# **Chem-Impex International Inc.**

Tel: (630) 766-2112 E-mail: <u>sales@chemimpex.com</u> Shipping and Correspondence: 935 Dillon Drive Wood Dale, IL 60191 USA Fax: (630) 766-2218 Web site: <u>www.chemimpex.com</u> Manufacturing site: 825 Dillon Drive Wood Dale, IL 60191 USA

# SAFETY DATA SHEET

# SECTION 1. CHEMICAL IDENTIFICATION

| CATALOG #:           | 39321  |
|----------------------|--|
| NAME:                | Zinc dimethyldithiocarbamate                   |
| SYNONYMS:            | Dimethyldithiocarbamic acid zinc salt<br>Ziram |
| 24 HOUR EMERGENCY    | (800) 535-5053(USA)                            |
| TELEPHONE:           | 352-323-3500 (INTERNATIONAL)                   |
| TO REQUEST AN MSDS:  | (800) 869-9290                                 |
| CUSTOMER<br>SERVICE: | (630) 766-2112                                 |

# SECTION 2. HAZARDS IDENTIFICATION

#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS) ACUTE TOXICITY, ORAL (CATEGORY 4), H302 ACUTE TOXICITY, INHALATION (CATEGORY 2), H330 SERIOUS EYE DAMAGE (CATEGORY 1), H318 SKIN SENSITISATION (CATEGORY 1), H317 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, H335 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE, ORAL (CATEGORY 2), LIVER, BLOOD, H373 SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 1), H400 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 1), H410

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS PICTOGRAM



SIGNAL WORD DANGER

| H302 | HARMFUL IF SWALLOWED.                        |
|------|--|
| H317 | MAY CAUSE AN ALLERGIC SKIN REACTION.         |
| H318 | CAUSES SERIOUS EYE DAMAGE.                   |
| H330 | FATAL IF INHALED.                            |
| H335 | MAY CAUSE RESPIRATORY IRRITATION.            |
| H373 | MAY CAUSE DAMAGE TO ORGANS (LIVER, BLOOD)    |
|      | THROUGH PROLONGED OR REPEATED EXPOSURE IF    |
|      | SWALLOWED.                                   |
| H410 | VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING |
|      | EFFECTS.                                     |
|      |  |

#### PRECAUTIONARY STATEMENT(S)

| P260                 | DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/<br>SPRAY |
|----------------------|---|
| P264                 | WASH SKIN THOROUGHLY AFTER HANDLING.                    |
| P270                 | DO NOT EAT, DRINK OR SMOKE WHEN USING THIS              |
|                      | PRODUCT.  |
| P271                 | USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.         |
| P272                 | CONTAMINATED WORK CLOTHING SHOULD NOT BE                |
|                      | ALLOWED OUT OF THE WORKPLACE.                           |
| P273                 | AVOID RELEASE TO THE ENVIRONMENT.                       |
| P280                 | WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE        |
|                      | PROTECTION/ FACE PROTECTION.                            |
| P284                 | WEAR RESPIRATORY PROTECTION.                            |
| P301 + P312 + P330   | IF SWALLOWED: CALL A POISON CENTER/DOCTOR IF YOU        |
|                      | FEEL UNWELL. RINSE MOUTH.                               |
| P302 + P352          | IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.         |
| P304 + P340 + P310   | IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP         |
|                      | COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A           |
|                      | POISON CENTER OR DOCTOR/ PHYSICIAN.                     |
| P305 + P351 + P338 + | IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL     |
| P310                 | MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND          |
|                      | EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A        |
|                      | POISON CENTER OR DOCTOR/ PHYSICIAN.                     |
| P314                 | GET MEDICAL ADVICE/ ATTENTION IF YOU FEEL UNWELL.       |
| P333 + P313          | IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL          |
|                      | ADVICE/ ATTENTION.                                      |

| P363<br>P391<br>P403 + P233                   | WASH CONTAMINATED CLOTHING BEFORE REUSE.<br>COLLECT SPILLAGE.<br>STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER |
|---|---|
| P405<br>P501                                  | TIGHTLY CLOSED.<br>STORE LOCKED UP.<br>DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED<br>WASTE DISPOSAL PLANT.     |
| HAZARDS NOT<br>OTHERWISE<br>CLASSIEIED (HNOC) | NONE  |

CLASSIFIED (HNOC) OR NOT COVERED BY GHS

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MW: 305.80

CAS-NO. 137-30-4

PURITY:  $\geq 97\%$  (Assay by titration)

#### HAZARDOUS COMPONENTS

| HAZARDOUS COMPONENTS  |                                |               |
|-----------------------|--------------------------------|---------------|
| COMPONENT             | CLASSIFICATION                 | CONCENTRATION |
| Zinc dimethyldithioca | rbamate                        |               |
|                       | ACUTE TOX. 4; ACUTE TOX. 2;    | <= 100%       |
|                       | EYE DAM. 1; SKIN SENS. 1; STOT |               |
|                       | SE 3; STOT RE 2; AQUATIC ACUTE |               |
|                       | 1; AQUATIC CHRONIC 1; H302,    |               |
|                       | H330, H318, H317, H335, H373,  |               |
|                       | H400, H410                     |               |
|                       | M-FACTOR - AQUATIC ACUTE: 100  |               |
|                       | - AQUATIC CHRONIC: 1           |               |

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

# SECTION 4. FIRST-AID MEASURES

#### **DESCRIPTION OF FIRST AID MEASURES**

GENERAL ADVICE CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.

| IF INHALED   | IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF<br>NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.<br>CONSULT A PHYSICIAN.     |
|--|---|
| IN CASE OF SKIN<br>CONTACT   | WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE<br>VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A<br>PHYSICIAN.                   |
| IN CASE OF EYE<br>CONTACT  | RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.                                    |
| IF SWALLOWED   | NEVER GIVE ANYTHING BY MOUTH TO AN<br>UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER.<br>CONSULT A PHYSICIAN.                 |
| MOST IMPORTANT<br>SYMPTOMS AND<br>EFFECTS, BOTH ACUTE<br>AND DELAYED                   | THE MOST IMPORTANT KNOWN SYMPTOMS AND<br>EFFECTS ARE DESCRIBED IN THE LABELLING (SEE<br>SECTION 2.2) AND/OR IN SECTION 11 |
| INDICATION OF ANY<br>IMMEDIATE MEDICAL<br>ATTENTION AND<br>SPECIAL TREATMENT<br>NEEDED | NO DATA AVAILABLE   |

# SECTION 5. FIRE AND EXPLOSION DATA

#### **EXTINGUISHING MEDIA**

| SUITABLE  | USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY                              |
|---|---|
| EXTINGUISHING MEDIA   | CHEMICAL OR CARBON DIOXIDE.   |
| SPECIAL HAZARDS<br>ARISING FROM THE<br>SUBSTANCE OR MIXTURE | CARBON OXIDES, NITROGEN OXIDES (NOX), SULPHUR<br>OXIDES, ZINC/ZINC OXIDES |
| ADVICE FOR  | WEAR SELF-CONTAINED BREATHING APPARATUS FOR                               |
| FIREFIGHTERS  | FIREFIGHTING IF NECESSARY.  |

FURTHER INFORMATION NO DATA AVAILABLE

# SECTION 6. ACCIDENTAL RELEASE MEASURES

| PERSONAL     |
|--------------|
| PRECAUTIONS, |
| PROTECTIVE   |

WEAR RESPIRATORY PROTECTION. AVOID DUST FORMATION. AVOID BREATHING VAPOURS, MIST OR

| EQUIPMENT AND<br>EMERGENCY<br>PROCEDURES                       | GAS. ENSURE ADEQUATE VENTILATION. EVACUATE<br>PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST.  |
|--|---|
|  | FOR PERSONAL PROTECTION SEE SECTION 8.  |
| ENVIRONMENTAL<br>PRECAUTIONS                                   | PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE<br>TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.<br>DISCHARGE INTO THE ENVIRONMENT MUST BE<br>AVOIDED. |
| METHODS AND<br>MATERIALS FOR<br>CONTAINMENT AND<br>CLEANING UP | PICK UP AND ARRANGE DISPOSAL WITHOUT<br>CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN<br>SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.                |
| REFERENCE TO OTHER<br>SECTIONS                                 | FOR DISPOSAL SEE SECTION 13.  |

# SECTION 7. HANDLING AND STORAGE

| PRECAUTIONS FOR SAFE<br>HANDLING                                   | AVOID CONTACT WITH SKIN AND EYES. AVOID<br>FORMATION OF DUST AND AEROSOLS.FURTHER<br>PROCESSING OF SOLID MATERIALS MAY RESULT IN<br>THE FORMATION OF COMBUSTIBLE DUSTS. THE<br>POTENTIAL FOR COMBUSTIBLE DUST FORMATION<br>SHOULD BE TAKEN INTO CONSIDERATION BEFORE<br>ADDITIONAL PROCESSING OCCURS.<br>PROVIDE APPROPRIATE EXHAUST VENTILATION AT<br>PLACES WHERE DUST IS FORMED.<br>FOR PRECAUTIONS SEE SECTION 2.2. |
|--|---|
| CONDITIONS FOR SAFE<br>STORAGE, INCLUDING<br>ANY INCOMPATIBILITIES | KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.   |
|  | KEEP IN A DRY PLACE   |
|  | Store at 2 - 8 °C   |
| SPECIFIC END USE(S)  | APART FROM THE USES MENTIONED IN SECTION 1.2<br>NO OTHER SPECIFIC USES ARE STIPULATED   |

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **CONTROL PARAMETERS**

# COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

#### CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES. HAZARDOUS COMPONENTS WITHOUT WORKPLACE CONTROL PARAMETERS

#### **EXPOSURE CONTROLS**

| APPROPRIATE | AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH |
|-------------|--|
| ENGINEERING | HANDS BEFORE BREAKS AND IMMEDIATELY AFTER        |
| CONTROLS    | HANDLING THE PRODUCT.                            |

#### PERSONAL PROTECTIVE EQUIPMENT

- EYE/FACEFACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FORPROTECTIONEYE PROTECTION TESTED AND APPROVED UNDER<br/>APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH<br/>(US) OR EN 166(EU).
- SKIN PROTECTIONHANDLE WITH GLOVES. GLOVES MUST BE INSPECTED<br/>PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE<br/>(WITHOUT TOUCHING GLOVE''S OUTER SURFACE) TO<br/>AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF<br/>CONTAMINATED GLOVES AFTER USE IN ACCORDANCE<br/>WITH APPLICABLE LAWS AND GOOD LABORATORY<br/>PRACTICES. WASH AND DRY HANDS.

FULL CONTACT MATERIAL: NITRILE RUBBER MINIMUM LAYER THICKNESS: 0.11 MM BREAK THROUGH TIME: 480 MIN MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

SPLASH CONTACT MATERIAL: NITRILE RUBBER MINIMUM LAYER THICKNESS: 0.11 MM BREAK THROUGH TIME: 480 MIN MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.

**BODY PROTECTION** COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

| RESPIRATORY<br>PROTECTION | WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING<br>RESPIRATORS ARE APPROPRIATE USE A FULLFACE           |
|---------------------------|---|
| INOTECTION                | PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143)  |
|                           | RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING  |
|                           | CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF  |
|                           | PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR.<br>USE RESPIRATORS AND COMPONENTS TESTED AND |
|                           | APPROVED UNDER APPROPRIATE GOVERNMENT   |
|                           | STANDARDS SUCH AS NIOSH (US) OR CEN (EU).   |
| CONTROL OF                | PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO   |
| ENVIRONMENTAL             | SO. DO NOT LET PRODUCT ENTER DRAINS.  |
| EXPOSURE                  | DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.   |

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

# INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| INFORMATION ON DASIC   | I II I SICALAND CHEWICAL I KOI EKI I  |
|------------------------|---------------------------------------|
| APPEARANCE             | White or off-white crystalline powder |
| ODOUR                  | NO DATA AVAILABLE                     |
| ODOUR THRESHOLD        | NO DATA AVAILABLE                     |
| PH                     | NO DATA AVAILABLE                     |
| MELTING                | 257 °C                                |
| POINT/FREEZING POINT   |                                       |
| INITIAL BOILING POINT  |                                       |
| AND BOILING RANGE      |                                       |
| FLASH POINT            |                                       |
| EVAPORATION RATE       | NO DATA AVAILABLE                     |
| FLAMMABILITY (SOLID,   | THE PRODUCT IS NOT FLAMMABLE.         |
| GAS)                   |                                       |
| UPPER/LOWER            | NO DATA AVAILABLE                     |
| FLAMMABILITY OR        |                                       |
| EXPLOSIVE LIMITS       |                                       |
| VAPOUR PRESSURE        | NO DATA AVAILABLE                     |
| VAPOUR DENSITY         | NO DATA AVAILABLE                     |
| RELATIVE DENSITY       |                                       |
| WATER SOLUBILITY       | SLIGHTLY SOLUBLE                      |
| PARTITION COEFFICIENT: | LOG POW: 1.65 AT 20 C                 |
| N- OCTANOL/WATER       |                                       |
| AUTO-IGNITION          | NOT AUTO-FLAMMABLE                    |
| TEMPERATURE            |                                       |
| DECOMPOSITION          | NO DATA AVAILABLE                     |
| TEMPERATURE            |                                       |
| VISCOSITY              | NO DATA AVAILABLE                     |
| EXPLOSIVE PROPERTIES   | NO DATA AVAILABLE                     |
| OXIDIZING PROPERTIES   | NO DATA AVAILABLE                     |
|                        |                                       |
| OTHER SAFETY INFORMA   | ATION                                 |

## **OTHER SAFETY INFORMATION**

| SOLUBILITY IN OTHER | ACETONE 2.3 G/L AT 20 C   |
|---------------------|---------------------------|
| SOLVENTS            | METHANOL 0.11 G/L AT 20 C |
| SURFACE TENSION     | 73 MN/M AT 16 C           |

# SECTION 10. STABILITY AND REACTIVITY

| REACTIVITY                               | NO DATA AVAILABLE   |
|--|---|
| CHEMICAL STABILITY                       | STABLE UNDER RECOMMENDED STORAGE CONDITIONS.  |
| POSSIBILITY OF<br>HAZARDOUS<br>REACTIONS | NO DATA AVAILABLE   |
| CONDITIONS TO AVOID                      | NO DATA AVAILABLE   |
| INCOMPATIBLE<br>MATERIALS                | STRONG ACIDS  |
| HAZARDOUS<br>DECOMPOSITION<br>PRODUCTS   | HAZARDOUS DECOMPOSITION PRODUCTS FORMED<br>UNDER FIRE CONDITIONS CARBON OXIDES,<br>NITROGEN OXIDES (NOX), SULPHUR OXIDES,<br>ZINC/ZINC OXIDES<br>OTHER DECOMPOSITION PRODUCTS - NO DATA<br>AVAILABLE<br>IN THE EVENT OF FIRE: SEE SECTION 5 |

# SECTION 11. TOXICOLOGICAL INFORMATION

# INFORMATION ON TOXICOLOGICAL EFFECTS

| ACUTE TOXICITY                       | LD50 ORAL - RAT - MALE AND FEMALE - 320 MG/KG  |
|--------------------------------------|--|
|                                      | LC50 INHALATION - RAT - 2 H - 26 MG/M3   |
|                                      | LD50 DERMAL - RABBIT - MALE AND FEMALE - ><br>2,000 MG/KG<br>(OECD TEST GUIDELINE 402) |
|                                      | NO DATA AVAILABLE  |
| SKIN<br>CORROSION/IRRITATION         | SKIN - RABBIT<br>RESULT: NO SKIN IRRITATION - 4 H<br>(OECD TEST GUIDELINE 404)         |
| SERIOUS EYE<br>DAMAGE/EYE IRRITATION | EYES - RABBIT<br>RESULT: RISK OF SERIOUS DAMAGE TO EYES.<br>(OECD TEST GUIDELINE 405)  |

| RESPIRATORY OR SKIN<br>SENSITISATION                     | IN VIVO ASSAY - GUINEA PIG<br>RESULT: MAY CAUSE SENSITISATION BY SKIN<br>CONTACT.<br>(OECD TEST GUIDELINE 406)   |
|--|--|
| GERM CELL<br>MUTAGENICITY                                | MOUSE<br>LYMPHOCYTE<br>MUTATION IN MAMMALIAN SOMATIC CELLS.<br>HAMSTER<br>OVARY<br>RESULT: NEGATIVE<br>MUTAGENICITY (MICRONUCLEUS TEST)<br>MOUSE - MALE AND FEMALE<br>RESULT: NEGATIVE |
| CARCINOGENICITY  |  |
| IARC:  | NO COMPONENT OF THIS PRODUCT PRESENT AT<br>LEVELS GREATER THAN OR EQUAL TO 0.1% IS<br>IDENTIFIED AS PROBABLE, POSSIBLE OR<br>CONFIRMED HUMAN CARCINOGEN BY IARC.                       |
| NTP:   | NO COMPONENT OF THIS PRODUCT PRESENT AT<br>LEVELS GREATER THAN OR EQUAL TO 0.1% IS<br>IDENTIFIED AS A KNOWN OR ANTICIPATED<br>CARCINOGEN BY NTP.                                       |
| OSHA:  | NO COMPONENT OF THIS PRODUCT PRESENT AT<br>LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON<br>OSHA S LIST OF REGULATED CARCINOGENS.   |
| <b>REPRODUCTIVE TOXICITY</b>                             | NO DATA AVAILABLE  |
| SPECIFIC TARGET ORGAN<br>TOXICITY - SINGLE<br>EXPOSURE   | INHALATION - MAY CAUSE RESPIRATORY<br>IRRITATION RESPIRATORY TRACT   |
| SPECIFIC TARGET ORGAN<br>TOXICITY - REPEATED<br>EXPOSURE | ORAL - MAY CAUSE DAMAGE TO ORGANS THROUGH<br>PROLONGED OR REPEATED EXPOSURE LIVER,<br>BLOOD  |
| ASPIRATION HAZARD  | NO DATA AVAILABLE  |
| ADDITIONAL<br>INFORMATION                                | REPEATED DOSE TOXICITY - RAT - MALE AND<br>FEMALE - ORAL - NO OBSERVED ADVERSE EFFECT<br>LEVEL - < 7.4 MG/KG - LOWEST OBSERVED ADVERSE<br>EFFECT LEVEL - 7.4 MG/KG                     |
|  | RTECS: ZH0525000   |
|  | STOMACH - IRREGULARITIES - BASED ON HUMAN<br>EVIDENCE  |

## SECTION 12. ECOLOGICAL INFORMATION

| FLOW-THROUGH TEST LC50 - LEPOMIS                |
|---|
| MACROCHIRUS (BLUEGILL) - 0.0097 MG/L - 96 H     |
| (OECD TEST GUIDELINE 203)                       |
| STATIC TEST EC50 - DAPHNIA MAGNA (WATER FLEA) - |
| 0.048 MG/L - 48 H                               |
| (OECD TEST GUIDELINE 202)                       |
| STATIC TEST EC50 - PSEUDOKIRCHNERIELLA          |
| SUBCAPITATA (ALGAE) - CA. 0.5 MG/L - 72 H       |
| (OECD TEST GUIDELINE 201)                       |
| <b>RESPIRATION INHIBITION EC50 - SLUDGE</b>     |
| TREATMENT - 19.2 MG/L - 3 H                     |
| (OECD TEST GUIDELINE 209)                       |
|   |

#### PERSISTENCE AND DEGRADABILITY

| BIODEGRADABILITY | AEROBIC - EXPOSURE TIME 28 D               |
|------------------|--|
|                  | RESULT: 7.7 % - NOT READILY BIODEGRADABLE. |
|                  | (OECD TEST GUIDELINE 301B)                 |

#### **BIOACCUMULATIVE POTENTIAL**

| BIOACCUMULATION | ONCORHYNCHUS MYKISS (RAINBOW TROUT) - 96 H - |
|-----------------|--|
|                 | 138 G/L                                      |

**BIOCONCENTRATION FACTOR (BCF): 470** 

**RESULTS OF PBT AND VPVB**PBT/VPVB ASSESSMENT NOT AVAILABLE AS**ASSESSMENT**CHEMICAL SAFETY ASSESSMENT NOTREQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTSVERY TOXIC TO AQUATIC LIFE WITH LONG LASTING<br/>EFFECTS.<br/>AN ENVIRONMENTAL HAZARD CANNOT BE<br/>EXCLUDED IN THE EVENT OF UNPROFESSIONAL<br/>HANDLING OR DISPOSAL.

# SECTION 13. DISPOSAL CONSIDERATIONS

### WASTE TREATMENT METHODS

| PRODUCT                   | OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS<br>TO A LICENSED DISPOSAL COMPANY. CONTACT A<br>LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE<br>TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE<br>MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN<br>IN A CHEMICAL INCINERATOR EQUIPPED WITH AN<br>AFTERBURNER AND SCRUBBER. |
|---------------------------|--|
| CONTAMINATED<br>PACKAGING | DISPOSE OF AS UNUSED PRODUCT.  |

# SECTION 14. TRANSPORT INFORMATION

| DOT (US)                  |   |
|---------------------------|---|
| PROPER SHIPPING NAME:     | TOXIC SOLID, ORGANIC, N.O.S. (Zinc dimethyldithiocarbamate) |
| UN NUMBER:                | 2811  |
| CLASS:                    | 6.1   |
| PACKING GROUP:            | II  |
| REPORTABLE QUANTITY (RQ): | 10 LBS  |
| MARINE POLLUTANT:         | YES   |
| POISON INHALATION         | NO  |
| HAZARD:                   |   |
|                           |   |
| IMDG                      |   |
| PROPER SHIPPING NAME:     | TOXIC SOLID, ORGANIC, N.O.S. (Zinc dimethyldithiocarbamate) |
| UN NUMBER:                | 2811  |
| CLASS:                    | 6.1   |
| PACKING GROUP:            | II  |
| EMS-NO:                   | F-A, S-A  |
|                           |   |
| IATA                      |   |
| PROPER SHIPPING NAME:     | TOXIC SOLID, ORGANIC, N.O.S. (Zinc                          |
|                           | dimethyldithiocarbamate)                                    |
| UN NUMBER:                | 2811  |
| CLASS:                    | 6.1   |
| PACKING GROUP:            | II  |
|                           |   |

# SECTION 15. REGULATORY INFORMATION

**SARA 302 COMPONENTS** NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

| SARA 313 COMPONENTS          | THE FOLLOWING COMPONENTS ARE SUBJECT TO<br>REPORTING LEVELS ESTABLISHED BY SARA TITLE III, |               |
|------------------------------|--|---------------|
|                              | SECTION 313:   |               |
|                              | CAS-NO.  | REVISION DATE |
| Zinc dimethyldithiocarbamate | 137-30-4   | 04-24-1993    |

SARA 311/312 HAZARDS ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

#### MASSACHUSETTS RIGHT TO KNOW COMPONENTS

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

#### PENNSYLVANIA RIGHT TO KNOW COMPONENTS

|                              | CAS-NO.  | <b>REVISION DATE</b> |
|------------------------------|----------|----------------------|
| Zinc dimethyldithiocarbamate | 137-30-4 | 04-24-1993           |

#### SECTION 16. OTHER INFORMATION

| H302 | H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.<br>HARMFUL IF SWALLOWED. |
|------|---|
|      |   |
| H317 | MAY CAUSE AN ALLERGIC SKIN REACTION.                                      |
| H318 | CAUSES SERIOUS EYE DAMAGE.  |
| H330 | FATAL IF INHALED.   |
| H335 | MAY CAUSE RESPIRATORY IRRITATION.   |
| H373 | MAY CAUSE DAMAGE TO ORGANS (LIVER, BLOOD)                                 |
|      | THROUGH PROLONGED OR REPEATED EXPOSURE IF                                 |
|      | SWALLOWED.  |
| H410 | VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING                              |
|      | EFFECTS.  |

| MSDS LEGEND |  |
|-------------|--|
| MW:         | MOLECULAR WEIGHT                                 |
| MF:         | MOLECULAR FORMULA                                |
| VOC:        | VOLATILE ORGANIC COMPOUNDS                       |
| ACGIH:      | AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL |
|             | HYGINISTS  |
| CAS:        | CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER        |
| OSHA:       | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION    |
| PEL:        | PERMISSIBLE EXPOSURE LIMIT (OSHA)                |
| TLV:        | THRESHOLD LIMIT VALUE (ACGIH)                    |
| IMPORTANT:  |  |

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