KEYSTONE ANILINE CORPORATION

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CHICAGO, ILLINOIS 60612

CORPORATE OFFICE: 312.666.2015

HEALTH & SAFETY FAX: 312.666.8530

TRADE NAME: KECO ACID ROYAL BLUE R

PRODUCT ID: 201-025-51

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 To avoid use of outdated information, please completely destroy ALL previously dated MSDS' that are on file.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:09-22-04 SUPERSEDES: 09-17-04 PRODUCT CODE: 201-025-51

SECTION 1 CHEMICAL IDENTIFICATION

C.I. NAME

: ACID BLUE 25

C.I. NUMBER : 62055 CAS NUMBER : 6408-78-2

CHEMICAL FAMILY: ANTHRAQUINONE DYE

PHYSICAL FORM : POWDER

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

COMPONENT NAME

CAS NUMBER

PEL

C.I. ACID BLUE 25

6408-78-2 NE

NE

< 70

SECTION 3 HAZARD IDENTIFICATION AND EMERGENCY OVERVIEW

HMIS RATINGS: HEALTH 1 FLAMMABILITY 1 REACTIVITY 0 PROTECTION F, N 0=MINIMAL 1=SLIGHT 2=MODERATE 3=SERIOUS 4=SEVERE

EMERGENCY OVERVIEW: CAN CAUSE EYE AND RESPIRATORY IRRITATION. OVEREXPOSURE CAN CAUSE MODERATE SKIN IRRITATION. CAN CAUSE STOMACH AND INTESTINE DISTURBANCES IF

PRIMARY ROUTE (S) OF EXPOSURE: SKIN CONTACT, INHALATION, EYE CONTACT.

EXPOSURE LIMITS: NO EXPOSURE LIMITS HAVE BEEN DETERMINED OR FOUND IN EXISTING PUBLISHED STUDIES. IT IS SUGGESTED THAT THIS PRODUCT BE USED IN ACCORDANCE WITH GOOD INDUSTRIAL PRACTICES. HANDLE WITH CARE. AVOID

POSSIBLE HEALTH EFFECTS:

EYE CONTACT: MAY SLIGHTLY IRRITATE. OVEREXPOSURE TO THIS PRODUCT MAY CAUSE

SKIN CONTACT: NOT EXPECTED TO IRRITATE BASED ON ANIMAL TOXICITY DATA HOWEVER, OVEREXPOSURE TO THIS PRODUCT CAN CAUSE MECHANICAL IRRITATION AND COLORATION OF THE SKIN TO OCCUR. BREATHING DUST: MAY IRRITATE THE NOSE, THROAT AND LUNGS.

SWALLOWING: MAY CAUSE STOMACH AND INTESTINE DISTURBANCES.

SENSITIZATION: NK

CANCER INFORMATION:

PRODUCT AND COMPONENTS NOT KNOWN TO US TO BE CARCINOGENS

NTP: NK IARC: NK OSHA: NR

MEDICAL CONDITIONS MADE WORSE BY EXPOSURE: PERSONS WITH BREATHING AND LUNG PROBLEMS CAN BE AFFECTED BY BREATHING IN ANY TYPE OF DUSTY MATERIAL.

SECTION 4 FIRST AID INSTRUCTIONS

EYE CONTACT: IMMEDIATELY RINSE WITH PLENTY OF CLEAN FLOWING WATER FOR AT LEAST 15 MINUTES, HOLDING EYELIDS OPEN TO RINSE COMPLETELY. IF IRRITATION OCCURS AND PERSISTS GET MEDICAL ATTENTION.

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 IRRITATION OCCURS AND PERSISTS GET MEDICAL ATTENTION.

BREATHING PRODUCT DUST: MOVE PERSON TO FRESH AIR. IF PERSON IS HAVING DIFFICULTY BREATHING, GIVE OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, AND GET EMERGENCY MEDICAL HELP QUICKLY.

SWALLOWING OF PRODUCT: IF SWALLOWED, GIVE SEVERAL GLASSES OF MILK OR 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 EMERGENCY SERVICES AVAILABLE IN YOUR AREA. HAVE THIS MSDS

CECTION, S FIRE FIGHTING INSTRUCTIONS

FLASH POINT : NORMALLY STABLE, NOT COMBUSTIBLE NOR FLAMMABLE : NORMALLY STABLE, NOT COMBUSTIBLE NOR FLAMMABLE FLAMMABLE LIMITS

TYPES OF EXTINGUISHERS : WATER, DRY CHEMICAL, CO2, FOAM

FIREFIGHTING DIRECTIONS: WEAR SELF-CONTAINED BREATHING APPARATUS TO PROTECT AGAINST POSSIBLY TOXIC FUMES. WEAR FULL FIRE-PROTECTIVE CLOTHING. AVOID DUSTING. DUST CAN FORM EXPLOSIVE MIXTURES WITH AIR.

SECTION 6 ACCIDENTAL SPILL OR RELEASE INSTRUCTIONS

WEAR A NIOSH APPROVED DUST RESPIRATOR, WITH ALL PROTECTIVE CLOTHING AND EQUIPMENT AS APPROPRIATE FOR SPILL CONDITION.

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.

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

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. AVOID HUMID

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

NOTE: WHEN SELECTING PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING, TAKE INTO CONSIDERATION ALL CONDITIONS AND ALL CHEMICALS TO BE HANDLED OR PROCESSED.

EYE PROTECTION: WEAR SPLASH-PROOF CHEMICAL SAFETY GOGGLES OR FULL FACE SHIELD. CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH CHEMICALS.

SKIN PROTECTION: WEAR CHEMICALLY IMPERVIOUS GLOVES, COVERALLS AND OTHER PROTECTIVE CLOTHING TO MINIMIZE SKIN CONTACT. AS PRECAUTIONS, WASH HANDS & FACE WITH MILD SOAP & WATER BEFORE EATING, DRINKING, SMOKING, USING RESTROOM. AFTER EACH SHIFT, CLEAN ALL PROTECTIVE EQUIPMENT, WASH WORK CLOTHES AND SHOWER.

LUNG, THROAT & NASAL PROTECTION: WEAR NIOSH APPROVED DUST RESPIRATOR FOR YOUR PARTICULAR OPERATION AND MATERIALS BEING HANDLED.

HYGIENIC PRACTICES: ALWAYS PRACTICE GOOD INDUSTRIAL HYGIENE, HANDLE WITH CARE, AVOID PESONAL CONTACT. DO NOT GET INTO EYES OR ON SKIN, DO NOT BREATH 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

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, MECHANICAL EXHAUST IS ACCEPTABLE

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION DESCRIPTION : BLUE POWDER; SLIGHT ODOR WATER SOLUBILITY : SOLUBLE

: NE : NE BULK DENSITY

SECTION 10 STABILITY AND REACTIVITY

STABILITY : STABLE
CONDITIONS TO AVOID : CONTACT WITH STRONG ACIDS

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

INCOMPATIBLE MATERIALS : OXIDIZING & REDUCING AGENTS MAY DESTROY COLOR HAZARDOUS DECOMPOSITION PRODUCTS: BURNING CAN PRODUCE CO, CO2, OXIDES OF NITROGEN AND OTHER POTENTIALLY TOXIC FUMES. MAY EVOLVE CHLORINE GAS WHEN

SÉCTION 11 TOXICOLOGY INFORMATION

ORAL LD50 (RAT): > 5000 MG/KG

DERMAL LD50 (RAT): NE

INHALATION LC50 (RAT): NE

EYE EFFECTS (RABBIT): SLIGHTLY IRRITATING SKIN EFFECTS (RABBIT): NOT IRRITATING BREATHING EFFECTS: NE. TAKE PRECAUTIONS.

MUTAGENICITY: NK

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:

RECYCLE OR REWORK MATERIAL IF AT ALL POSSIBLE; INCINERATE MATERIAL AT AN APPROVED FACILITY; TREAT AT AN ACCEPTABLE WASTE TREATMENT FACILITY, OR MUNICIPAL WASTE TREATMENT PLANT AFTER PROPER TESTING & APPROVAL OF WASTE SAMPLES, IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE & LOCAL ENVIRONMENTAL REGULATIONS.

DO NOT RELEASE ANY CHEMICALS, DYES OR DYE SOLUTIONS INTO ANY WATERWAYS OR 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 (GROUND AND RAIL): NR IATA STATUS (AIR): NR

SECTION 15 REGULATORY INFORMATION

AICS (AUSTRALIA): COMPONENTS LISTED

CAL. PROP. 65: CONTAINS THE FOLLOWING SUBSTANCES THAT ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR REPRODUCTIVE TOXICITY: CADMIUM, CHROMIUM*, LEAD AND MERCURY. THE TOTAL SUM DOES NOT EXCEED 100 PPM.

*HEXAVALENT CHROMIUM IS A LISTED SUBSTANCE. MINUTE TRACES MAY BE PRESENT IN THE

CLEAN AIR ACT:

TITLE III-HAP'S: NA

TITLE V-VOC'S: NA

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

THE SUM TOTAL OF CADMIUM, CHROMIUM, LEAD AND MERCURY DOES NOT EXCEED 100 PPM DSL (CANADA): COMPONENTS LISTED

ECL (KOREA): COMPONENTS LISTED

EINECS (EUROPE): COMPONENTS LISTED

ENCS (JAPAN): COMPONENTS LISTED

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 DELAYED/CHRONIC HEALTH HAZARD : YES FIRE HAZARD

SUDDEN RELEASE OF PRESSURE HAZARD: NO

REACTIVITY HAZARD

: NO

SARA 313: NR

TSCA: COMPONENTS LISTED

USDA: NL WHMIS: D-2-B

TION 16 OTHER INFORMATION

REASON FOR REVISION 09-22-04: UPDATE TO CURRENT COMPONENT DATA

ACRONYM LIST

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

NL = NOT LISTED OR APPROVED UNDER THESE REGULATIONS

NR = NOT REGULATED OR REPORTABLE

NIOSH = NATIONAL INSTITUTE 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 PREVIOUS INFORMATION. PREVIOUSLY DATED SHEETS ARE INVALID & UNAPPLICABLE.