# SAFETY DATA SHEET (SDS)

Jacquard Products
Manufactured by Rupert, Gibbon & Spider, Inc.
P.O. Box 425 | Healdsburg, CA 95448
800.442.0455 | Fax: 707.433.4906
www.jacquardproducts.com



**Revision Date: 01/17/2024**

## SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

| | | |
|---|---|---|
| Product Name: | **POTASSIUM FERRICYANIDE** | |
| Product Number/Code: | **CHM0101, CHM1101, CHM2101, JCY1100, JCY1101, JCY9000** | |
| Recommended Use: | Creating cyanotype prints | |
| Synonym(s): | Potassium hexacyanoferrate (III) | |
| Restrictions on use: | None known | |
| Manufacturer: | Rupert, Gibbon & Spider, Inc.<br>1147 Healdsburg Ave.<br>Healdsburg, CA 95448<br>1-800-442-0455 / 707-433-9577 | |
| Emergency Number: | **ChemTel, Inc.** - Contract #MIS9128344 | |
| | North America:<br>**1-800-255-3924** | International:<br>**1-813-248-0585** |

## SECTION 2 - HAZARD(S) IDENTIFICATION

| | |
|---|---|
| **This product is not considered to be or contain hazardous chemicals based on evaluations made by our company under the OSHA Hazard Communication Standard, reference 29 CFR 1910.1200.** | |
| **Toxicological Data on Ingredients:** | |
| Hazard Classification | Not hazardous |
| Physical Hazards: | Not classified |
| Health Hazards: | Not classified |
| Environmental Hazards: | Not classified |
| **Label Elements** | |
| Pictogram: | None |
| Signal Words: | None |
| **Hazard Statements-EU:** | The mixture does not meet the criteria for classification. |
| **Precautionary Statements-EU:** | |
| Prevention: | See section 8 |
| Response: | See sections 4, 5 & 6 |
| Storage: | See section 7 |
| Disposal: | See section 13 |
| Hazard(s) not otherwise classified: | R32: Contact with acids liberates very toxic gas. |

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## SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| **Chemical identity** | **Content in percent (%)*** | **CAS #** | **EC #** |
|---|---|---|---|
| Potassium hexacyanoferrate(III) | 100.0% | 13746-66-2 | 237-323-33 |

## SECTION 4 - FIRST AID MEASURES

| **Description of first aid measures:** | |
|---|---|
| In the event of skin contact: | Immediately wash with soap and water; rinse thoroughly. Seek immediate medical advice. |
| In the event of eye contact: | Rinse opened eye for several minutes under running water. Consult a physician. |
| In the event of swallowing: | Seek medical treatment. |
| In the event of exposure by inhalation: | Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm. Seek immediate medical advice. |
| Most important symptoms and effects, acute and delayed: | No data available |
| Indication of any immediate medical attention and special treatment needed: | No data available |

## SECTION 5 - FIREFIGHTING MEASURES

| | |
|---|---|
| Extinguishing media: | Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. |
| Special hazards arising from the substance or mixture: | If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide, Nitrogen oxides (NOx), Hydrogen cyanide (HCN), Metal oxide fume |
| Advice for fire fighters: | Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit. |

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions, protective equipment and emergency procedures: | Mount respiratory protective device. Use personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation. |
| Methods and material for containment and clean up: | Pick up mechanically. |
| Prevention of secondary hazards: | No special measures required. |
| Environmental procedures: | Do not allow material to be released to the environment without official permits. Do not allow product to enter drains, sewage systems, or other water courses. Do not allow material to penetrate the ground or soil. |
| Reference to other sections: | See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information. |

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## SECTION 7 - HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling: | Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. |
| Information about protection against explosions and fires: | No data available |
| Conditions for safe storage including any incompatibilities: | |
| Requirements to be met by storerooms and receptacles: | No special requirements |
| Information about storage in one common storage facility: | Store away from oxidizing agents. Do not store together with acids. Store in the dark. |
| Further information about storage conditions: | Keep container tightly sealed. Store in cool, dry conditions in well-sealed containers. Protect from exposure to light. |
| Specific end use(s): | No data available |

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| | | |
|---|---|---|
| **Control parameters:** | | |
| Components with limit values that require monitoring in the workplace: | 13746-66-2 Potassium hexacyanoferrate(III) 100.0% | |
| Occupational exposure limits: | PEL (USA) Long-term value: | 5 mg/m³ as CN; Skin |
| | REL (USA) Long-term value: | 1 mg/m³ as Fe |
| | TLV (USA) Long-term value: | 1 mg/m³ as Fe |
| | Additional information: | No data |
| Exposure controls: | Follow typical protective and hygienic practices for handling chemicals. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment. | |
| **Individual protection measures, such as personal protective equipment:** | | |
| Eye/face protection: | Safety glasses | |
| Skin protection: | Protective work clothing | |
| Hand protection: | Impervious gloves. Inspect gloves prior to use. Suitability of gloves should be determined both by material and quality, the latter of which may vary by manufacturer. Penetration time of glove material (in minutes): No data available. | |
| Other protective equipment: | Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. | |
| Respiratory protection: | Use suitable respirator when high concentrations are present. | |

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **General information:** | |
| Appearance and physical state: | Crystalline |
| Color: | Orange |
| Type of Odor: | No data available |
| Odor threshold: | No data available |
| **Important health, safety and environmental information:** | |
| Initial Boiling Point and Boiling Range: | No data available |
| Melting Point/Freezing Point: | Decomposes |
| Flammability Classification: | No data available |
| Sublimination temperature/start: | No data available |
| Flash Point: | No data available |
| Auto-ignition Temperature: | No data available |
| Decomposition Temperature: | No data available |
| Flammability Limits (lower/upper): | No data available |
| Evaporation rate: | N/A |
| Vapor Pressure: | N/A |
| Vapor Density (Air=1): | N/A |
| Octanol/Water Partition Coefficient (log Pow): | No data available |
| Specific Gravity: | N/A |
| Bulk Density: | N/A |
| Water Solubility: | 20°C/68°F: 464 g/l |
| pH: | N/A |
| Viscosity: | N/A |
| Explosive Properties: | Product does not present an explosion hazard. |
| Oxidizing Properties: | N/A |
| Molecular Formula: | N/A |
| Molecular Weight: | N/A |
| Relative Density: | N/A |

## SECTION 10 - STABILITY AND REACTIVITY

| | |
|---|---|
| Reactivity: | Contact with acids liberates very toxic gas. |
| Stability: | Stable under recommended storage conditions. |
| Possibility of hazardous reactions: | Contact with acids liberates very toxic gas. |
| Conditions to avoid: | No data available |
| Incompatible materials: | Oxidizing agents, acids, light |
| Thermal decomposition/conditions to be avoided: | Decomposition will not occur if used and stored according to specifications. |
| Hazardous decomposition products: | Carbon monoxide, Carbon dioxide, Hydrogen cyanide, Metal oxide fume, Nitrogen oxides |

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## SECTION 11 - TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **Information on toxicological effects:**<br>Acute toxicity (list all possible routes of exposure) | |
| The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product. LD/LC50 values that are relevant for classification: | |
| Acute Oral Toxicity: | LD50 2,970 mg/kg (mouse) |
| Acute Dermal Toxicity: | No data available |
| Acute Inhalation Toxicity: | No data available |
| Skin Corrosion/Irritation: | May cause irritation. |
| Serious Eye Damage / Eye Irritation: | May cause irritation. |
| Respiratory or Skin Sensitization: | No sensitizing effects known. |
| Germ Cell Mutagenicity: | The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance. |
| Carcinogenicity: | No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. |
| Reproductive Toxicity: | No effects known. |
| Specific Target Organ Toxicity - single exposure (STOT-se): | No effects known. |
| Specific Target Organ Toxicity - repeated exposure (STOT-re): | No effects known. |
| Aspiration Hazard: | No effects known. |
| Sub-acute to chronic toxicity: | No effects known. |
| Additional toxicological information: | To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. |
| **Potential Health Effects:** | |
| Skin Contact: | No effects known. |
| Eye Contact: | No effects known. |
| Ingestion: | No effects known. |
| Inhalation: | No effects known. |
| Chronic Health Effects: | No effects known. |
| Additional Data: | No effects known. |

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## SECTION 12 - ECOLOGICAL INFORMATION

| **Toxicity:** | |
|---|---|
| Acute/prolonged toxicity to fish: | No data available |
| Acute/prolonged toxicity to aquatic invertebrates: | No data available |
| Acute/prolonged toxicity to aquatic plants: | No data available |
| Toxicity to bacteria, to soil dwelling organisms and to terrestrial plants: | No data available |
| Chronic toxicity to aquatic organisms: | No data available |
| | |
| General effect: | No data available |
| Persistence and degradability: | No data available |
| Bioaccumulative potential: | No data available |
| Mobility in soil: | No data available |
| Results of PBT and vPvB assessment (EC reg. 453/2010): | N/A |
| Other adverse effects: | No data available |
| Additional ecological information: | Disposal must be made according to official regulations. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

| **Waste treatment methods:** | |
|---|---|
| Disposal: | Consult official regulations to ensure proper disposal. |
| Container Disposal: | Disposal must be made according to official regulations. |

## SECTION 14 - TRANSPORT INFORMATION

| | |
|---|---|
| General Information: | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT). |
| UN number: | Not relevant |
| UN proper shipping name: | Not relevant |
| Transport hazard class: | Not relevant |
| Packing group: | Not relevant |
| **Environmental Hazards:** | |
| Environmentally hazardous substance: | No |
| Special precautions for user: | Not relevant |

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## SECTION 15 - REGULATORY INFORMATION

| **Safety, health and environmental regulations/legislation specific for the substance or mixture:** | |
|---|---|
| Hazard categories | |
| U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory: | All components of this product are listed. |
| Canadian Domestic Substances List (DSL): | All components of this product are listed. |
| SARA Section 313 (specific toxic chemical listings): | Substance is not listed. |
| Prop 65 - Chemicals known to cause cancer: | Substance is not listed. |
| Other regulations, limitations and prohibitive regulations: | |
| Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006: | Substance is not listed. |
| The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. | Substance is not listed. |
| Annex XIV of the REACH Regulations (requiring authorization for use): | Substance is not listed. |
| REACH - Pre-registered substances: | Substance is listed. |
| Chemical safety assessment: | A Chemical Safety Assessment has not been carried out. |

## SECTION 16 - OTHER INFORMATION

| **HMIS Hazard ID:** | |
|---|---|
| Health: | 1 |
| Flammability: | 1 |
| Reactivity: | 1 |
| Health (acute effects): | 1 |
| Physical Hazard: | 1 |
| Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect | |

**Disclaimer:**
The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

**Revision Date: 12/02/2020**

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| **National Chemical Inventories:** | |
|---|---|
| All components of this product are listed on the following chemical substance inventories: TSCA (USA) | |
| DSL | (Canada) |
| EINECS | (Europe) |
| ENCS | (Japan) ECL |
| | (Korea) |
| AICS | (Australia) NZIoC |
| | (New Zealand) |
| PICCS | (Philippines) |
| IECSC | (China) |

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| **Abbreviations:** | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| ADR | International carriage of Dangerous goods by Road |
| AICS | Australian Inventory of Chemical Substances |
| ATE | Acute Toxicity Estimate |
| BfR | Bundesinstitut für Risikobewertung recommendations for food contact materials |
| BCF | Bioconcentration Factor |
| BOD5 | 5-day Biochemical Oxygen Demand |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CLP | Classification, Labeling and Packaging regulation |
| COD | Chemical Oxygen Demand DOT<br>Department of Transportation DSL<br>Domestic Substances List |
| EINECS | European Inventory of Existing Chemical Substances |
| ECL | Existing Chemicals List (Korea) |
| ENCS | Existing and New Chemical Substances Inventory (Japan) |
| EN 689 | Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy. |
| ERG | Emergency Response Guide |
| GHS | Globally Harmonized System |
| HMIS | Hazardous Materials Information System IARC<br>International Agency for Research on Cancer IATA<br>International Air Transport Association |
| ICAO | International Civil Aviation Organization IDLH<br>Immediately Dangerous to Life and Health IMDG<br>International Maritime Dangerous Goods |
| LD50 | Lethal Dose to 50% of test animal population |
| MAK | Maximale Arbeitsplatz Konzentration |
| NTP | National Toxicology Program |
| OEL | Occupational Exposure Limit |
| OSHA | Occupational Safety & Health Administration |
| PBT | Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit |
| PICCS | Philippine Inventory of Commercial Chemical Substances |
| PNEC | Predicted No Effect Concentration |
| REACH | Registration, Evaluation and Authorization of Chemical Substances |
| RID | International carriage of dangerous goods by Rail SARA<br>Superfund Amendments and Reauthorization Act STEL Short Term<br>Exposure Limit |
| SVHC | Substance of Very High Concern |
| TLV | Threshold Limit Value |
| TSCA | Toxic Substances Control Act |
| TWA | Time Weighted Average |
| VOC | Volatile Organic Compound |
| WGK | Wassergefahrdungsklasse (Water Hazard Class) WHMIS<br>Workplace Hazardous Material Identification System |