

WKOLON INDUSTRIES

15th FI, KOLON Tower, Kolon-Ro 11, GWACHEON-City, Gyeonggi-do, KOREA (427-709)
• Tel: 82-2-3677-6124
• Fax: 82-2-3677-6191

REVISION DATE: 1/MAY/2015, VERSION 12.

SECTION I: IDENDIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

GHS PRODUCT IDENTIFIER

NAME

HIKOTACK P-120HS

CHEMICAL FAMILY

PETROLEUM HYDROCARBON RESIN

CAS NUMBER

64742-16-1

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:

RECOMMENDED USE

ADDITIVE FOR ADHESIVES, PAINTS, COATINGS, INKS

RESTRICTIONS ON USE

USED FOR RECOMMENDED USE.

MANUFACTURER/IMPORTER/SUPPLIER INFORMATION

SUPPLIER NAME

KOLON INDUSTRIES

ADDRESS

15TH FL, KOLON TOWER, KOLON-RO 11, GWACHEON-CITY, GYEONGGO-DO, KOREA (427-709)

TELEPHONE / FAX

(82) 2 3677 6124 / (82) 2 3677 6191

EMERGENCY TELEPHONE

HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

(82) 2 3677 6124

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION

US OSHA's Hazard Communication Standard 2012

NOT CLASSIFIED

EL CLP (EC no. 1272/2008)

NOT CLASSIFIED

NFPA

HEALTH = 1 FIRE =1 REACTIVITY = 0 (0 = NO HAZARD, 1 = SLIGHT HAZARD)

SECTION 3: COMPOSITION. INFORMATION ON INGREDIENTS

COMPONENT

CAS NUMBER

Weight % Range

PETROLEUM HYDROCARBON RESIN

64742-16-1

vergint 70 Marig

SECTION 4 : FIRST AID MEASURES

EYE CONTACT

FLUSH EYES WITH AMOUNT OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT

GET MEDICAL ATTENTION IF NEEDED.

DRY AND WASH THOROUGHLY CONTAMINATED CLOTHING AND SHOES BEFORE REUSE

REMOVE CONTAMINATED CLOTHING AND SHOES. WASH IMMEDICATELY SKIN WITH SOAP AND WATER FOR AT LEAST 15 MINUTES.

INHALATION

GIVE ARTIFICIAL RESPIRATION IF VICTIM IS NOT BREATHING.

MOVE VICTIM TO NON-CONTAMINATED PLACE IF SIDE EFFECT OCCURRED.

GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION

GET MEDICAL ATTENTION IF SWALLOWED AMOUNT OF SUBSTANCE.

OTHER NOTES FOR PHYSICIAN

THERE IS NOT SPECTIFIC ANTIDOTE. TAKE FUNCTIONALLY MEASURES ACCORDING TO SYMPTOMS.

SECTION 5 : FIRE FIGHTING MEASURES

SUITABLE(AND UNSUITABLE) EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA

DRY CHEMICAL, CO2, WATER SPRAY, REFULAR FOAM

UNSUITABLE EXTINGUISHING MEDIA

NOT ABAILABLE

IN CASE OF MAJOR FIRE AND LARGE QUANTITIES

USE REGULAR EXTINGUISHING AGENT AND FINE WATER SPRAY.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

THERMAL DECOMPOSITION PRODUCTS

CARBON OXIDES

FIRE AND EXPLOSIVE HAZARD

IT COULD BE A SLIGHT FIRE HAZARD.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

MOVE CONTAINERS FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK.

DO NOT SCATTER SPILLED MATERIAL WITH HIGH PRESSURE WATER STREAMS.

MAKE AN EMBANKMENT FOR FURTHER PROCESSING.

USE EXTINGUISHING AGENT SUITABLE FOR TYPE OF SURROUNDING FIRE.

AVOID INHALATION OF THE SUBSTANCE OR COMBUSTION PRODUCTS.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

KEEP AWAY FROM WATERWAYS AND SEWERS.

ISOLATE EXPOSED AREA.

KEEP UNATHORIZED PERSONNEL AWAY.

MOVE MATERIALS TO SUITABLE CONTAINERS FOR LATER DISPOSAL.

ENVIRONMENTAL PRECAUTIONS AND PROTECTIVE PROCEDURES

ATMOSPHERE

NOT ABAILABLE

LAND

NOT ABAILABLE

UNDERWATER

DO NOT RELEASE SPILLAGE INTO SEWERS.

THE METHODS OF PURIFICATION AND REMOVAL

SMALL SPILL

DISPOSE WASTE AS WASTE SYNTHESIS RESIN(GENERAL WASTE).

LARGE SPILL

COLLECT AND THEN RECYCLE OR DISPOSE AS A WASTE RESIN (GENERAL WASTE).

SECTION 7 : HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

PREVENT SKIN AND EYE CONTACT

AVOID CONTACT IN THE MOLTEN STATE BY HEAT AND VAPOR INHALATION. WHEN STATIC ELECTRICTIY GENERATES, REMOVE BY GROUNDING, CLEANING WORK SPACE. AND USING ARTICLES PREVENTING ELECTRIFICATION.

CONDITIONS FOR SAFE STORAGE

MINIMIZE GENERATION AND ACCUMULATION OF DUST

STORE IN A COOL, DRY AND WELL-VENTILATED AREA.

AVOID CONTACT WITH STRAIGHT SUNLIGHT.

STORE AND USE BY REGULATION OF CENTRAL GOVERNMENT AND LOCAL SELF-GOVERNMENT.

SECTION 8: EXPOSURE CONTROLS. PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

OSHA

TWA - 5 mg/m³ (RESPIRABLE DUST FRACTION)

BIOLOGICAL EXPOSURE INDEX

NOT AVAILABLE

KOREAN OCCUPATION OF SAFETY AND HEALTH REGULATION

NOT AVAILABLE

APPROPRIATE ENGINEERING CONTROLS

PROVIDE LOCAL EXHAUST VENTILATION SYSTEM OR OTHER ENGINEERING CONTROLS TO KEEP THE AIRBORNE CONCENTRATIONS OF VAPOR BELOW THEIR RESPECTIVE THRESHOLD LIMIT VALUE.

CHECK LEGAL SUITABILITY OF EXPOSURE LEVEL.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATOR

WEAR NIOSH OR EUROPEAN STANDARD EN 149 APPROVED FULL OR HALF FACE PIECE(WITH GOGGLES) RESPIRATORY PROTECTIVE EQUIPMENT WHEN NECESSARY.

AIR RESPIRATOR ARE REQUIRED IN CASE OF HIGH FREQUENCY USE OR SEVERE EXPOSURE

AIR-PURIFYING RESPIRATOR(HIGH EFFICIENCY PARTIFULATE ABSORBER)
IN CASE OF UNKNOWN CONCENTRATIONS OR URGENT RISK OF LIFE/HEALTH
AIR-LINE MASK(COMBINATION AIRLINE BREATHING MASK)

AIR-BREATHING APPARAUSE(FULL FACEPIECE)

EYE PROTECTION

WEAR SAFETY GLASSES(GOGGLES) TO PROTECT EYES FROM DUST.

HAND PROTECTION

WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT EXPOSURE OF SKIN.

BODY PROTECTION

WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT EXPOSURE OF SKIN.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

STATE

SOLID

COLOR

YELLOW

ODOR

PETROCHEMICAL ODOR

ODOR THRESHOLD

NOT AVAILABLE

Ph

NOT AVAILABLE

MELTING POINT/FREEZING POINT

126~130°C (SOFTENING POINT)

INITIAL BOILING POINT AND BOILING RANGE

NOT AVAILABLE

FLASH POINT

>270℃

EVAPORATION RATE

NOT APPLICABLE

FLAMMABILITY(SOLID, GAS)

NOT AVAILABLE

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS

NOT AVAILABLE

(DUST EXPLSIVENESS: MINIMUM COMPLEXING ENGERGY(M.I.E TEST) 3~5mJ)

VAPOR PRESSURE

NOT APPLICABLE

SOLUBILITY(ies)

INSOLUBLE

VAPOR DENSITY

NOT APPLICABLE

SPECIFIC GRAVITY

1.05~1.10

PARTITION COEFFICIENT(n-OCTANOL/WATER)

NOT APPLICABLE

AUTO IGNITION TEMPERATURE

NOT AVAILABLE

DECOMPOSITION TEMPERATURE

NOT AVAILABLE

VISCOSITY

360 cps(200°C)

MOLECULAR WEIGHT

APPROX. 2400 (Mw)

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY AND POSSIBILITY OF HAZARDOUS REACTIONS

STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

IT WILL NOT OCCUR POLYMERIZATION REACTION.

CONDITION TO AVOID

AVOID HEAT, FLAMES, SPARKS AND OTHER SOURCES OF IGNITION.

INCOMPATIBLE MATERIALS

STRONG OXIDIZING AGENT

HAZARDOUS DECOMPOSITION PRODUCTS

CARBON OXIDES

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON THE LIKELY ROUTES OF EXPOSURE

VAPOR BY POLYMERIZATION OR DECOMPOSITION MAY CAUSE IRRATATION OF EYES, SKIN, THROAT AND LUNG.

INFORMATION OF HEALTH HAZARDOUS

ACUTE TOXICITY

ORAL: NOT CLASSIFIED (LD50 = 7,000mg/kg(RAT))

DERMAL: NOT CLASSIFIED (NOT AVAILABLE)

INHALATION(DUST/MIST): NOT CLASSIFIED (NOT AVAILABLE)

SKIN COROOSION/IRRITATION

NOT CLASSIFIED

SKIN IRRITATION TEST: NOT IRRITATIVEW BASED ON PRIMARY IRITATION

INDEX = 0

SERIOUS EYE DAMAGE/IRRITATION

NOT CLASSIFIED (NOT AVAILABLE)

RESPIRATORY SENSITIZER

NOT AVAILABLE

SKIN SENSITIZATION

NOT CLASSIFIED (NOT AVAILABLE)

CARCINOGENICITY

NOT AVAILABLE

IARC: NOT AVAILABLE NTP: NOT AVAILABLE OSHA: NOT AVAILABLE WISHA: NOT AVAILABLE ACGIH: NOT AVAILABLE

MUTAGENICITY

NOT CLASSIFIED (NOT AVAILABLE)

REPRODUCTIVE TOXICITY

NOT CLASSIFIED (NOT AVAILABLE)

SPECIFIC TARGET ORGAN TOXICITY(SINGLE EXPOSURE)

NOT CLASSIFIED (NOT AVAILABLE)

<u>SPECIFIC TARGET ORGAN TOXICITY(REPEAT EXPOSURE)</u>

NOT CLASSIFIED (NOT AVAILABLE)

ASPIRATION HAZARD

NOT CLASSIFIED (NOT AVAILABLE)

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL TOXICITY

FISH

NOT CLASSIFIED (NOT AVAILABLE)

CRUSTACEA

NOT CLASSIFIED (NOT AVAILABLE)

ALGAE

NOT CLASSIFIED (NOT AVAILABLE)

PERSISTENCE AND DEGRADABILITY

PERSISTENCE

NOT AVAILABLE

DEGRADABILITY

NOT AVAILABLE

BIOACCUMULATIVE POTENTIAL

BIOACCUMULATION

NOT AVAILABLE

BIODEGRADATION

NOT AVAILABLE

MOBILITY IN SOIL

NOT AVAILABLE

OTHER HAZARD EFFECTS

NOT AVAILABLE

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHOD

WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL ENVIRONMENTAL CONTROL REGULATIONS.

DISPOSAL PRECAUTION

CONSIDER THE REQUIRE ATTENTIONS IN ACCORDANCE WITH WASTE TREATMENT MANAGEMENT REGULATION.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER

NOT APPLICABLE BY IATA REGULATION

UN PROPER SHIPPING NAME

NOT APPLICABLE BY IATA REGULATION

TRANSPORT HAZARD CLASS

NOT APPLICABLE BY IATA REGULATION

PACKING GROUP

NOT APPLICABLE BY IATA REGULATION

MARINE POLLUTANT

NOT APPLICABLE BY IATA REGULATION

INFORMATION NOTE

IN CASE OF FIRE

NOT APPLICABLE BY IATA REGULATION

IN CASE OF LEAKAGE

NOT APPLICABLE BY IATA REGULATION

SECTION 15: REGULATORY INFORMATION

EU CLASSIFICATION

CLASSIFICATION

NOT AVAILABLE

RISK PHRASES

NOT AVAILABLE

SAFETY PHRASES

NOT AVAILABLE

EU RoHS REGULATION(DIRECTIVE 2002/96/EC)

THE FOUR HEAVY METALS AND BROMINATED FLAME RETARDANTS WERE NOT DETECTED.

U.S.A MANAGEMENT INFORMATION

OSHA(29CFR1910.119)

NOT REGULATED

CERCLA 103(40CFR302.4)

NOT REGULATED

EPCRA 302(40CFR355.3)

NOT REGULATED

EPCRA 304(40CFR355.4)

NOT REGULATED

EPCRA 313(40CFR372.65)

NOT REGULATED

SARA CLASSIFICATION

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312(40CFR370.21): NONE SARA SECTION 313(40CFR372.65): NONE

SUBSTANCE OF ROTERDAME PROTOCOL

NOT REGULATED

SUBSTANCE OF STOCKHOLME PROTOCOL

NOT REGULATED

SUBSTANCE OF MONTREAL PROTOCOL

NOT REGULATED

INVENTORY STATUS

TSCA(US TOXIC SUBSTANCES CONTROL ACT): ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE **TSCA** INVENTORY.

DSL(CANADIAN DOMESTIC SUBSTANCES LIST): ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE **DSL** INVENTORY.

EINECS(EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES): THIS PRODUCT IS LISTED ON EINECS OR OTHERWISE COMPLIES WITH EINECS REQUIREMENTS.

AICS/NICNAS (AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES AND NATIONAL INDUSTRIAL CHEMICALS NOTIFICATION AND ASSESSMENT SCHEME): ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE AICS OR OTHERWISE COMPLY WITH NICNAS INVENTORY.

MITI(JAPANESS HANDBOOK OF EXISTING AND NEW CHEMICAL SUBSTANCES): ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE MITI INVENTORY.

KECI(KOREAN EXISTING CHEMICAL AND CHEMICAL SUBSTANCES): ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE **KECI** INVENTORY. **PICCS**(PHILIPPINES INVENTORY OF CHEMICAL AND CHEMICAL SUBSTANCES)

ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE **PICCS** INVENTORY.

SECTION 16: OTHER INFORMATION

INFORMATION SOURCE AND REFERENCES

KOREA OCCUPATIONAL HEALTH&SAFETY AGENCY(SDS)

(HTTP://WWW.KOSHA.NET)

THE PRODUCT ANALYSIS CONDUCTED BY RESEARCH INSTITUTE OF KOLON INDUSTIRES, Inc.(CHEMICAL)

KOREA TESTING AND RESEARCH INSTITUTE FOR CHEMICAL INDUSTRY SKIN IRRITATION TEST DATA(TBH-000718(2003), TEST METHOD: THE NOTICE 1999-61 OF KOREA FOOD AND DRUG ADMINISTRATION

KOREA TESTING AND RESEARCH INSTITUTE FOR CHEMICAL INDUSTRY HAZ-ARDOUS CHEMICAL SUBSTANCE ANALYSIS DATA M.I.E TEST REPORT OF CHILWORTH IN USA
THE SDS DATA PUBLISHED BY ANTIOXIDANT MANUFACTURER
CHEMICAL RISK INFORMATION PLATFORM(CHRIP)
(HTTP://WWW.SAFE.NITE.GO.JP/ENGLISH/DB.HTML)
QUANTITATIVE STRUCTURE ACTIVITY RELATION(QSAR)
INTERNATIONAL UNIFORM CHEMICAL INFORMATION DATABASE(IUCLID)
(HTTP://ECB.JRC.IT/ESIS)

ISSUING DATE

07 AUGUST 1996

REVISION NUMBER AND DATE

REVISION NUMBER

12TH

DATE OF THE LASTEST REVISION

1 MAY 2015

REASON FOR REVISION

CLASSIFICATION AND LABELLING OF CHEMICALS FOLLOWING GHS AND FOLLOWING THE NOTICE ABOUT PREPARING OF A SAFETY DATA SHEET.

PREPARED BY

G.D.KIM, MANAGER OF TECHNICAL TEAM, ULSAN PLANT, KOLON INDUSTRIES

THE INFORMATION CONTAINED HEREIN IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF ACCURATE. SINCE SDS IS TO PROVIDE INFORMATION ON THE HEALTH/SAFETY/ ENVIRONMENT TO USERS OF THE SUBSTANCE, DATA WRITTEN HERE DO NOT MEAN TO ENSURE PROPERTIES OF MATTER OR SPEC.