

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

COMMON NAME: METHOMYL

CHEMICAL NAME: S-METHYL N-(METHYL CARBAMOYLOXY) THIOACETIMIDATE

COMPANY NAME: NANJING BESTGREEN CHEMICAL CO., LTD

TEL: 025-58630277

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2. COMPOSITION AND INGREDIENT INFORMATION

ACTIVE INGREDIENT CONTENT: 97% MIN.

COMPOSITION (ACTIVE INGREDIENT & OTHER INGREDIENT PERCENTAGE)

METHOMYL CONTENT: 97% MIN.

MOISTURE: 0.3% MAX.

3. HEALTH HAZARD INFORMATION

METHOMYL IS MODERATELY TO HIGHLY TOXIC TO FISH AND HIGHLY TOXIC TO AQUATIC INVERTEBRATES. THE 96-HOUR LC50 IN RAINBOW TROUT FOR A LIQUID FORMULATION OF METHOMYL IS 3.4 MILLIGRAMS PER LITER (MG/L); FOR BLUEGILL SUNFISH, IT IS 0.8 MG/L. A 28-DAY FISH RESIDUE STUDY INDICATED THAT METHOMYL DID NOT ACCUMULATE IN FISH TISSUE. THE 48- HOUR LC50 FOR DAPHNIA MAGNA (A SMALL, FRESHWATER CRUSTACEAN) IS 28.7 PPB.

EFFECTS ON OTHER ANIMALS (NONTARGET SPECIES)

METHOMYL IS HIGHLY TOXIC TO BEES BOTH BY DIRECT CONTACT AND THROUGH INGESTION. APPLICATIONS SHOULD BE COORDINATED WITH PERIODS OF MINIMUM BEE ACTIVITY SO THAT METHOMYL IS NEVER APPLIED WHILE BEES ARE ACTIVELY VISITING TREATMENT AREAS.

4. FIRST AID MEASURES

IF ON SKIN: REMOVE CONTAMINATED CLOTHING AND WASH SKIN WITH PLENTY OF SOAP AND WATER.

IF IN EYES: FLUSH WITH WATER FOR 15 MINUTES. SEEK MEDICAL ATTENTION.

IF SWALLOWED: DRINK 1-2 GLASSES OF WATER AND INDUCE VOMITING UNLESS PATIENT IS UNCONSCIOUS. SEEK MEDICAL ATTENTION.

IF INHALED: REMOVE FROM EXPOSURE. KEEP PATIENT LYING DOWN AND QUIET. IF PATIENT IS UNCONSCIOUS, START ARTIFICIAL RESPIRATION.

FOR PHYSICIAN: ATROPINE SULFATE IS ANTIDOTAL; REPEAT INTRAVENOUSLY UNTIL FULL ATROPINIZATION IS ACHIEVED. 2-PAM MAY BE USED IN CONJUNCTION. DO NOT GIVE MORPHINE.

5. FIRE AND EXPLOSION INFORMATION

EXPLOSION AND FIRE PROTECTION-TYPICAL EXTINGUISHING, MEDIA, FIRE FOAM, CO₂, ETC.

6. ACCIDENTAL RELEASE MEASURES

SPILLAGE /LEAKAGE: WASH BY ALKALINE WATER. PROTECT FROM ENTERING THE SEWAGE SYSTEM.

7. HANDLING AND STORAGE

STORE IN A COOL, DRY PLACE, AWAY FROM FEED AND FOODSTUFFS. AVOID CONTACT WITH MOUTH, EYES, AND SKIN. KEEP OUT OF REACH OF CHILDREN. DO NOT STORE TOGETHER WITH ALKALINE MATTER.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

WASH THOROUGHLY AFTER HANDLING.

DO NOT BREATHE DUST.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

NIOSH/MSHA-APPROVED RESPIRATOR.

COMPATIBLE CHEMICAL-RESISTANT GLOVES.

CHEMICAL SAFETY GOGGLES.

SAFETY SHOWER AND EYE BATH.

MECHANICAL EXHAUST REQUIRED.

USE ONLY IN A CHEMICAL FUME HOOD.

KEEP TIGHTLY CLOSED.

9. PHYSICAL AND CHEMICAL PROPERTIES

METHOMYL 97% TECH IS NOT A CORROSIVE, EXPLOSIVE, FLAMMABLE MATERIAL. IT IS SOLUBLE IN WATER.

METHOMYL 97% TECH IS WATER SOLUBLE POWDER.

10. STABILITY AND REACTIVITY INFORMATION

METHOMYL 97%TECH IS EFFECTIVE IN TWO WAYS: (A) AS A 'CONTACT INSECTICIDE,' BECAUSE IT KILLS TARGET INSECTS UPON DIRECT CONTACT, AND; (B) AS A 'SYSTEMIC INSECTICIDE' BECAUSE OF ITS CAPABILITY TO CAUSE OVERALL 'SYSTEMIC' POISONING IN TARGET INSECTS, AFTER IT IS ABSORBED AND TRANSPORTED THROUGHOUT THE PESTS THAT FEED ON TREATED PLANTS. DO NOT STORE ABOVE 136 DEGREE C, KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. STORE IN ORIGINAL CONTAINER AWAY FROM FOOD AND FEED.

11. TOXICOLOGICAL INFORMATION

PHYTOTOXICITY: METHOMYL 97% TECH IS A SAFE INSECTICIDE.

LD₅₀ ORAL & DERMAL(RAT & RABBIT):

ORAL: LD₅₀≥80MG/KG(RATS);

DERMAL: LD₅₀≥6000MG/KG(RABBIT)

NET CONTENT(NET WEIGHT OR VOLUME): 400MG/KG

TOXICITY CLASS: IMDG 6221

HAZARD SYMBOLS: METHOMYL 97% TECH IS HIGH TOXICITY TO ANIMAL AND FISH.

12. ECOLOGICAL INFORMATION

METHOMYL IS TOXIC TO FISH, BIRDS AND OTHER WILDLIFE.

EFFECTS ON BIRDS. METHOMYL IS HIGHLY TOXIC TO BIRDS. THE ACUTE ORAL LD₅₀ FOR BOBWHITE QUAIL IS 60 MG/KG. THE ORAL LD₅₀ OF METHOMYL WAS 50 MG/KG IN HENS. ALL DEATHS OCCURRED WITHIN TEN MINUTES OF DOSING. THE CLINICAL SIGNS OF TOXICITY INCLUDED TEARING OF THE EYES, SALIVATION, OCCASIONAL CONVULSIONS, AND RESPIRATORY DISORDERS. IN JAPANESE QUAIL, THE LD₅₀ WAS 45 MG/KG. THE LD₅₀ OF A 40% PURE FORMULATION WAS 31 MG/KG IN EIGHT-MONTH OLD MALLARDS, AND 15.4 MG/KG IN THREE-TO-FOUR MONTH OLD MALE PHEASANTS. THE LD₅₀ FOR STARLINGS WAS 42 MG/KG AND FOR REDWINGED BLACKBIRDS WAS 10 MG/KG.

EFFECTS ON AQUATIC ORGANISMS

METHOMYL IS MODERATELY TO HIGHLY TOXIC TO FISH AND HIGHLY TOXIC TO AQUATIC INVERTEBRATES. THE 96-HOUR LC₅₀ IN RAINBOW TROUT FOR A LIQUID FORMULATION OF METHOMYL IS 3.4 MILLIGRAMS PER LITER (MG/L); FOR BLUEGILL SUNFISH, IT IS 0.8 MG/L. A 28-DAY FISH RESIDUE STUDY INDICATED THAT METHOMYL DID NOT ACCUMULATE IN FISH TISSUE. THE 48- HOUR LC₅₀ FOR DAPHNIA MAGNA (A SMALL, FRESHWATER CRUSTACEAN) IS 28.7 PPB.

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THE LD₅₀ FOR A 97% PURE FORMULATION OF METHOMYL WAS 22 TO 45 MG/KG IN MULE DEER. SYMPTOMS OF ACUTE POISONING IN THESE ANIMALS INCLUDED DROWSINESS, DROOLING, DIARRHEA, AND TREMORS.

13. DISPOSAL CONSIDERATIONS

DISPOSAL OF THE PESTICIDE'S EMPTY CONTAINERS (ADVISING HOW TO GET RID OF THEM AFTER USE) SETTING ON FIRE OR IS EMBEDDED INTO SOIL.

14. TRANSPORT INFORMATION

IT IS CONSIDERED AS HALF-HAZARDOUS MATERIAL.

IMDG CODE 3097-1, 6221

UN NO.: 2757

15. REGULATORY INFORMATION

ANTIDOTE AND MEDICAL ADVICE

CONSIDERING THE QUALITATIVE AND QUANTITATIVE CHARACTERISTICS OF METHOMYL TOXICITY, IT IS CONCLUDED THAT 0.03 MG/KG BODY WEIGHT PER DAY WILL PROBABLY NOT CAUSE ADVERSE EFFECTS IN HUMANS BY ANY ROUTE OF EXPOSURE. ATROPINE WAS SHOWN TO BE THE MOST CONSISTENTLY EFFECTIVE ANTIDOTE FOR METHOMYL POISONING BASED UPON THE RESULTS OF STUDIES IN SEVERAL SPECIES.

TOLERANCE ASSESSMENT:

TOLERANCES HAVE BEEN ESTABLISHED FOR RESIDUES OF METHOMYL IN A VARIETY OF RAW AGRICULTURAL COMMODITIES (REFER TO 40 CFR 180.253 FOR LISTING OF TOLERANCES). METHOMYL'S TOLERANCES HAVE BEEN REASSESSED USING THE TOLERANCE ASSESSMENT SYSTEM (TAS). THE ACCEPTABLE DAILY INTAKE (ADI) FOR THIS CHEMICAL IS 0.025 MG/KG/DAY. THE THEORETICAL MAXIMUM RESIDUE CONTRIBUTION (TMRC) FOR THE U.S. POPULATION IS 0.016188 MG/KG/DAY, WHICH OCCUPIES 65% OF THE ADI.

16. OTHER INFORMATION

THIS INFORMATION WHICH DESCRIBES OUR PRODUCT AS TO POSSIBLE SECURITY REQUIREMENTS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE AND EXPERIENCE .IT IS GIVEN IN FOOD FAITH BUT NO WARRANTY.