

BIOCHEMICAL SCIENCES INC -- 23005500, 23111003,10% FORMALDEHYDE BUFFERED (SEE SUPPL) -- 6550-01-416-4358

===== Product Identification =====

Product ID:23005500, 23111003,10% FORMALDEHYDE BUFFERED (SEE SUPPL)

MSDS Date:06/10/1998

FSC:6550

NIIN:01-416-4358

Status Code:A

MSDS Number: CLLJY

=== Responsible Party ===

Company Name:BIOCHEMICAL SCIENCES INC

Address:100 CLARENDON DRIVE

City:SWEDESBORO

Stat

e:NJ

ZIP:08085

Country:US

Info Phone Num:800-524-0294

Emergency Phone Num:800-524-0294

Preparer's Name:NOT PROVIDED

Chemtrec Ind/Phone:(800)424-9300

CAGE:0B0Y1

=== Contractor Identification ===

Company Name:BIOCHEMICAL SCIENCES INC

Address:200 COMMODORE DRIVE

Box:City:SWEDESBORO

State:NJ

ZIP:08085

Country:US

Phone:800-524-0294

CAGE:0B0Y1

===== Composition/Information on Ingredients =====

Ingred Name:FORMALDEHYDE

CAS:50-00-0

RTECS #:LP8925000

= Wt:3.8

Other REC Limits:NOT PROV

IDED
OSHA PEL:SEE 1910.1048
ACGIH STEL:C0.37 MG/M3;C0.3 PPM
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:SODIUM PHOSPHATE, DIBASIC
CAS:7558-79-4
RTECS #:WC4500000
< Wt:1.
Other REC Limits:NONE LISTED
OSHA PEL:NONE LISTED
ACGIH TLV:NONE LISTED
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:SODIUM PHOSPHATE, MONOBASIC
CAS:7558-80-7
RTECS #:WA1900000
< Wt:1.
Other REC Limits:NONE LISTED
OSHA PEL:NONE LISTED
ACGIH TLV:NONE LISTED

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC01100
00
Fraction by Wt: BALANCE
Other REC Limits:NONE LISTED
OSHA PEL:NONE LISTED
ACGIH TLV:NONE LISTED

===== Hazards Identification =====

LD50 LC50 Mixture:NOT PROVIDED
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute and Chronic:HARMFUL IF SWALLOWED, INHALED,
ABSORBED THROUGH SKIN. EYE: MAY CAUSE SEVERE IRRITATION, CORNEAL
INJURY. SKIN: MAY CAUSE SEVERE IRRITATION, SKIN SENSITIZATION. IN
SEVERE CASES MAY PRODUCE BLISTERIN

G, SCALING AND FORMATION OF
FISSURES. INGESTION: MAY CAUSE IRRITATION OF DIGESTIVE TRACT,
VIOLENT VOMITING AND DIARRHEA LEADING TO COLLAPSE. MAY CAUSE
SYSTEMIC TOXICITY INCLUDING CNS DEPRESSION, CONVULSIONS, COMA,
POSSIBLE DEATH DUE TO RESPIRATORY FAILURE. INHALATION: MAY CAUSE
IRRITATION WITH PAIN, COUGHING, WHEEZING, SHORTNESS OF BREATH,
SENSITIZATION. CHRONIC: MAY CAUSE DERMATITIS, LUNG CANCER, SKIN
DISCOLORATION, NAIL DECAY.

Explanation of Carcinogenicity:FORMALDEHYDE

Effects of Overexposure:EYE: MAY CAUSE SEVERE IRRITATION. SKIN: MAY
CAUSE SEVERE IRRITATION, SKIN SENSITIZATION. IN SEVERE CASES MAY
PRODUCE BLISTERING, SCALING AND FORMATION OF FISSURES. INGESTION:
MAY CAUSE IRRITATION OF DIGESTIVE TRACT, VIOLENT VOMITING AND
DIARRHEA LEADING TO COLLAPSE. MAY CAUSE SYSTEMIC TOXICITY INCLUDING
CNS DEPRESSION, CONVULSIONS, COMA, POSSIBLE DEATH. INHALATION: MAY
CAUSE IRRITATION WITH PAIN, COUGHING, WHEEZING, SHORTNESS OF
BREATH, SENSITIZATION.

Medical Cond Aggravated by Exposure:NOT PROVIDED

===== First Aid Measures =====

First Aid:EYE: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY
LIFTING UPPER AND LOWER LIDS. GET MEDICAL AID. DO NOT ALLOW VICTIM
TO RUB/KEEP EYES CLOSED. SKIN: IMMEDIATELY FLUSH SKIN WITH PLENTY
OF SOAP AND WATER. GET MEDICAL AID IF IRRITATION DEVELOPS OR
PERSISTS. INGESTION: IF VICTIM IS CONSCIOUS AND ALERT, GIVE 2-4
CUPFULS OF MILK/ WATER. NEVER GIVE ANYTHING BY MOUTH TO AN
UNCONSCIOUS PERSON. GET MEDICAL AID IMMEDIATELY. INHALATION: GET
MEDICAL AID IMMEDIATELY. REMOVE FROM EXPOSURE TO FRESH AIR
IMMEDIATELY. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF
BREATHING IS DIFFICULT, GIVE OXYGEN .

===== Fire Fighting Measures =====

Lower Limits:N/AV

Upper Limits:N/AV

Extinguishing Media:SMALL FIRE: USE WATER SPRAY, DRY CHEMICAL, CARBON
DIOXIDE OR CHEMICAL FOAM.

Fire

Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS IN PRESSURE DEMAND. MSHA/NIOSH (APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR. WATER RUNOFF CAN CAUSE ENVIRONMENTAL DAMAGE. DIKE AND COLLECT WATER USED TO FI GHT FIRES. USE WATER SPAY TO KEEP FIRE-EXPOSED CONTAINERS COOL.

Unusual Fire/Explosion Hazard:NOT PROVIDED

===== Accidental Release Measures =====

Spill Release Procedures:ABSORB WITH INERT MATERIAL(DRY SAND OR EARTH), THEN PLAC E INTO A CHEMICAL WASTE CONTAINER. PROVIDE VENTILATION. UREA BASED MATERIALS ARE AVAILABLE WHICH CAN BE USED TO BIND THE FORMALDEHYDE FORMING A POLYMER.

Neutralizing Agent:UREA BASED MATERIALS

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A TIGHTLY CLOSED CONTAINER. STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM INCOMPATIBLE EXPOSURE LIMITS.

Other Precautions:WASH THOROUGHLY AFTER HANDLING. WASH HANDS BEFORE

EATING. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. USE ONLY IN A WELL VENTILATED AREA. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. KEEP CONTA INER TIGHTLY CLOSED. DO NOT INGEST OR INHALE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:FOLLOW OSHA RESPIRATOR REGULATIONS FOUND IN 29CFR1910.134 OR EUROPEAN STANDARD EN149. ALWAYS USE A NIOSH OR EUROPEAN STANDARD EN 149 APPROVED RESPIRATOR WHEN NECESSARY.

Ventilation:USE ADEQ

UATE GENERAL OR LOCAL EXHAUST VENTILATION TO KEEP

AIRBORNE CONCENTRATIONS BELOW PERMISSIBLE EXPOSURE LIMITS.

Protective Gloves:APPROPRIATE PROTECTIVE GLOVES

Eye Protection:PROTECTIVE EYEGLASSES OR CHEMICAL SAFETY GOGGLES

Other Protective Equipment:WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT SKIN EXPOSURE.

Work Hygienic Practices:NOT PROVIDED

Supplemental Safety and Health

CONTD FROM PROD

ID:230-(11120,23798,23799,26783,27274,28865,28866,29973,31092,32059

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32060,32061,320

62,35159,36223,36225,36226,37238,37239,38528,45111,4
5112,45149,46785,46986, 46988,47002),23111-(004,
005,008,114,123),232-(45684,45685,45864,45865,53998,69627,69628,862
00,86603),23305510,2331-(4264,4499,6153,6154,6155...)

===== Physical/Chemical Properties =====

HCC:N1

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:=102.C, 215.6F

Melt/Freeze Pt:M.P/F.P Text:NOT AVAILABLE

Decomp Temp:Decomp Text:NOT AVAILABLE

Vapor Pres:79MMHG

Vapor Density:>1

Spec Gravity:1

.0

pH:NOT AVAILABLE

Viscosity:NOT AVAILABLE

Evaporation Rate & Reference:SIMILAR TO WATER

Solubility in Water:COMPLETE

Appearance and Odor:COLORLESS LIQUID; CHARACTERISTIC ODOR

Percent Volatiles by Volume:NOT PROVIDED

Corrosion Rate:NOT PROVIDED

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

HYDROGEN PEROXIDE, MAGNESIUM CARBONATE HYDROXIDE, NITROGEN DIOXIDE,
NITROMETHANE, PEROXYFORMIC ACID, PERSHLORIC ACID+ANILINE, PERFORM
IC

ACID, PHENOL, POTASSIUM PERMANGANATE. REACTS WITH HYDROGEN CHLORIDE
IN HUMID AIR TO PRO

Stability Condition to Avoid:INCOMPATIBLE MATERIALS, IGNITION SOURCES,
ACIDS, REDUCING AGENTS, OXIDIZERS, BASES.

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE,
OXIDES OF CARBON

Conditions to Avoid Polymerization:POLYMERIZATION AT LOW TEMPERATURES
MAY OCCUR.

===== Toxicological Information =====

Toxicological Information:CAS# 50-00-0: INH

ALATION, MOUSE: LC50 = 400

MG/M3/2H; INHALATION, RAT: LC50 = 203 MG/M3; ORAL, MOUSE: LD50 = 42

MG/KG; ORAL, RAT: LD50 = 100 MG/KG;SKIN, RABBIT: LD50 = 270 MG/KG.

CAS# 7558-79-4: ORAL RAT: LD50 = 17 GM/KG. CAS# 7558-80-7: ORAL

RAT: LD50 = 8290 MG/KG. CAS# 7732-18-5: ORAL RAT: LD50 > 90 ML/KG.

===== Ecological Information =====

Ecological:BLUEGILL LC50=100 UG/L/96H LAKE TROUT LC50=100 UL/L/96H

ATLANTIC SALMON LC50=173 UL/L/96H CATFISH (FRES

H WATER) TLM=32

PPM/24H FLOUNDER (SALT WATER) TLM=100-330 PPM/48H FATHEAD MINNOW

LC50=10-100 UL/L /96H RAINBOW TROUT LC50=168 MG/L/48H ZEBRAFISH

LC50=41 MG/L/96H WATER FLEA LC50=52 MG/L/24H.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF IN A MANNER CONSISTENT WITH FEDERAL,
STATE AND LOCAL REGULATIONS

===== MSDS Transport Information =====

Transport Information:NO INFORMATION AVAILABLE.

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===== Regulatory Information =====

SARA Title III Information:SARA SECTION 302 9RQ): CAS# 50-00-0: FINAL

RQ = 100 POUNDS (45.4 KG). CAS# 7558-79-4: RQ = 5000 LBS. SECTION

302 (TPQ): CAS# 50-00-0: TPQ = 500 LBS. SARA CODES: ACUTE, CHRONIC.

SECTION 313: THIS MATERIAL CONTAINS FORMALDEHYDE (CAS# 50-00-0,
3.8 %), WHICH IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION

313 SARA TITLE III AND 40 CFR PART 373. CLEAN AIR ACT: CAS #

50-00-0 IS LI

STED AS A HAZARDOUS AIR POLLUTANT (HAP). THIS

MATERIAL DOES NOT CONTAIN ANY CLASS 1 OR CLASS 2 OZONE DEPLETORS.

CLEAN WATER ACT: CAS # 50-00-0 AND CAS # 7558-79-4 ARE LISTED AS

HAZARDOUS SUBSTANCES UNDER THE CWA.

Federal Regulatory Information:OSHA: CAS# 50-00-0 IS CONSIDERED HIGHLY

HAZARDOUS BY OSHA. TSCA (TOXIC SUBSTANCES CONTROL ACT): ALL

INGREDIENTS ARE LISTED.

State Regulatory Information:FORMALDEHYDE CAN BE FOUND ON THE FOLLOWING

STATE RIGHT TO KNOW LISTS: CALIFOR

NIA, NEW JERSEY, FLORIDA,
PENNSYLVANIA, MINNESOTA, MASSACHUSETTS. SODIUM PHOSPHATE, DIBASIC
CAN BE FOUND ON THE FOLLOWING S TATE RIGHT TO KNOW LISTS:
CALIFORNIA, NEW JERSEY, PENNSYLVANIA, MASSACHUSETTS. WARNING! THIS
PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO
CAUSE CANCER. CALIFORNIA NO SIGNIFICANT RIS K LEVEL: CAS# 50-00-0:
NO SIGNIFICANT RISK LEVEL = 40 UG/DAY.

===== Other Information =====

Disclaimer (provid
ed with this information by the compiling agencies):
This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.