

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

H, 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 (FRESH
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 (RQ): 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 LISTED

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: CALIFORNIA

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,
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assume responsibility for the suitability of this information to their
particular situation.