KEYSTONE ANILINE CORPORATION

2501 WEST FULTON STREET

CHICAGO, ILLINOIS 60612

CORPORATE OFFICE: 312.666.2015

HEALTH & SAFETY FAX: 312.666.8530

TRADE NAME: NIGROSINE 128B POWDER

PRODUCT ID: 101-002-46

PREPARED FOR: FISHER HAMILTON SCIENTIFIC

EMERGENCY PHONE: Call CHEMTEL 800.255.3924

HEALTH & SAFETY TEL: 312.666.2015

MATERIAL SAFETY DATA SHEET

N O T E: DO NOT DETACH THIS GUIDANCE COVER SHEET FROM THE REST OF THIS DOCUMENT. This page indicates the Keystone Trade Name and Product ID. This identifying information must be referenced when ordering products or making inquiries.

A) YOUR CERTIFICATION OF COMPLIANCE UNDER FEDERAL AND STATE REGULATIONS

IMPORTANT NOTE: THIS DOCUMENT IS YOUR OFFICIAL CERTIFICATION OF COMPLIANCE as stated in each applicable section. It is compiled in accordance with OSHA's Hazard Communication standard (29 CFR 1910.1200), and other federal and state regulations. NOTE: NO ADDITIONAL COMPANY CERTIFICATION OF COMPLIANCE IS REQUIRED WHEN COMPLIANCE IS INDICATED IN THE APPROPRIATE SECTION OF THIS DOCUMENT. To avoid use of outdated information, please completely destroy ALL previously dated MSDS' that are on file.

B) ABOUT THE FORMAT OF THIS MATERIAL SAFETY DATA SHEET

New and updated MSDS' are presented in the ANSI Z400.1 Sixteen-section format. All available information is included in systematic updates.

C) ABOUT THE PURPOSE AND AVAILABILITY OF THIS DOCUMENT

Under the federal OSHA Hazard Communication Standard and some State Right to Know laws, employers using this product in their operation must make this MSDS available to all employees handling this product in any manner. The MSDS must be readily available for review by all persons concerned.

This MSDS is designed to effectively communicate Health and Physical Hazards to the material handler and all other responsible persons concerned with Health and Environmental protection and regulatory compliance. Distributors receiving this MSDS are obligated to readily provide a copy to their customers, affiliates, and agents.

D) THE PRODUCT USER RESPONSIBILITY NOTICE

This type of document cannot cover all possible unique situations. It is the product user's responsibility to provide a safe workplace, and to pass on all Health, Safety and Environmental information to all employees and customers that may handle this product. Under 29 CFR 1910.1200, all product users and handlers must be informed of U.S. OSHA requirements, and the need to be familiar with them.

E) ABOUT CUSTOMER INQUIRIES

This MSDS includes all technical and Regulatory information available on the Effective Date. Please Fax technical questions directly to the appropriate laboratory. Chicago Lab Fax: 312-666-8530, or Los Angeles Lab Fax: 562-921-3461. Fax all health, safety & environmental questions to the Chicago office at 312-666-2015. Note: Product information requests will be expedited by providing: 1) The eight digit Keystone Product ID Number, 2) The complete Keystone Trade Name and 3) Detailed comments explaining the nature of our client's request or problem.

EFFECTIVE DATE

SUPERSEDES

07-26-01

03-20-98

SECTION 1 CHEMICAL IDENTIFICATION

C.I. NAME

: ACID BLACK 2

C.I. NUMBER : 50420 CAS NUMBER : 8005-03-6

CHEMICAL FAMILY : AZINE DYE PHYSICAL FORM : POWDER

SECTION 2 INGREDIENTS HAZARDOUS UNDER OSHA 29 CFR PART 1910.1200 APPENDIX A & B

COMPONENT NAME

CAS NUMBER

PET.

TLV

C.I. ACID BLACK 2*

8005-03-6

NE

NE

100

*READ & UNDERSTAND SECTIONS 3, 8 & 11 FOR HEALTH & SAFETY INFORMATION. WEAR ALL PROTECTIVE EQUIPMENT & CLOTHING DESCRIBED IN SECTION 8.

SECTION 3 HAZARD IDENTIFICATION AND EMERGENCY OVERVIEW

HMIS RATINGS

HEALTH

FLAMMABILITY 1

REACTIVITY

PROTECTION

EMERGENCY OVERVIEW: CAN CAUSE SLIGHT EYE AND SKIN IRRITATION. CAN CAUSE RESPIRATORY

POSSIBLE EXPOSURES: EYES, SKIN, BREATHING DUSTS, ACCIDENTAL SWALLOWING

POSSIBLE HEALTH EFFECTS:

EYE CONTACT: CAN SLIGHTLY IRRITATE. 1

SKIN CONTACT: CAN SLIGHTLY IRRITATE. 1

BREATHING DUST: CAN IRRITATE THE NOSE, THROAT AND LUNGS. 1

SWALLOWING: EXPECTED TO BE PRACTICALLY NON-TOXIC. 1

SENSITIZATION: NK

TARGET ORGANS: EYES, LUNGS, SKIN, NOSE, THROAT 1

CANCER INFORMATION:

PRODUCT AND COMPONENTS NOT KNOWN TO US TO BE CARCINOGENS

IARC: NK OSHA: NR

1 PRECAUTIONS:

TO HELP PROTECT YOURSELF FROM EITHER EXPECTED OR UNFORSEEN IRRITATION OR ALLERGIC REACTIONS, WORKERS SHOULD WEAR ALL PROPERLY SELECTED PROTECTIVE EQUIPMENT AND CLOTHING AS INSTRUCTED IN SECTION 8 OF THIS MSDS. WASH HANDS AND FACE AFTER HANDLING AND BEFORE EATING, DRINKING, SMOKING OR USING RESTROOM FACILITIES. AFTER EACH SHIFT, CLEAN ALL PROTECTIVE EQUIPMENT, WASH ALL WORK CLOTHES, AND SHOWER. SEE SECTION 11, TOXICOLOGY INFORMATION.

UNUSUAL HAZARDS: IF MIXED WITH AIR IN SUFFICIENT AMOUNTS & PROPORTIONS, ORGANIC DUSTS CAN FORM FLAMMABLE OR EXPLOSIVE DUST/AIR MIXTURES. AS PRECAUTIONS, KEEP AREAS CLEAN AND AVOID DUST BUILD-UP. HAVE PLENTY OF GOOD VENTILATION. AVOID CREATING VERY DUSTY CONDITIONS. WHEN MIXING, POURING OR PROCESSING BULK AMOUNTS OF POWDERS, GROUND ALL CONTAINERS AND AVOID STATIC CHARGES, SPARKS, SMOKING, OPEN FLAMES, OR OTHER POSSIBLE CAUSES OF FIRE OR EXPLOSION.

SECTION 4 FIRST AID INSTRUCTIONS

EYE CONTACT: IMMEDIATELY RINSE WITH PLENTY OF CLEAN FLOWING WATER FOR AT LEAST 20 MINUTES, HOLDING EYELIDS OPEN TO RINSE COMPLETELY. CALL A DOCTOR, AND GET MEDICAL HELP QUICKLY, AS A PRECAUTION.

- SKIN CONTACT: REMOVE AFFECTED CLOTHING. WASH AFFECTED SKIN AREA WITH PLENTY OF SOAP AND WATER. RINSE WITH PLENTY OF WATER. WASH ALL WORK CLOTHES BEFORE WEARING AGAIN. IF ANY REDNESS, SWELLING, ITCHING, OR PAIN OF THE
- BREATHING PRODUCT DUST: MOVE PERSON TO FRESH AIR. IF PERSON IS HAVING DIFFICULTY BREATHING, GIVE OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. GET EMERGENCY MEDICAL HELP QUICKLY. CALL 911 IF AVAILABLE IN YOUR AREA, OR OTHER MEDICAL EMERGENCY NUMBER.
- SWALLOWING OF PRODUCT: IF SWALLOWED, GIVE PERSON SEVERAL GLASSES OF WATER AND FORCE VOMITING. NEVER GIVE ANY FLUIDS OR FORCE VOMITING IF THE PERSON IS UNCONSCIOUS, OR IS HAVING CONVULSIONS, OR HAS NO GAG REFLEX. CONTACT A DOCTOR QUICKLY TO GET MEDICAL HELP, CALL 911, OR OTHER MEDICAL

SECTION 5 FIRE FIGHTING INSTRUCTIONS _______

FLASH POINT

TYPES OF EXTINGUISHERS : DRY CHEMICAL, CO2, WATER SPRAY OR REGULAR FOAM FIREFIGHTING DIRECTIONS: WEAR SELF-CONTAINED BREATHING APPARATUS TO PROTECT AGAINST POSSIBLY TOXIC FUMES. WEAR FULL FIRE-PROTECTIVE CLOTHING. MOVE CONTAINERS FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK. APPLY COOLING WATER TO SIDES OF CONTAINERS THAT ARE EXPOSED TO FLAMES UNTIL WELL AFTER

SECTION 6 ACCIDENTAL SPILL OR RELEASES

WEAR A NIOSH APPROVED DUST RESPIRATOR, WITH ALL PROTECTIVE CLOTHING AND EQUIPMENT AS DIRECTED IN SECTION 8 OF THIS MSDS.

CONTAIN AND CLEAN UP SPILL IMMEDIATELY. SWEEP POWDERS CAREFULLY, USING AN ABSORBENT (SWEEPING COMPOUND) TO KEEP DOWN THE DUST IN THE AREA. SCOOP MATERIAL & ABSORBENT INTO DISPOSAL DRUM, AND SEAL.

RCRA STATUS: SEE REGULATORY INFORMATION, SECTION 15.

ENVIRONMENTAL PROTECTION: PREVENT FROM ENTERING FLOOR DRAINS OR SEWERS. DO NOT RELEASE TO SEWER WITHOUT PROPER GOVERNMENT PERMISSION AT ALL LEVELS.

SEE SECTION 13, DISPOSAL CONSIDERATIONS/ENVIRONMENTAL PROTECTION PROCEDURES

SECTION 7 HANDLING AND STORAGE

PROTECT PRODUCT FROM MOISTURE, STORE IN COOL, DRY PLACE UNDER LOW RELATIVE HUMIDITY, AWAY FROM EXCESSIVE HEAT. STORE IN ORIGINAL OR EQUIVALENT WATER-PROOF CONTAINERS. RESEAL CONTAINERS TIGHTLY AFTER EACH USE. KEEP OUT OF DIRECT SUNLIGHT.

SHELF LIFE: INDEFINITE WHEN STORED CAREFULLY AS INSTRUCTED ABOVE.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

NOTE: WHEN SELECTING PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING, FOLLOW ALL MANUFACTURER SPECIFICATIONS AND RECOMMENDATIONS THAT APPLY TO YOUR SPECIFIC OPERATIONS AND PROCESSING CONDITIONS. TAKE INTO CONSIDERATION ALL CONDITIONS AND ALL CHEMICALS TO BE HANDLED OR PROCESSED

- EYE PROTECTION: WEAR SPLASH-PROOF CHEMICAL SAFETY GOGGLES. CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH CHEMICALS.
- SKIN PROTECTION: WEAR CHEMICALLY RESISTANT RUBBER GLOVES, SELECTED WITH YOUR SPECIFIC PROCESSING CONDITIONS AND CHEMICALS TO BE HANDLED IN MIND. WEAR COVERALLS AND BOOTS TO MINIMIZE SKIN CONTACT. AS PRECAUTIONS, WASH HANDS & FACE WITH MILD SOAP & WATER BEFORE EATING, DRINKING, SMOKING, OR USING RESTROOM. AFTER EACH SHIFT, CLEAN ALL PROTECTIVE EQUIPMENT, WASH
- LUNG, THROAT & NASAL PROTECTION: WEAR NIOSH APPROVED DUST RESPIRATOR FOR YOUR PARTICULAR OPERATION AND MATERIALS BEING HANDLED.
- OTHER PROTECTION: EYE WASH FOUNTAINS & DRENCH SHOWERS SHOULD BE LOCATED WITHIN 100 FEET OR A 10 SECOND WALK OF THE WORK AREA PER ANSI Z358.1-1990

VENTILATION: LOCAL EXHAUST IS RECOMMENDED.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION MELTING POINT : BLACK POWDER/CRYSTALS, NO ODOR

WATER SOLUBILITY : NE
PH : SOLUBLE

PH : 7 @ 1.0% SPECIFIC GRAVITY : 1.15

DENSITY % TOTAL VOC'S : 9.57 (LBS. PER GALLON)

% NON-VOLATILES : 100 % WATER

SECTION 10 STABILITY AND REACTIVITY

STABILITY CONDITIONS TO AVOID : STABLE HAZARDOUS POLYMAN : NK

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

INCOMPATIBLE MATERIALS : STRONG OXIDIZING AND REDUCING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: BURNING CAN PRODUCE OXIDES OF CARBON AND

SECTION 11 TOXICOLOGY INFORMATION

ORAL LD50 (RAT): > 5000 MG/KG

DERMAL LD50 (RAT): NE

INHALATION LC50 (RAT): NE

EYE EFFECTS (ANIMAL): SLIGHTLY IRRITATING 1 SKIN EFFECTS (ANIMAL): SLIGHTLY IRRITATING 1

SEE SECTION 3 FOR ANY OTHER OBSERVATIONS, EXPECTATIONS OR COMMENTS.

1) AS PRECAUTIONS TO HELP MINIMIZE CONTACT, WEAR ALL PROTECTIVE EQUIPMENT & CLOTHING AS INSTRUCTED IN SECTION 8 OF THIS MSDS. READ SECTION 8.

GENERAL PRECAUTIONS: ALWAYS PRACTICE GOOD INDUSTRIAL HYGIENE, HANDLE WITH CARE, AVOID PERSONAL CONTACT. DO NOT GET INTO EYES OR ON SKIN, DO NOT BREATHE DUST OF PRODUCT, DO NOT SWALLOW. WASH HANDS WITH SOAP AND WATER, AND RINSE WELL AFTER HANDLING PRODUCT. SHOWER AFTER EACH SHIFT. WASH ALL WORK CLOTHING AND COMPLETELY CLEAN ALL PROTECTIVE EQUIPMENT AFTER

MUTAGENICITY: NK

ADDITIONAL INFORMATION: CHECK SECTION 3, HAZARD IDENTIFICATION AND EMERGENCY

MEDICAL CONDITIONS WORSENED BY EXPOSURE: PERSONS WITH BREATHING AND LUNG PROBLEMS CAN BE AFFECTED BY BREATHING IN ANY TYPE OF DUSTY MATERIAL. PERSONS WITH ASTHMA, ALLERGIES, OR OTHER BREATHING-RELATED PROBLEMS SHOULD STAY AWAY FROM, NOT HANDLE, AND NOT BE EXPOSED TO ANY DUSTY PRODUCTS OR

SECTION 12 ECOLOGICAL DATA

BOD 5: NE COD: NE

FISH TOXICITY: NE SEED TOXICITY: NE

CWA TOXIC POLLUTANTS: NK

BIOLOGICAL ELIMINATION: NE

SECTION 13 DISPOSAL CONSIDERATIONS/ENVIRONMENTAL PROTECTION PROCEDURES

DISPOSAL METHODS:

IT IS RECOMMENDED THAT YOU SELECT AN ALTERNATIVE BELOW ACCORDING TO THE FOLLOWING ORDER OF PREFERENCE, DEPENDING ON ENVIRONMENTAL IMPACT:

- 1) RECYCLE OR REWORK MATERIAL IF AT ALL POSSIBLE
- 2) INCINERATE MATERIAL AT AN APPROVED FACILITY

TABLE AT AN ACCEPTABLE WASTE TREATMENT FACILITY, OR MUNICIPAL WASTE TREATMENT PLANT AFTER PROPER TESTING & APPROVAL OF WASTE SAMPLES.

IF DISPOSED OF IN IT'S ORIGINAL UNUSED FORM, THIS MATERIAL SHOULD BE TREATED, AND DISPOSED OF AT AN APPROVED SITE OR FACILITY, IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE & LOCAL ENVIRONMENTAL REGULATIONS. YOU MUST CONTACT THE PROPER GOVERNMENT AGENCIES FOR ADDITIONAL DIRECTIONS. ALL WASTE MATERIAL & WASTE WATER SHOULD BE DISPOSED OF CORRECTLY, UNDER ALL FEDERAL, STATE , CITY & COUNTY LAWS.

RCRA STATUS: SEE SECTION 15, REGULATORY INFORMATION

DO NOT RELEASE DYE OR DYE SOLUTION INTO ANY WATERWAYS OR SEWER SYSTEMS WITHOUT PROPER GOVERNMENT PERMISSION FROM ALL LEVELS.

CONTAINER REUSE: AN "EMPTY" CONTAINER CAN CONTAIN PRODUCT RESIDUE, AND SHOULD NOT BE REUSED. IF NOT PROFESSIONALLY CLEANED & RECONDITIONED, CRUSHING OR OTHER MEANS IS RECOMMENDED TO PREVENT UNAUTHORIZED REUSE.

SECTION 14 TRANSPORT INFORMATION

DOT STATUS (HIGHWAY AND RAIL): NR

IATA STATUS (AIR): NR

SECTION 15 REGULATORY INFORMATION

AICS (AUSTRALIA): COMPONENTS LISTED

CAL. PROP. 65: PRODUCT IS NOT KNOWN TO CONTAIN SUBSTANCES THAT CALIFORNIA LISTS AS CAUSING CANCER OR REPRODUCTIVE TOXICITY.

CERCLA: NH

CLEAN AIR ACT:

TITLE III-HAP'S: NK

TITLE V-VOC'S: SEE SECTION 9

TITLE VI-ODC'S: NOT MANUFACTURED WITH NOR CONTAINING CLASS I OR II ODC'S CONEG-TYPICAL METALS PRESENT IN PPM:

CADMIUM NE

CHROMIUM NE

LEAD NE

MERCURY NE

DSL (CANADA): COMPONENTS LISTED ECL (KOREA): SERIAL #KE-06266

EINECS (EUROPE): NOT LISTED

ENCS (JAPAN): #5-1876

FDA STATUS: NL

OTHER TYPICAL DATA IN PPM: NK

PICCS (PHILIPPINES): COMPONENTS LISTED

RCRA: NOT HAZARDOUS IN IT'S PURCHASED FORM. HOWEVER, UNDER RCRA, IT IS THE PRODUCT USER'S RESPONSIBILITY TO DETERMINE AT TIME OF DISPOSAL IF ANY

MATERIAL CONTAINING THE PRODUCT OR DERIVED FROM THE PRODUCT IS A

SARA 311/312: IMMEDIATE/ACUTE HEALTH HAZARD : YES

DELAYED/CHRONIC HEALTH HAZARD : NO FIRE HAZARD

SUDDEN RELEASE OF PRESSURE HAZARD: NO

REACTIVITY HAZARD SARA 313: NR

TSCA: COMPONENTS LISTED

USDA: NL WHMIS: D-2-B

SECTION 16 OTHER INFORMATION

REASON FOR REVISION 07-26-01: GENERAL REVIEW

CODE KEY

NA = NOT APPLICABLE TO THIS MATERIAL

NC = NOT CERTAIN, UNDETERMINED

ND = NO DATA IS CURRENTLY AVAILABLE

NE = NOT ESTABLISHED, NO TESTING IS PLANNED

NH = NOT HAZARDOUS UNDER CITED REGULATIONS

NK = NONE KNOWN, NO INFORMATION FOUND IN DATA SEARCHS NL = NOT LISTED OR APPROVED UNDER THESE REGULATIONS

NR = NOT REGULATED OR REPORTABLE

INDITITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CORRECT. HOWEVER, NO GUARANTEE OR WARRANTY OF ANY KIND EXPRESSED OR IMPLIED, IS MADE WITH RESPECT TO THE INFORMATION CONTAINED HEREIN. THIS MATERIAL SAFETY DATA SHEET WAS PREPARED TO COMPLY WITH THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200, AND SUPERSEDES ANY DREVIOUS INFORMATION PREVIOUSLY DATED SHEETS ARE INVALID & UNAPPLICABLE PREVIOUS INFORMATION. PREVIOUSLY DATED SHEETS ARE INVALID & UNAPPLICABLE.