SIGMA CHEMICAL COMPANY
POST OFFICE BOX 14508
SAINT LOUIS, MISSOURI 63178, USA

ATTN: SAFETY DIRECTOR
UNIVERSITY OF WISCONSIN
WHITewater
ACCOUNTS PAYABLE
PO BOX 296
WHITewater WI 53190-0296

EMERGENCY PHONE 1-314-771-5765
DATE 07/23/96
CUST#: 2-087-94804
PO#: UNG-71236

MATERIAL SAFETY DATA SHEET PAGE 1

SECTION 1. -- -- -- -- -- -- CHEMICAL IDENTIFICATION-- -- -- -- -- --

CATALOG #: B3375
NAME: BENZOIC ACID SODIUM CRYSTALLINE

SECTION 2. -- -- -- -- COMPOSITION/INFORMATION ON INGREDIENTS -- -- -- --

CAS #: 532-32-1
MF: C7H5NaO2
EC NO: 208-534-8

SYNONYMS
ANTIMOL * BENZOAN SODNY (CZECH) * BENZOATE OF SODA * BENZOATE SODIUM *
BENZOESELN (NA-SALZ) (GERMAN) * SOBENATE * SODIUM BENZOATE *
SODIUM BENZOIC ACID *

SECTION 3. -- -- -- -- -- -- HAZARDS IDENTIFICATION -- -- -- -- -- --

LABEL PRECAUTIONARY STATEMENTS
HARMFUL
HARMFUL IF SWALLOWED,
WEAR SUITABLE PROTECTIVE CLOTHING.

SECTION 4. -- -- -- -- -- -- FIRST-AID MEASURES-- -- -- -- -- --

IN CASE OF CONTACT, IMMEDIATELY Flush EYES WITH copious AMOUNTS OF
WATER FOR AT LEAST 15 MINUTES.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND copious
AMOUNTS OF WATER.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
WASH CONTAMINATED CLOTHING BEFORE USE.

SECTION 5. -- -- -- -- -- -- FIRE FIGHTING MEASURES -- -- -- -- -- --

EXTINGUISHING MEDIA
WATER SPRAY.
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. -- -- -- -- -- -- ACCIDENTAL RELEASE MEASURES-- -- -- -- -- --

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY
CONTINUED ON NEXT PAGE 8933
SIGMA CHEMICAL COMPANY
POST OFFICE BOX 14508
SAINT LOUIS, MISSOURI 63178, USA

CUST#: 2-097-94804
PO#: UNG-71236

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

CATALOG #: B3375
NAME: BENZOIC ACID SODIUM CRYSTALLINE

RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - - - HANDLING AND STORAGE - - - - - - - -
REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSOAL PROTECTION - - - -

CHEMICAL SAFETY GOGGLES.
NIOSH/MSHA-APPROVED RESPIRATOR.
MECHANICAL EXHAUST REQUIRED.
COMPATIBLE CHEMICAL-RESISTANT GLOVES.
AVOID BREATHING DUST.
AFFECT CONTACT WITH EYES, SKIN AND CLOTHING.
WASH THOROUGHLY AFTER HANDLING.
HARMFUL SOLID.
KEEP CONTAINER CLOSED.
STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

APPEARANCE AND ODOR
WHITE POWDER

PHYSICAL PROPERTIES
MELTING POINT: >300 C

SECTION 10. - - - - - - STABILITY AND REACTIVITY - - - - - -

INCOMPATIBILITIES
STRONG OXIDIZING AGENTS
PROTECT FROM MOISTURE.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE

SECTION 11. - - - - - - - TOXICOLOGICAL INFORMATION - - - - - -

ACUTE EFFECTS
HARMFUL IF SWALLOWED.
MAY BE HARMFUL IF INHALED.
MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
MAY CAUSE IRRITATION.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: DH6650000
BENZOIC ACID, SODIUM SALT

CONTINUED ON NEXT PAGE

8934
SIGMA CHEMICAL COMPANY
POST OFFICE BOX 14506
SAINT LOUIS, MISSOURI 63178, USA

CUST #: 2-097-94804
PO#: UNG-71236

MATERIAL SAFETY DATA SHEET

CATALOG #: B3375
NAME: BENZOIC ACID SODIUM CRYSTALLINE

TOXICITY DATA
OUL-RAT LD50: 4070 MG/KG
SCU-RAT LD50: 2 GM/KG
IVN-RAT LD50: 1714 MG/KG
ORL-MUS LD50: 1600 MG/KG
IVN-MUS LD50: 1440 MG/KG
IMS-MUS LD50: 2306 MG/KG
ORL-DOG LD50: 2 GM/KG
ORL-RBT LD50: 2 GM/KG
SCU-RBT LD50: 2 GM/KG
JIHTAB 30.63.48
GISAAA 28(1).45.63
JAPMA8 31 253.42
GISAAA 51(1).75.86
MECHAN 6 290.63
JPETAB 117.307.56
FAONAU 53A.34.74
FAONAU 53A.34.74

TARGET ORGAN DATA
BEHAVIORAL (TREMOR)
BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
BEHAVIORAL (CHANGE IN MOTOR ACTIVITY)
LUNGS, THORAX OR RESPIRATION (DYSPNÆA)
EFFECTS ON EMBRYO OR FETUS (FETAL DEATH)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

SECTION 12. ECOLOGICAL INFORMATION
DATA NOT YET AVAILABLE.

SECTION 13. DISPOSAL CONSIDERATIONS
DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A
CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. TRANSPORT INFORMATION
CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. REGULATORY INFORMATION
EUROPEAN INFORMATION
HARMFUL
R 22
HARMFUL IF SWALLOWED.
S 36
WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS
OEL=?
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
FIFRA 54.7740.89
NOHS 1974: HZD 80214; NIS 84; TTN 13289; NOS 69; TNE 92390
NOES 1983: HZD 81192; NIS 2; TTN 31; NOS 2; TNE 430; TFE 288

CONTINUED ON NEXT PAGE

8935

We are committed to the success of our customers through science, technology and service.
SIGMA CHEMICAL COMPANY
POST OFFICE BOX 14508
SAINT LOUIS, MISSOURI 63178, USA

CUST#: 2-097-94804
PO#: UNG-71236

MATERIAL SAFETY DATA SHEET PAGE 4

---

CATALOG #: B3375
NAME: BENZOIC ACID SODIUM CRYSTALLINE

NOES 1983: HZD 80214; NIS 143; TNF 20457; NOS 125; TNE 533161; TFE 199915
EPA GENETOX PROGRAM 1988, NEGATIVE: TRP REVERSION
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, APRIL 1996

SECTION 16. OTHER INFORMATION-

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.

COPYRIGHT 1996 SIGMA CHEMICAL CO.
LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

MATERIAL WAS SHIPPED TO THIS ADDRESS:
UNIVERSITY OF WISCONSIN
WHITewater
CENTRAL RECv/ STORES
500 N FREMONT ST
WHITewater WI 53190