



# SAFETY DATA SHEET

**MATERION**

## 1. Identification

**Product identifier** QMet™ 300

**Other means of identification**  
**SDS number** L69

**Manufacturer/Importer/Supplier/Distributor information**  
**Manufacturer**

**Company name** Materion Brush Inc.  
**Address** 6070 Parkland Boulevard  
Mayfield Heights, OH 44124  
United States

**Telephone** 1.800.862.4118  
**Website** www.materion.com  
**E-mail** ehs@materion.com  
**Contact person** Theodore Knudson

**Emergency phone number** 1.800.862.4118

## 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** The material as sold in solid form is generally not considered hazardous. However, if the process involves grinding, melting, cutting or any other process that causes a release of dust or fumes, hazardous levels of airborne particulate could be generated.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.  
**Response** Wash hands after handling.  
**Storage** Store away from incompatible materials.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

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

**Supplemental information** For further information, please contact the Product Stewardship Department at +1.800.862.4118.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name | Common name and synonyms | CAS number | %          |
|---------------|--------------------------|------------|------------|
| Copper        |                          | 7440-50-8  | 95 - 99.5  |
| Chromium      |                          | 7440-47-3  | < 3        |
| Silver        |                          | 7440-22-4  | 0.01 - 2.5 |

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

|   |  |
|---|--|
| <b>Skin contact</b>   | Wash off with soap and water. Get medical attention if irritation develops and persists.                         |
| <b>Eye contact</b>  | Rinse with water. Get medical attention if irritation develops and persists.                                     |
| <b>Ingestion</b>  | Rinse mouth. Get medical attention if symptoms occur.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Exposure may cause temporary irritation, redness, or discomfort.   |
| <b>Indication of immediate medical attention and special treatment needed</b> | Treat symptomatically.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

## 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Powder. Dry sand.  |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                     |
| <b>Specific hazards arising from the chemical</b>                    | None known.  |
| <b>Special protective equipment and precautions for firefighters</b> | Wear suitable protective equipment.  |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk.                              |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials. |
| <b>General fire hazards</b>  | No unusual fire or explosion hazards noted.  |

## 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away.   |
| <b>Methods and materials for containment and cleaning up</b>               | Stop the flow of material, if this is without risk. Following product recovery, flush area with water. |
| <b>Environmental precautions</b>   | Collect spillage. Prevent further leakage or spillage if safe to do so.                                |

## 7. Handling and storage

|   |   |
|---|---|
| <b>Precautions for safe handling</b>                                | Observe good industrial hygiene practices.                          |
| <b>Conditions for safe storage, including any incompatibilities</b> | Store away from incompatible materials (see Section 10 of the SDS). |

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components               | Type | Value                  | Form           |
|--------------------------|------|------------------------|----------------|
| Chromium (CAS 7440-47-3) | PEL  | 1 mg/m <sup>3</sup>    |                |
| Copper (CAS 7440-50-8)   | PEL  | 1 mg/m <sup>3</sup>    | Dust and mist. |
|                          |      | 0.1 mg/m <sup>3</sup>  | Fume.          |
| Silver (CAS 7440-22-4)   | PEL  | 0.01 mg/m <sup>3</sup> |                |

#### US. ACGIH Threshold Limit Values

| Components               | Type | Value                 | Form                |
|--------------------------|------|-----------------------|---------------------|
| Chromium (CAS 7440-47-3) | TWA  | 0.5 mg/m <sup>3</sup> | Inhalable fraction. |
| Copper (CAS 7440-50-8)   | TWA  | 1 mg/m <sup>3</sup>   | Dust and mist.      |
|                          |      | 0.2 mg/m <sup>3</sup> | Fume.               |

### US. ACGIH Threshold Limit Values

| Components             | Type | Value     | Form           |
|------------------------|------|-----------|----------------|
| Silver (CAS 7440-22-4) | TWA  | 0.1 mg/m3 | Dust and fume. |

### US. NIOSH: Pocket Guide to Chemical Hazards

| Components               | Type | Value      | Form           |
|--------------------------|------|------------|----------------|
| Chromium (CAS 7440-47-3) | TWA  | 0.5 mg/m3  |                |
| Copper (CAS 7440-50-8)   | TWA  | 1 mg/m3    | Dust and mist. |
|                          |      | 0.1 mg/m3  | Fume.          |
| Silver (CAS 7440-22-4)   | TWA  | 0.01 mg/m3 | Dust.          |

### US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

| Components               | Type | Value      | Form           |
|--------------------------|------|------------|----------------|
| Chromium (CAS 7440-47-3) | PEL  | 0.5 mg/m3  |                |
| Copper (CAS 7440-50-8)   | PEL  | 1 mg/m3    | Dust and mist. |
|                          |      | 0.1 mg/m3  | Fume.          |
| Silver (CAS 7440-22-4)   | PEL  | 0.01 mg/m3 |                |

|  |  |
|--|--|
| <b>Biological limit values</b>   | No biological exposure limits noted for the ingredient(s).   |
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. |
| <b>Individual protection measures, such as personal protective equipment</b> |  |
| <b>Eye/face protection</b>   | Wear safety glasses with side shields (or goggles).  |
| <b>Skin protection</b>   |  |
| <b>Hand protection</b>   | Wear gloves to prevent metal cuts and skin abrasions during handling.  |
| <b>Other</b>   | Wear suitable protective clothing.   |
| <b>Respiratory protection</b>  | In case of insufficient ventilation, wear suitable respiratory equipment.  |
| <b>Thermal hazards</b>   | Wear appropriate thermal protective clothing, when necessary.  |
| <b>General hygiene considerations</b>  | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.  |

## 9. Physical and chemical properties

### Appearance

|   |  |
|---|--|
| <b>Physical state</b>                               | Solid.   |
| <b>Form</b>   | Various shapes.                                  |
| <b>Color</b>  | Copper.  |
| <b>Odor</b>   | Not applicable.                                  |
| <b>Odor threshold</b>                               | Not applicable.                                  |
| <b>pH</b>   | Not applicable.                                  |
| <b>Melting point/freezing point</b>                 | 1760.9 °F (960.5 °C) estimated / Not applicable. |
| <b>Initial boiling point and boiling range</b>      | Not applicable.                                  |
| <b>Flash point</b>                                  | Not applicable.                                  |
| <b>Evaporation rate</b>                             | Not applicable.                                  |
| <b>Flammability (solid, gas)</b>                    | Not applicable.                                  |
| <b>Upper/lower flammability or explosive limits</b> |  |
| <b>Explosive limit - lower (%)</b>                  | Not applicable.                                  |
| <b>Explosive limit - upper (%)</b>                  | Not applicable.                                  |

|  |                                    |
|--|------------------------------------|
| Vapor pressure                             | Not applicable.                    |
| Vapor density                              | Not applicable.                    |
| Relative density                           | Not applicable.                    |
| Solubility(ies)                            |                                    |
| Solubility (water)                         | Insoluble.                         |
| Partition coefficient<br>(n-octanol/water) | Not applicable.<br>Not applicable. |
| Auto-ignition temperature                  | Not applicable.                    |
| Decomposition temperature                  | Not applicable.                    |
| Viscosity                                  | Not applicable.                    |
| Other information                          |                                    |
| Explosive properties                       | Not explosive.                     |
| Oxidizing properties                       | Not oxidizing.                     |
| Specific gravity                           | 8.93 estimated                     |

## 10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability                 | Material is stable under normal conditions.   |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use.                                   |
| Conditions to avoid                | Contact with incompatible materials.  |
| Incompatible materials             | Strong oxidizing agents.  |
| Hazardous decomposition products   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|              |  |
|--------------|--|
| Inhalation   | No adverse effects due to inhalation are expected.   |
| Skin contact | No adverse effects due to skin contact are expected. |
| Eye contact  | Not likely, due to the form of the product.          |
| Ingestion    | Expected to be a low ingestion hazard.               |

|  |             |
|--|-------------|
| Symptoms related to the physical, chemical and toxicological characteristics | None known. |
|--|-------------|

### Information on toxicological effects

|                                   |   |
|-----------------------------------|---|
| Acute toxicity                    | Not known.  |
| Skin corrosion/irritation         | Not relevant, due to the form of the product.     |
| Serious eye damage/eye irritation | Not likely, due to the form of the product.       |
| Respiratory or skin sensitization |   |
| Respiratory sensitization         | Not a respiratory sensitizer.                     |
| Skin sensitization                | Not a skin sensitizer.                            |
| Germ cell mutagenicity            | Not classified.                                   |
| Carcinogenicity                   | Not classifiable as to carcinogenicity to humans. |

### IARC Monographs. Overall Evaluation of Carcinogenicity

Chromium (CAS 7440-47-3)

3 Not classifiable as to carcinogenicity to humans.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

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

Not listed.

|   |  |
|---|--|
| <b>Reproductive toxicity</b>                              | This product is not expected to cause reproductive or developmental effects.                         |
| <b>Specific target organ toxicity - single exposure</b>   | Not classified.  |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.  |
| <b>Aspiration hazard</b>                                  | Not an aspiration hazard.  |
| <b>Chronic effects</b>                                    | Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. |

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product                |      | Species                                       | Test Results                    |
|------------------------|------|---|---------------------------------|
| QMet™ 300              |      |   |                                 |
| <b>Aquatic</b>         |      |   |                                 |
| <i>Acute</i>           |      |   |                                 |
| Fish                   | LC50 | Fish  | 0.0326 mg/l, 96 hours estimated |
| <b>Components</b>      |      | <b>Species</b>                                | <b>Test Results</b>             |
| Copper (CAS 7440-50-8) |      |   |                                 |
| <b>Aquatic</b>         |      |   |                                 |
| <i>Acute</i>           |      |   |                                 |
| Crustacea              | EC50 | Blue crab ( <i>Callinectes sapidus</i> )      | 0.0031 mg/l                     |
| Fish                   | LC50 | Fathead minnow ( <i>Pimephales promelas</i> ) | 0.0219 - 0.0446 mg/l, 96 hours  |

\* Estimates for product may be based on additional component data not shown.

### Persistence and degradability

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

|                          |         |
|--------------------------|---------|
| Chromium (CAS 7440-47-3) | Listed. |
| Copper (CAS 7440-50-8)   | Listed. |
| Silver (CAS 7440-22-4)   | 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.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

| Chemical name | CAS number | % by wt.   |
|---------------|------------|------------|
| Chromium      | 7440-47-3  | < 3        |
| Copper        | 7440-50-8  | 95 - 99.5  |
| Silver        | 7440-22-4  | 0.01 - 2.5 |

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Chromium (CAS 7440-47-3)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

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

**US state regulations** California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**California Proposition 65**

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

|                          |
|--------------------------|
| Chromium (CAS 7440-47-3) |
| Copper (CAS 7440-50-8)   |
| Silver (CAS 7440-22-4)   |

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

|                      |            |
|----------------------|------------|
| <b>Issue date</b>    | 12-03-2018 |
| <b>Revision date</b> | 10-07-2021 |
| <b>Version #</b>     | 03         |

**Further information**

Transportation Emergency  
Call Chemtrec at:  
International: 703.741.5970  
Spain: 900.868.538  
Switzerland: 0800.564.402  
Chemtrec's toll free, mobile-enabled number in Germany – 0800 1817059

**Other information**

Revised information in Section 16.

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