

SAFETY DATA SHEET



ROYAL-G (YELLOW/MAGENTA/CYAN/BLACK/INTENSE BLACK)

Date of issue: 06/09/2021

Revision date: 06/09/2021

Version: 1.1

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY /UNDERTAKING

1.1. PRODUCT IDENTIFIER

Product Form : Mixture
Product Name : ROYAL-G YELLOW/MAGENTA/CYAN/BLACK/INTENSE BLACK

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Printing ink, offset, oxidative drying.
Intended for professional use on offset presses

1.3. Details of the supplier of the safety data sheet

Kwang Myung Ink Co., Ltd.

6, Noksansandan 165-ro, Gangseo-gu, Busan, Republic of Korea
T. +82-51-831-9800
F. +82-51-831-6608
E-mail : kmink@kmink.co.kr

N. American Distribution | KMi America, LLC

1395 Bangor Street
Copiague, NY 11726
T. +1 631-553-8035
E-mail: info@kmiamerica.com

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE :

Skin Sensitizer (Category 1) Respiratory Sensitizer (Category 1)

PICTOGRAMS :



SIGNAL WORD : Warning

HAZARD STATEMENTS :

Harmful if inhaled (Mist) *Causes slight skin and eye irritation *May cause allergic reaction *May cause damage to lungs or skin through prolonged or repeated exposure

PRECAUTIONARY STATEMENTS :

P261 #Avoid breathing dust/fume/gas/mist/vapours/spray. P280 #Wear protective gloves/protective clothing/eye protection/face protection.
P405 #Store locked up. P501

#Dispose of contents/container to an approved waste disposal plant. P304+P340 #IF INHALED:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. P201 #Obtain special instructions before use. P202 #Do not handle until all safety precautions have been read and understood. P272 #Contaminated work clothing should not be allowed out of the workplace.
P284 #Wear respiratory protection. P362 #Take off contaminated clothing and wash before reuse. P342+P311 #IF experiencing respiratory symptoms:

Call a POISON CENTER or doctor/physician. P302+P352 #IF ON SKIN: Wash with plenty of soap and water. P333+P313

#If skin irritation or rash occurs: Get medical advice/attention. P308+P313 #IF exposed or concerned: Get medical advice/attention.

HAZARDS NOT OTHERWISE CLASSIFIED OR NOT COVERED BY GHS :

Not Applicable.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Cas Number	Percent Weight
Carbon Black	1333-86-4	0 - 25%
Organic Pigment	Proprietary	0 - 25%
Synthetic Resins	70955-45-2	30 - 70%
Linseed Oil	8001-26-1	5 - 15%
Distillates (petroleum), hydrotreated light	64742-47-8	5 - 20%
Polyethylene	9002-88-4	1 - 5%
Tetrafluoroethene homopolymer	9002-84-0	1 - 5%
Hydroquinone	123-31-9	0 - 1%
Cobalt Dryer	61789-51-3	0 - 1%
Manganese Drier	1336-93-2	0 - 1%
Calcium carbonate	471-34-1	0 - 5%

This Material Has No Reportable Components * ** ***

* This chemical is subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

** California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

*** State Right To Know Acts (MA, NJ, PA)

The specific identity and/ or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

EYES : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
Check for and remove any contact lenses. Get medical attention.

SKIN : Flush contaminated skin with plenty of water, Remove contaminated clothing and shoes.
Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes.
Get medical attention. Wash clothing. before reuse. Clean shoes thoroughly before reuse.

INGESTION : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

INHALATION : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

SYMPTOMS : No Information Available

EFFECTS : No Information Available

NOTES TO FIRST RESPONDERS : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

NOTES TO MEDICAL PERSONNEL : Treat symptomatically

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.

FIRE FIGHTING PROCEDURES : Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment.

FIRE FIGHTING EQUIPMENT : Fire- fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

FIRE EXPLOSION : In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

OTHER CONSIDERATIONS : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARD : Not Applicable

COMBUSTION PRODUCTS : Not Applicable

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Isolate the area and eliminate all ignition sources. Stop the spill at the source.

PROTECTIVE EQUIPMENT : Wear personal protective equipment (See Section 8).

EMERGENCY PRECAUTIONS : Obey relevant local, state, provincial, and federal laws and regulations. Do not allow the product to enter public drainage systems or open water courses. Collect spillage. Notify appropriate authorities if entry occurs.

METHOD OF CLEANING UP : Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid generation of vapors. Contain spills immediately with spill socks and inert materials (e.g. clean sand, sawdust, vermiculate, non-acidic clay). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers, Sweep or scoop into a suitable container for disposal. Wash spill site after material pickup is complete. Consult a regulatory specialist to determine appropriate state or local reporting requirements.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING : Avoid contact with the skin and eyes by wearing recommended personal protective equipment. Ensure adequate ventilation. Avoid breathing vapors, mist, or dust. Do not eat, drink or smoke in the work area. Allow to warm to room temperature before using. Wash thoroughly after handling. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

CONDITIONS FOR SAFE STORAGE : Keep in a dry, cool place. Store in closed containers, in a secure area to prevent container damage and subsequent spillage. Store out of direct sunlight in a cool well- ventilated place. Keep from freezing.

8. EXPOSURE CONTROLS \ PERSONAL PROTECTION

EXPOSURE LIMITS :

ENGINEERING CONTROLS : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

PERSONAL PROTECTIVE EQUIPMENT :



EYES AND FACE : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

SKIN : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

RESPIRATORY : Use a properly fitted, air- purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

WORK HYGIENIC PRACTICES : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

OTHER USE PRECAUTIONS : Chemical- resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment. indicates this is necessary.

COMMENTS : Consult local authorities for acceptable exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : Paste

ODOR : Slight Oily Scent

COLOR : Different according to coloring.

SPECIFIC GRAVITY : 1.05 - 1.10

VOCS, GRAMS/LTR. : 110 - 150

VOCS, LBS/GAL : 0.9 - 1.3

VOLATILE BY VOL% : 11.5 - 16.0

VOLATILE BY WEIGHT% : 11.0 - 15.0

% SOLUBILITY IN WATER : No test date available
AUTO-IGNITION TEMPERATURE : No test date available
BOILING RANGE : 465 F TO 500 F
DECOMPOSITION TEMPERATURE : No test date available
EVAPORATION RATE : No test date available
FLAMMABILITY (Solid/Gas) : No test date available
FLAMMABLE LIMITS : No test date available
FLASH POINT AND METHOD : 215 F(Setaflash Closed Cup)
MOLECULAR FORMULA : No test date available
MOLECULAR WEIGHT : No test date available
OCTANOL /WATER PARTITION COEFFICIENT : No test date available
POUR POINT : No test date available
VAPOUR DENSITY : No test date available
VAPOUR PRESSURE : No test date available
VISCOSITY : No test date available

Note: The term Volatile Organic Compounds (VOC) refers only to volatile organic materials as defined by the US EPA and does not include water, ammonia, acetone or other exempt solvents.

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION : Will not occur under normal conditions.

CONDITION TO AVOID : None Known.

STABILITY : The product is stable.

HAZARDOUS DECOMPOSITION PRODUCTS : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

INCOMPATIBLE MATERIALS : None Known.

POSSIBILITY OF HAZARDOUS REACTIONS : None Known.

11. TOXICOLOGICAL INFORMATION

SIGNS AND SYMPTOMS OF OVEREXPOSURE : No information available

ACUTE EFFECTS :

EYE : No information available

SKIN : No information available

INHALATION : No information available

INGESTION : No information available

TARGET ORGAN : No information available

CHRONIC EFFECTS : No information available

ACUTE TOXICITY VALUES : No information available

SYMPTOMS OF RELATED :

PHYSICAL : No information available

CHEMICAL : No information available

TOXICOLOGICAL CHARACTERISTICS : No information available

DELAAYED AND IMMEDIATE EFFECTS : No information available

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION : No information available

PERSISTENCE AND DEGRADABILITY : No information available

BIO-ACCUMULATIVE POTENTIAL : No information available

MOBILITY : No information available

OTHER ADVERSE EFFECTS : No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT/ PACKAGING DISPOSAL : Empty containers may retain some product. residues, Do not cut, weld or gring used containers unless they have been thoroughly cleaned. Dispose in accordance with local, state, and federal regulations.

WASTE TREATMENT OPTIONS : Under the Resource Conservation and Recovery Act (RCRA), It is the responsibility of the user of the material to determine , at the time of disposal, whether the material is a hazardous waste subject to RCRA. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this Safety Data Sheet Incomplete.

RECOMMENDATIONS : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Refer to protective measures listed in sections 7 and 8.

SAFE HANDLING : Wear personal protective equipment (See Section 8).

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION) TECHNICAL NAME: Not Regulated

DOT PROPER SHIPPING NAME (49 CFR 172-101-102) : Not Regulated

DOT HAZARD CLASS (49 CFR 172-101-102) : None

DOT LABEL : None

DOT PLACARD : None

BILL OF LADING DESCRIPTION : Printing Ink

INTERNATIONAL :

UN/NA NUMBER : Not Regulated or Classified

UN PROPER SHIPPING NAME : Not Regulated

IMDG/IACO CLASSIFICATION : Not Regulated or Classified

IATA CLASSIFICATION : Not Regulated or Classified

ADDITIONAL INFORMATION : None

PACKING GROUP : None

MARINE POLLUTANT : Componets are not listed as marine pollutants.

SPECIAL PRECAUTIONS : Avoid falling, dropping, and freezing containers. Protect container from direct sunlight.

15. REGULATORY INFORMATION

UNITED STATES : All components of this material are on the US TSCA Inventory or are exempt.

EU : To obtain information on the Reach compliance status of this product, please e-mail us at : info@kmiamerica.com

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES :

SARA TITLE INGREDIENTS:

302/304 EMERGENCY PLANNING

EMERGENC PLAN: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CALIF. PROP. 65 : Any known components subject to reporting are listed in Section 3.

State Right To know Acts (MA, NJ, PA) : Any known components subject to reporting Are listed in Section 3.

C.O.N.E.G. : Coalition of Northeastern Governors : Periodically we have an analysis performed on our base products, and they confirm typical trace amounts of the named metals do not exceed 100 ppm with the Exception of those products where a metal may be used as a colorant or additive.

CAAA of 1990: This product does not contain or is packaged with no known Class I or Class II ozone depleting material (ODC) as defined In Section 611 of CAAA of 1990.

N.A.F.T.A : North American Free Trade Agreement: The materials described Herein are manufactured or produced within the confines of the United States, North America.

CONFLICT : In July of 2010, the United States Congress passed legislation-requiring

MINERALS : Companies to report the use of "Conflict Minerals" in the manufacture of their products. "Conflict Minerals" in this context refer to specific minerals originating from mines controlled by armed groups in the Democratic Republic of the Congo or adjoining countries. KMI Printing Ink products do not contain any coltan (columbite tantalite) and its derivatives (tantalum), cassiterite and its derivatives (tin), wolframite and its derivatives (tungsten) and gold. To the best of our knowledge, KMI Printing Ink Company is in full compliance with the regulations regarding conflict minerals.

ABBREVIATIONS and ACRONYMS:

ACGIH - American Conference of Industrial Hygienists

CAS - Chemical Abstracts Service

CERCLA - Comprehensive Environmental Response, Compensation and Liability Act

DOT - Department of Transportation

GHS - Globally Harmonized System of Classification and Labeling of Chemicals

HMIS - Hazardous Materials Information Identification System

IATA - International Air Transport Association

ICAO - International Civil Aviation Organization

IMDG - International Maritime Code for Dangerous Goods

NAPIM - National Association of Printing Ink Manufacturers

NFPA - National Fire Protection Association

NIOSH - National Institute for Occupational Safety and Health

OEL - Occupational Exposure Limit.

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

PPE - Personal Protective Equipment

RTK - Right to Know

TLV - Threshold Limit Value

TWA - Time- weighted Average

WHMIS - Workplace Hazardous Materials Information System

16. OTHER INFORMATION

DATE CREATED : 03-05-21

REVISION INDICATOR : Latest Version

HMIS RATING	
Health :	1
Flammability :	1
Reactivity :	0
Personal Protection :	B

SDS STANDARD: This SDS - Safety Data Sheet Formally MSDS or Material Safety Data Sheet is prepared as outlined by US-OSHA's Hazard Communication Standard (29 CFR 1910.1200 (g) and (Appendix 0 of 29 CFR 1910.1200).

OSHA Regulatory Status: This SDS contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

MANUFACTURER DISCLAIMER : Caution : HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J.J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein. We cannot guarantee that these are the only hazards that exist.