-DEC-1995 10:59:20.62

50# BAG-GRA

CAS #: 001330434

MSDS No. 000336

Revision No./Date 01 930322

Detail Number 00887/01

FORMULA: Na₂B₄O₇ · 5(H₂O)

CHEM. FAMILY: inorganic salts

CHEMICAL NAME AND SYNONYMS:

Borax 5 Mol;

Sodium Tetraborate Pentahydrate;

Disodium Tetraborate Pentahydrate;

MSDS 000336 DETAIL 000887

SUPPLIERS NAME : Harcros Chemicals Inc.

5200 Speaker Road

Kansas City KS 66106-1095

SUPPLIERS PHONE NUMBER : 913-321-3131

TRANSPORTATION EMERGENCY PHONE NUMBER : 1-800-424-9300

S.A.R.A. INFORMATION

HAZARDS : Acute

PHYSICAL DATA : Pure Solid

SECTION I HAZARDOUS INGREDIENTS

Ingredient Cas Number	MAX Z w/w	SARA APPLIES			AIR CONTAMINENT LEVELS				
		312	313	372	TWA/TLV (ppm)	STEL (ppm)	CEIL (ppm)	SKIN	AGENT
Borax 5 Mole Sodium Tetraborate (CAS # 1330-43-4)	100.0	Y	N	N	AS SODIUM TETRABORATE TWA 10 mg/m ³ OSHA TLV 1 mg/m ³ ACGIH				

SECTION II HEALTH HAZARDS

POTENTIAL EFFECTS OF EXPOSURE

EYES

Eye contact with product may cause irritation

SKIN

Skin contact may cause irritation redness swelling

Prolonged or repeated skin contact may cause irritation redness drying cracking

INHALATION

Inhalation may cause irritation

INGESTION

Ingestion may cause irritation pain nausea vomiting diarrhea shock symptoms (rapid pulse, sweating, collapse)

Continued On Page 2

Harcros Chemicals Inc
Kansas City, Kansas

MATERIAL SAFETY DATA SHEET Page 2

PRODUCT NAME : BORAX 5 MOL

Date: 4-DEC-1995 10:59:21.18

PRODUCT CODE : 05525

50# BAG-GRA

SECTION II HEALTH HAZARDS

(CONTINUED)

coma even death central nervous system (CNS) depression Symptoms of early to moderate central nervous system (CNS) depression include giddiness, dizziness, confusion, drunken behavior, headache, nausea, diarrhea, vomiting, tiredness and drowsiness. In extreme cases, symptoms of central nervous system (CNS) depression include stupor, convulsions, unconsciousness, coma, and even death.

TARGET ORGANS

OVEREXPOSURE MAY CAUSE DAMAGE TO, DISORDERS OF, OR ADVERSELY AFFECT THE FOLLOWING SYSTEMS, FUNCTIONS, ORGANS: central nervous system life cycle

ANIMAL TEST DATA

BASED ON LABORATORY TEST DATA,

OVEREXPOSURE MAY CAUSE DAMAGE TO, DISORDERS OF, OR ADVERSELY AFFECT THE FOLLOWING SYSTEMS, FUNCTIONS, OR ORGANS:, reproductive system, fetus

FIRST AID

FIRST AID EYES

Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids apart to ensure flushing of entire surface. Call a physician.

FIRST AID SKIN

Immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse. Call a physician.

FIRST AID INHALATION

Remove to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. If breathing is difficult give oxygen. Call a physician.

FIRST AID INGESTION

Do not induce vomiting. Rinse mouth with water. Dilute stomach contents by drinking water. If vomiting occurs spontaneously, keep head below hips to prevent breathing vomit into lungs. Call a physician immediately.

OTHER INFORMATION

ROUTES OF ENTRY

eye contact skin contact inhalation

OVEREXPOSURE MAY AGGRAVATE DISORDERS OF THE central nervous system liver kidneys

SECTION III SPECIAL PROTECTION

PROTECTIVE EQUIPMENT

PROTECTIVE EQUIPMENT EYES

goggles Always wear eye protection when working with chemicals. Do Not wear contact lenses when working with chemicals.

PROTECTIVE EQUIPMENT SKIN

clean body covering clothing impervious gloves

PROTECTIVE EQUIPMENT INHALATION

If exposure limits are exceeded, or if exposure may occur, use a NIOSH/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSH publications concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in

Continued On Page 3

Harcros Chemicals Inc
Kansas City, Kansas

MATERIAL SAFETY DATA SHEET Page 3

PRODUCT NAME : BORAX 5 MOL
PRODUCT CODE : 05525

Date: 4-DEC-1995 10:59:21.90

50# BAG-GRA

SECTION III SPECIAL PROTECTION

(CONTINUED)

compliance with OSHA requirements in 29 CFR 1910.134. For emergencies, a NIOSH/MSHA approved positive pressure breathing apparatus should be readily available.

VENTILATION REQUIRED:

Adequate ventilation is required to minimize exposure or to maintain exposure levels below OSHA/ACGIH requirements. Local mechanical ventilation may be required.

ADDITIONAL PROTECTIVE MEASURES

Safety shower, eye wash fountain, and washing facilities should be readily available.

SECTION IV FIRE & EXPLOSION HAZARD DATA

Flash Point (METHOD): > OR = N/A

Flammable Limits (% Volume in Air) UPPER: N/D Lower: N/D

HMIS Info Health : 1
Fire : 0
React : 0
Special : X

EXTINGUISHING MEDIA

media appropriate for surrounding fire

FIRE FIGHTING PROCEDURES

Prevent human exposure to fire, fumes, smoke, and products of combustion. Evacuate non essential personnel. Firefighters should wear full face, self contained breathing apparatus and impervious protective clothing. Not considered a fire hazard.

UNUSUAL FIRE & EXPLOSION HAZARDS

Toxic fumes may be released.

SECTION V PHYSICAL DATA

Boiling Point: N/D

Freezing Point: N/D

Specific Gravity (H₂O=1): > OR = 1.8000 @ 68 deg. F

Vapor Pressure (MM HG.): N/D

Vapor Density (AIR=1): N/D

Evaporation Rate (NA =1): N/D

Solubility in Water: 4%

Percent Volatile by Volume: N/D

pH: aqueous approx. > OR = 9.000

Appearance:

SOLID - POWDER, CRYSTAL, FLAKE, GRANULE
TABLET, PRILL, BRIQUETTE, ETC.

Odor :

NIL

Continued On Page 4

Harcros Chemicals Inc
Kansas City, Kansas

MATERIAL SAFETY DATA SHEET Page 4

PRODUCT NAME : BORAX 5 MOL

Date: 4-DEC-1995 10:59:22.39

PRODUCT CODE : 05525

50# BAG-GRA

SECTION V PHYSICAL DATA

(CONTINUED)

SECTION VI REACTIVITY DATA

STABILITY

Stable

INCOMPATIBILITY

metals/metal blends

HAZARDOUS DECOMPOSITION PRODUCTS

carbon monoxide carbon dioxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION VII SPILL AND LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Evacuate non essential personnel, eliminate ignition sources, and wear protective equipment (See Section III). Shut off source of leak only if safe to do so. Contain spill. Recover free product. To clean up residue, flush sparingly with water or use an absorbent. Avoid runoff to ground water, surface waters, and sewers. It may be necessary to remove contaminated soil. If product is flammable or combustible, use non sparking tools. If acidity (low pH) is a problem, neutralize with hydrated lime, soda ash, or sodium bicarbonate. If alkalinity (high pH) is a problem neutralize with dilute acetic acid or dilute hydrochloric (muriatic) acid. If required, notify state and local authorities.

DISPOSAL METHOD

Solids must be disposed of in a permitted hazardous waste management facility. Recovered liquids may be reprocessed or incinerated. Incineration must be handled in a permitted hazardous waste management facility. Dispose of material in accordance with all Federal, State and local regulations. Local regulations may be more stringent than Federal or State.

SECTION VIII

Proper Shipping Name:

Hazard Class: UNCLASSIFIED

Label Requirements: NONE

Reportable Quantity: None

SECTION IX ADDITIONAL INFORMATION

PRECAUTIONS

Wear protective equipment when handling. Use only with adequate ventilation. Wash thoroughly after handling. Do Not breathe dust. Do Not get in eyes, on skin, or clothing. Do not swallow.

HANDLING

Continued On Page 5

Harcros Chemicals Inc
Kansas City, Kansas

MATERIAL SAFETY DATA SHEET Page 5

PRODUCT NAME : BORAX 5 MOL
PRODUCT CODE : 05525

Date: 4-DEC-1995 10:59:22.95

50# BAG-GRA

SECTION IX ADDITIONAL INFORMATION

(CONTINUED)

Keep heat, lights, fire, and sparks away. For industrial use only. ATTENTION: This container hazardous when emptied. Since emptied container contains product residues (vapor or liquid), all labeled hazard precautions must be observed.

STORAGE

Keep container closed when not in use. Store in a cool dry place. Tank and equipment manufacturers should be consulted concerning the storage and transportation of this product. Keep out of reach of children.

NAME: GENE TURNER

DATE ISSUED: 930322

DATE REVISED: 930322

UNK = UNKNOWN

< = LESS THAN

N/A = NOT APPLICABLE

> = MORE THAN

N/D = NOT DETERMINED

N/E = NOT ESTABLISHED

The information provided in this Material Safety data sheet has been obtained from sources believed to be reliable. Harcros Chemicals Inc provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. Harcros Chemicals Inc knows of no medical condition, other than those noted on this material safety data sheet, which are generally recognized as being aggravated by exposure to this product.