MATERIAL SAFETY DATA SHEET

ALBAUGH 2,4-D AMINE 4

EPA REGISTRATION NUMBER 42750-19

EFFECTIVE DATE: NOVEMBER 22, 1995

DATE REVISED: OCTOBER 2, 1998

ALBAUGH, INC. 4900PACKERSAVENUE ST JOSEPH, M0 64504

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I. INGREDIENTS:

DIMETHYLAMINE SALT OF

2,4-DICHLOROPHENOXYACETIC ACID (CAS # 2008-39-1)

46.8 %

INERT INGREDIENTS 53.2 %

II. PHYSICAL DATA:

BOILING POINT: ~ 212 DEGREES FAHRENHEIT VAPOR PRESSURE: ~16.5 MM HG @ 20` C

SPECIFIC GRAVITY: 1.16 @ 20` C

APPEARANCE: CLEAR, AMBER TO BROWN LIQUID.

ODOR: PUNGENT ODOR

PEL/TLV

NOT ESTABLISHED

SOLUBILITY IN WATER: SOLUBLE

MELTING POINT: NOT APPLICABLE

PH: 7.5 - 9.5

VAPOR DENSITY: < 1 (WATER VAPOR)

III. FIRE AND EXPLOSION DATA

FLASH POINT: NOT COMBUSTIBLE

AUTOIGNITION TEMPERATURE: NOT ESTABLISHED

FLAMMABLE LIMITS: NOT ESTABLISHED

EXTINGUISHING MEDIA: WATER

NFPA CLASSIFICATION: HEALTH = 3, FLAMMABILITY = 1, REACTIVITY = 1

[0=LEAST, 1=SLIGHT, 2=MODERATE, 3=HIGH, 4=SEVERE]]

IV. REACTIVITY DATA:

STABILITY: STABLE UNDER NORMAL CONDITIONS. CONDITIONS TO AVOID: AVOID EXCESSIVE HEAT. MATERIALS TO AVOID: OXIDIZING AGENTS AND ACIDS. HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARDOUS DECOMPOSITION: THERMAL DECOMPOSITION MAY RELEASE TOXIC AND/OR HAZARDOUS GASES (HCL, NOx).

V. ENVIRONMENTAL AND DISPOSAL INFORMATION:

USE ABSORBANT MATERIAL TO CONTAIN SPILLS. PLACE CONTAMINATED ABSORBANT IN DRUMS AND DISPOSE OF AT AN EPA APPROVED INCINERATOR. DO NOT REUSE CONTAINERS. EMPTY CONTAINERS SHOULD BE TRIPLE RINSED AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. LARGE SPILLS SHOULD BE REPORTED IMMEDIATELY TO CHEMTREC (800-424-9300) AND TO ALBAUGH, INC.

RCRA HAZARDOUS WASTE CODES: DO16, U240

CERCLA REPORTABLE QUANTITY: 2,4-D = 100 LB

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VI. HEALTH HAZARD DATA:

ROUTES OF ENTRY: CONTACT, INHALATION, INGESTION.

INHALATION: SINGLE EXPOSURE TO VAPORS IS NOT LIKELY TO BE HAZARDOUS.

OVEREXPOSURE MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT.

<u>SKIN CONTACT</u>: NOT IRRITATING TO SKIN. PROLONGED SKIN EXPOSURE MAY RESULT IN THE MATERIAL BEING ABSORBED THROUGH THE SKIN. THE LD $_{50}$ FOR SKIN ABSORPTION IN MALE RABBITS HAS BEEN REPORTED TO BE 1122 MG/KG.

EYE CONTACT: MAY CAUSE SEVERE IRRITATION WITH CORNEAL INJURY WHICH MAY RESULT IN PERMANENT EYE DAMAGE.

 $\overline{\text{INGESTION}}$: SLIGHTLY TOXIC. THE ORAL LD₅₀ FOR MALE RATS IS > 1,000 MG/KG. INGESTION MAY CAUSE GASTROINTESTINAL IRRITATION OR ULCERATION.

<u>CARCINOGENICITY</u>: INGREDIENTS INTHIS PRODUCT ARE NOT SPECIFICALLY LISTED AS CARCINOGENS BY NTP, IARC, OR OSHA. IARC LISTS CHLOROPHENOXY HERBICIDES AS CLASS 2B CARCINOGENS - LIMITED EVIDENCE IN HUMANS. THE SCIENCE ADVISORY PANEL OF EPA HAS GIVEN A CLASS D STATUS - NOT CLASSIFIABLE AS TO HUMAN CARCINOGENICITY.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: SKIN IRRITATION MAY BE AGGRAVATED IN PERSONS WITH EXISTING SKIN LESIONS.

VII. FIRST AID

EYES: FLUSH WITH RUNNING WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS GET MEDICAL ATTENTION.

<u>SKIN</u>: WASH THOROUGHLY WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

<u>INHALATION:</u> REMOVE TO FRESH AIR. IF BREATHING STOPS ADMINISTER ARTIFICIAL RESPIRATION AND GET MEDICAL ATTENTION IMMEDIATELY. IF BREATHING IS DIFFICULT REFER TO A PHYSICIAN.

<u>INGESTION:</u> GIVE ONE OR TWO GLASSES OF WATER AND INDUCE VOMITING. GET MEDICAL ATTENTION.

VIII. HANDLING PRECAUTIONS

<u>VENTILLATION</u>: HANDLE IN A WELL VENTILATED AREA. IF VENTILATION IS NOT ADEQUATE, WEAR AN APPROVED AIR-PURIFYING RESPIRATOR.

<u>PROTECTIVE CLOTHING</u>: WEAR CHEMICAL RESISTANT GLOVES, LONG PANTS, LONG SLEEVED SHIRT, CHEMICAL RESISTANT BOOTS, AND A HAT. AVOID DIRECT CONTACT WITH THE SKIN. EYE PROTECTION: WEAR SAFETY GOGGLES OR FACE SHIELD.

IX. SARA TITLE III NOTIFICATION AND INFORMATION:

SARA TITLE III HAZARD CLASSES: ACUTE HEALTH=YES, CHRONIC HEALTH=YES, FIRE=NO, SUDDEN PRESSURE=NO, REACTIVE=NO.

THIS PRODUCT DOES NOT CONTAIN TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III SEC 313 AND 40 CFR PART 372.

X. ADDITIONAL INFORMATION:

AVOID FREEZING. STORE ABOVE 40` F. DO NOT STORE NEAR FOOD OR WITHIN THE REACH OF CHILDREN. DO NOT STORE NEAR HEAT OR OPEN FLAME.

THE INFORMATION HEREIN IS PROVIDED IN GOOD FAITH, BUT NO WARRANTY, EXPRESS OR IMPLIED, IS MADE. CONTACT ALBAUGH, INC. FOR FURTHER INFORMATION.