1. Identification

Product identifier: HP Indigo ElectroInk Calibration Tube Orange for use with HP Indigo Digital Presses 10000, 20000 and 30000
Q4228A

Other means of identification

Synonyms: Part Number Q4228A

Recommended use: Printing ink for use with HP Indigo Digital Presses 10000, 20000 and 30000.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

HP Inc.
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States

Telephone: 650-857-1501

HP Inc. health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048

HP Inc. Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Hazard symbol: None.

Signal word: None.

Hazard statement: Not available.

Precautionary statement

Prevention: Not available.
Response: Not available.
Storage: Not available.
Disposal: Not available.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkanes C11-15 iso</td>
<td></td>
<td>90622-58-5</td>
<td>&lt;80</td>
</tr>
<tr>
<td>Trade secret*</td>
<td></td>
<td>Proprietary*</td>
<td>&lt;15</td>
</tr>
<tr>
<td>C.I.P.O. 64 No.12760</td>
<td></td>
<td>72102-84-2</td>
<td>&lt;7.5</td>
</tr>
</tbody>
</table>

Material name: Q4228A

Version #: 08  Revision date: 03-Mar-2021  Issue date: 31-May-2014
4. First-aid measures

Inhalation
If overcome by vapor, remove person from exposure to fresh air. If breathing is difficult, give oxygen. If symptoms persist, get medical attention.

Skin contact
Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

Eye contact
Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention. Do not apply neutralizing agents.

Ingestion
Do not induce vomiting. Never give anything by mouth to an unconscious person. If ingestion of a large amount does occur, seek medical attention.

Most important symptoms/effects, acute and delayed
Not available.

5. Fire-fighting measures

Suitable extinguishing media
Suitable extinguishing media: Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
None known.

Special protective equipment and precautions for firefighters
Not available.

Fire fighting equipment/instructions
Move containers from fire area if you can do it without risk. Evacuate area and fight fire from a safe distance.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear appropriate personal protective equipment.

Methods and materials for containment and cleaning up
Not available.

Environmental precautions
Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

7. Handling and storage

Precautions for safe handling
Avoid prolonged or repeated skin contact with this material. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities
Keep away from excessive heat or cold. Store in a cool and shaded area. Do not store in direct sunlight.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>ACGIH Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>STEL</td>
<td>143 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>3 mg/m3</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Exposure guidelines
Manufacturer recommended exposure limit based on petroleum hydrocarbon at > 75%. TWA = 171 ppm (1200 mg/m3).

Appropriate engineering controls
Use in a well ventilated area.

Material name: Q4228A
13249  Version #: 08  Revision date: 03-Mar-2021  Issue date: 31-May-2014  SDS US
Individual protection measures, such as personal protective equipment

<table>
<thead>
<tr>
<th>Protection</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye/face protection</td>
<td>Not available.</td>
</tr>
<tr>
<td>Skin protection</td>
<td></td>
</tr>
<tr>
<td>Hand protection</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other</td>
<td>Not available.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>Not available.</td>
</tr>
<tr>
<td>Thermal hazards</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid.</td>
</tr>
<tr>
<td>Form</td>
<td>Not available.</td>
</tr>
<tr>
<td>Color</td>
<td>Orange.</td>
</tr>
</tbody>
</table>

**Odor**
mild hydrocarbon-like

**Odor threshold**
Not available.

**pH**
Not available.

**Melting point/freezing point**
Not available.

**Initial boiling point and boiling range**
Not available.

**Flash point**
Not available.

**Evaporation rate**
Not available.

**Flammability (solid, gas)**
Not available.

**Upper/lower flammability or explosive limits**

<table>
<thead>
<tr>
<th>Limit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Explosive limit - lower (%)**
Not available.

**Explosive limit - upper (%)**
Not available.

**Vapor pressure**
Not available.

**Vapor density**
Not available.

**Solubility(ies)**

<table>
<thead>
<tr>
<th>Solubility (water)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not soluble</td>
<td></td>
</tr>
</tbody>
</table>

**Partition coefficient (n-octanol/water)**
Not available.

**Auto-ignition temperature**
Not available.

**Decomposition temperature**
Not available.

**Viscosity**
Not available.

**Other information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxidizing properties</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>0.822</td>
</tr>
<tr>
<td>VOC</td>
<td>640 g/l (5.31 lbs/gal.US)</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

**Reactivity**
Not available.

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of hazardous reactions**
Will not occur.

**Conditions to avoid**
Not available.

**Incompatible materials**
This product may react with strong oxidizing agents.
Hazardous decomposition products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

**Inhalation**
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

**Skin contact**
Contact with skin may result in mild irritation.

**Eye contact**
Contact with eyes may result in mild irritation.

**Ingestion**
Ingestion is not a likely route of exposure. Health injuries are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics

Not available.

Information on toxicological effects

**Acute toxicity**
Based on available data, the classification criteria are not met.

### Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.I.P.O. 64 No.12760 (CAS 72102-84-2)</td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
</tr>
<tr>
<td>&gt;= 5000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td></td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified.</td>
</tr>
</tbody>
</table>

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Fluoropolymer resin (CAS 9002-84-0) Not classifiable as to carcinogenicity to humans.


Not listed.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity**
Not classified.

**Specific target organ toxicity - single exposure**
Not classified.

**Specific target organ toxicity - repeated exposure**
Not classified.

**Aspiration hazard**
Not classified.

**Further information**
Complete toxicity data are not available for this specific formulation

Refer to Section 2 for potential health effects and Section 4 for first aid measures.

12. Ecological information

**Aquatic toxicity**
This product has not been tested for ecological effects.

**Ecotoxicity**
No ecotoxicity data noted for the ingredient(s).

**Persistence and degradability**
Not available.

**Bioaccumulative potential**
Not available.

**Mobility in soil**
Not available.

**Other adverse effects**
Not available.
## 13. Disposal considerations

**Disposal instructions**

Dispose of in compliance with federal, state, and local regulations.

## 14. Transport information

### DOT

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not available.</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Not Regulated.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Not available.</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not available.</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
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</table>

### IATA

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not available.</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Not Regulated.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Not available.</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not available.</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
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</table>

### IMDG

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not available.</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Not Regulated.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Not available.</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not available.</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### ADR

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not available.</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Not Regulated.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Not available.</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Hazard No. (ADR)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Tunnel restriction code</td>
<td>Not available.</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not available.</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Further information

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.
- Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

## 15. Regulatory information

### US federal regulations

- US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.
- US TSCA 12(b): Does not contain listed chemicals.

**Toxic Substances Control Act (TSCA)**

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  - Not regulated.
- **TSCA Chemical Action Plans, Chemicals of Concern**
  - Fluoropolymer resin (CAS 9002-84-0) Long-Chain Perfluorinated Chemicals (PFCs) Action Plan
CERCLA Hazardous Substance List (40 CFR 302.4)  
Not listed.
*SARA 304 Emergency release notification*  
Not regulated.
*OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)*  
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)  
*SARA 302 Extremely hazardous substance*  
Not listed.

**Other federal regulations**

*Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List*  
No intentionally added HAP substances.

*Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)*  
Not regulated.

*Safe Drinking Water Act (SDWA)*  
Not regulated.

**Regulatory information**  
All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

**16. Other information, including date of preparation or last revision**

<table>
<thead>
<tr>
<th>Issue date</th>
<th>31-May-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>03-Mar-2021</td>
</tr>
<tr>
<td>Version #</td>
<td>08</td>
</tr>
<tr>
<td>Other information</td>
<td>This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).</td>
</tr>
</tbody>
</table>

**Disclaimer**  
This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.
Explanation of abbreviations

ACGIH  American Conference of Governmental Industrial Hygienists
CAS   Chemical Abstracts Service
CERCLA  Comprehensive Environmental Response Compensation and Liability Act
CFR    Code of Federal Regulations
COC    Cleveland Open Cup
DOT    Department of Transportation
EPCRA  Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC   International Agency for Research on Cancer
NIOSH  National Institute for Occupational Safety and Health
NTP    National Toxicology Program
OSHA   Occupational Safety and Health Administration
PEL    Permissible Exposure Limit
RCRA   Resource Conservation and Recovery Act
REC    Recommended
REL    Recommended Exposure Limit
SARA   Superfund Amendments and Reauthorization Act of 1986
STEL   Short-Term Exposure Limit
TCLP   Toxicity Characteristics Leaching Procedure
TLV    Threshold Limit Value
TSCA   Toxic Substances Control Act
VOC    Volatile Organic Compounds