# Product Safety Information

**Issuing Date** 2017-02-09 **Revision Date** 2015-06-18 **Revision Number** 1

## 1. Identification of the substance/preparation and of the Company/undertaking

**Product Identifier**

**Product Type** Hard metal articles, inserts, drills, mills
**Product name** **KM1 article**
**Product code** KA1037-2

**Type** article

**Other means of identification**

**Synonyms** Hard Metal, Cemented WC, Tungsten Carbide

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Service life, hardmetal articles, Industrial use, Professional use, Mining Tools, Construction Tools, Round Tools, Metalworking Tools, Inserts, For use in industrial installations only

**Uses advised against** Do no re-sharpen tools without using appropriate safety and extraction systems to avoid dust exposure. Return tools to Kennametal for reconditioning services. Consumer use.

**Details of the Supplier of the Safety Data Sheet**

**Emergency Telephone Number**

**Emergency Telephone Number** CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

**NRC (National Response Center)** USA, Poison Centres +1 800 222 1222
Canada, IWK Regional Poison Center +1 902 470 8161 or 1 800 565 8161

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## 2. Hazards Identification

**Classification**

As a sintered tool, exposure to high volumes of powder/dust is not anticipated under normal conditions and use. If tool chips, breaks, fragments or is reground, exposure to powder/dust may result in potential health effects.

**Label Elements**

### Emergency Overview

**Precautionary Statements - Prevention**

Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.

**Precautionary Statements - Response**

IF exposed: Call a POISON CENTER or doctor/physician **Skin** If skin irritation or rash occurs: Get medical advice/attention.
**Inhalation** If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**Appearance** grey solid | **Physical State @20°C** solid | **Odor** none

**Hazards not otherwise classified (HNOC)**

**WARNING** Fragmentation hazard. Cutting tools and holders may fragment in use. Always wear safety equipment and keep machine guards in places. Do no re-sharpen tools without using appropriate safety and extraction systems to avoid dust exposure. Return tools to Kennametal for reconditioning services. Use personal protective equipment as required

**Other Hazards** Breathing hazard. Wet or dry grinding of cutting tools may produce hazardous dust or mist. Use ventilation control and respiratory protection.

## 3. Composition/Information on Ingredients

**Synonyms** Hard Metal, Cemented WC, Tungsten Carbide.

| Chemical name | Formula | CAS-No | weight-% | GHS Classification |
|---|---|---|---|---|
| Tungsten carbide | WC | 12070-12-1 | > 50 | Not classified |
| Cobalt | Co | 7440-48-4 | 5 - 10 | Acute Oral 4 (H302)<br>Acute dust/mist 1 (H330)<br>Eye damage 2 (H319)<br>Resp. Sens. 1B (H334)<br>Skin Sens. 1 (H317)<br>Carc. 1B (H350) Inhalation<br>Repr. tox 2 (H361)Fertility<br>Aquatic Acute 1 M=10(H400)<br>Aquatic Chronic 1 M=1(H410) |
| Tantalum Carbide | TaC | 12070-06-3 | 1 - 2.5 | Not classified |
| Niobium Carbide | NbC/$Nb_2C$ | 12069-94-2 | 0.1 - 1 | Not classified |

* The exact percentage (concentration) of composition has been withheld as a trade secret.

**Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H350i - May cause cancer by inhalation
H361f - Suspected of damaging fertility
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

## 4. First aid measures

**FIRST AID MEASURES**

**General advice** If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Eye Contact** Keep eye wide open while rinsing. If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin contact** Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash off immediately with soap and plenty of water.

**Inhalation** Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Oxygen or artificial respiration if needed. Keep victim warm and quiet. Avoid direct contact

| | |
|---|---|
| | with skin. Use barrier to give mouth-to-mouth resuscitation. Get medical attention. |
| **Ingestion** | Drink plenty of water. If symptoms persist, call a physician. Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting unless directed to do so by a physician. |
| **Self-protection of the first aider** | Self-protection of the first aider. Wear suitable gloves. |

**Most important symptoms and effects, both acute and delayed**

| | |
|---|---|
| **4.2. Most important symptoms and effects, both acute and delayed** | Hives. |

**Indication of any immediate medical attention and special treatment needed**

| | |
|---|---|
| **Notes to Physician** | Treat symptomatically. |

## 5. Fire-fighting measures

| | |
|---|---|
| **Suitable extinguishing media** | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| **Specific hazards arising from the chemical** | |
| **Protective equipment and precautions for firefighters** | Use personal protective equipment as required |

**Component Information**

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

| | |
|---|---|
| **Personal precautions** | Use personal protective equipment as required. |
| **Environmental precautions** | Avoid release to the environment. |
| **Methods and material for containment and cleaning up** | Prevent further leakage or spillage if safe to do so. Collect in closed and suitable containers for disposal. |

## 7. Handling and Storage

| | |
|---|---|
| **Precautions for safe handling** | Breathing hazard. Wet or dry grinding of cutting tools may produce hazardous dust or mist. Use ventilation control and respiratory protection. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Minimize dust generation and accumulation. Use personal protective equipment as required. Ensure adequate ventilation. |

**Conditions for safe storage, including any incompatibilities**

| | |
|---|---|
| **Storage** | Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. |
| **Incompatible products** | None known based on information supplied. |
| **Specific use(s)** | For use in industrial installations only. |

## 8. Exposure Controls/Personal Protection

**Control parameters**

| Chemical name | USA - ACGIH TLV | USA - OSHA PEL | USA - NIOSH IDLH | Argentina | Brazil |
|---|---|---|---|---|---|
| Tungsten carbide | 3 mg/m³ TWA (respirable particulate matter, as W); TLV basis: lung damage | - | - | TWA: 5 mg/m³<br>STEL: 10 mg/m³ | - |
| Carbide, containing tungsten carbide and cobalt | 0.005 mg/m³ TWA (thoracic fraction, as Co)<br>3 mg/m³ TWA (respirable particulate matter, as W); TLV basis: lung damage | - | - | - | - |
| Cobalt | 0.02 mg/m³ TWA | 0.1 mg/m³ TWA (dust and fume) | 20 mg/m³ IDLH (dust and fume) | TWA: 0.02 mg/m³ | - |
| **Chemical name** | **Canada - Alberta** | **Canada - British Columbia** | **Canada - Ontario** | **Canada - Quebec** | **Canada - Manitoba** |
| Tungsten carbide | - | - | - | - | 5 mg/m³ TWA (as W)<br>0.005 mg/m³ TWA (thoracic fraction, as Co) |
| Carbide, containing tungsten carbide and cobalt | - | - | - | - | 0.005 mg/m³ TWA (thoracic fraction, as Co) |
| Cobalt | 0.02 mg/m³ TWA | 0.02 mg/m³ TWA | 0.02 mg/m³ TWA | 0.02 mg/m³ TWAEV | 0.02 mg/m³ TWA 0.02 mg/m³ TWA (as Co)<br>0.005 mg/m³ TWA (thoracic fraction, as Co) |
| **Chemical name** | **Chile** | **Colombia - OEL** | **Mexico OEL (TWA)** | **Nicaragua** | **Peru** |
| Tungsten carbide | - | 5 mg/m³ TWA (as W)<br>0.005 mg/m³ TWA (thoracic fraction, as Co)<br>10 mg/m³ STEL (as W) | - | 5 mg/m³ TWA (as W)<br>0.005 mg/m³ TWA (thoracic fraction, as as Co) | - |
| Carbide, containing tungsten carbide and cobalt | - | 0.005 mg/m³ TWA (thoracic fraction, as Co) | - | 0.005 mg/m³ TWA (thoracic fraction, as as Co) | - |
| Cobalt | TWA: 0.016 mg/m³ | 0.02 mg/m³ TWA 0.02 mg/m³ TWA (as Co)<br>0.005 mg/m³ TWA (thoracic fraction, as Co) | 0.1 mg/m³ TWA LMPE-PPT (dust and fume, as Co) | 0.02 mg/m³ TWA 0.02 mg/m³ TWA (as Co)<br>0.005 mg/m³ TWA (thoracic fraction, as as Co) | 0.02 mg/m³ TWA |
| **Chemical name** | **Uruguay** | **Venezuela** | **...** | **...** | **...** |
| Tungsten carbide | - | STEL: 10 mg/m³<br>TWA: 5 mg/m³ | - | - | - |
| Carbide, containing tungsten carbide and cobalt | 0.005 mg/m³ TWA (inhalable fraction) | - | - | - | - |
| Cobalt | 0.02 mg/m³ TWA | TWA: 0.02 mg/m³ | - | - | - |

*NIOSH IDLH: Immediately Dangerous to Life or Health*

| Chemical name | Derived No Effect Level (DNEL) | Predicted No Effect Concentration (PNEC) |
|---|---|---|
| Tungsten carbide | 6.2 mg/m³ systemic inhalation | Tungsten 0.338 mg/l freshwater; 0.0338 mg/l marine water; 2.17 mg/kg soil; 11 mg/kg food |
| Cobalt | 0.04 mg/m³ long term local inhalation | 2.36 µg Co/l (AF 3) marine water; 0.74 µg/l (AF 3) fresh water |

**Appropriate engineering controls**

**Engineering controls**

Showers
Eyewash stations
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye Protection** Wear safety glasses with side shields (or goggles).

**Skin Protection** Long sleeved clothing.

**Hand Protection** Protective gloves.

**Respiratory protection** If exposure limits are likely to be exceeded or if irritation or other symptoms are experienced, NIOSH/MSHA or EN 136 approved respiratory protection should be worn.

**Hygiene Measures** Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday.

**Biological standards**

| Chemical name | USA ACGIH -BEI | Argentina - Occupational Exposure Limits - Biological Exposure Indices (BEIs) | Chile - Occupational Exposure Limits - Biological Exposure Indices (BEIs) |
|---|---|---|---|
| Carbide, containing tungsten carbide and cobalt | Medium: urine Time: end of shift at end of workweek Parameter: Cobalt (nonquantitative, nonspecific) | - | - |
| Cobalt | 15 µg/L Medium: urine Time: end of shift at end of workweek Parameter: Cobalt (nonspecific) | 15 µg/L urine end of shift on the last day of workweek Co (Background); 1 µg/L blood end of shift on the last day of workweek Co (Background, semi-quantitative) | - |
| **Chemical name** | **Mexico - Occupational Exposure Limits - BEIs (IBE)** | **Venezuela - Biological Exposure Indices (BEIs)** | **...** |
| Cobalt | 15 µg/L Medium: urine Time: end of shift at end of work week Parameter: Cobalt (background); 1 µg/L Medium: blood Time: end of shift at end of work week Parameter: Cobalt (background, semi-quantitative) | 15 µg/L urine end of shift at end of workweek Cobalt (F); 1 µg/L urine end of shift at end of workweek Cobalt (F,Sc) | - |

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

| | | | |
|---|---|---|---|
| **Physical State @20°C** | solid | **Appearance** | grey, solid |
| **Odor** | none | **Odor Threshold** | none |
| **Boiling temperature / boiling range** | no data available | **flash point** | not applicable |
| **Water solubility** | practically insoluble | **Decomposition Temperature** | unknown |
| **Explosive properties** | not applicable Hardmetal WC-Co (50µm); Lower explosion limit 750 g/cm³, max explosion pressure 4.3 bar, Kst value 16 bar*m/s St1, ignition temperature 500°C, minimum ignition energy < 10 000 mJ | | |

### 9.2. Other information

**VOC Content (%)** Not Applicable

**Component Information**

| Chemical name | Mol. Weight | Water Solub. | Vap. Press. | Vap. Dens. | pH Val. | Autoign. Temp. | Evap. Rate | Boil. Temp. |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Tungsten carbide | 195,86 g/mol | - | - | - | 7.5 - 8.1 | > 140 °C | - | 6000 °C |
| Cobalt | 58.93 g/mol | - | 0.00007 hPa at 1050 °C | - | - | - | - | 2870 °C |
| **Chemical name** | **Density VALUE** | **Melt. Temp.** | **Flash Point** | **Water Sol.** | **Bulk Dens.** | **Odor** | **State** | **color** |
| Tungsten carbide | 15.63 g/cm3 at 18 °C | 2785 °C | - | < 0.1 mg/l | <9.2 kg/m³ (ASTM B329) | odorless | solid | black |
| Cobalt | 8.85 - 8.9 g/cm3 at 20 °C | <1495 °C | - | insoluble | - | - | - | - |

## 10. Stability and Reactivity

**Reactivity** Stable under normal conditions

**Chemical stability** Stable under normal conditions.
**Possibility of Hazardous Reactions** None under normal processing.
**Conditions to avoid**
**incompatible materials**
**Hazardous decomposition products** None known based on information supplied.

## 11. Toxicological Information

**Information on likely routes of exposure**

**Inhalation** Long-term exposure to WC-Co is reported to be associated with occupational asthma and a fibrotic lung condition referred to as hardmetal disease. Breathing hazard. Wet or dry grinding of cutting tools may produce hazardous dust or mist. Use ventilation control and respiratory protection.

**Skin contact** Avoid contact with skin.

**Ingestion** Ingestion is not a likely route of exposure.

| Chemical name | Oral LD50 | dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Tungsten carbide | > 2000 mg/kg bw (OECD 401) | > 2000 mg/kg bw (OECD 402) | > 5.3 mg/L (4h) (OECD 403) |
| Carbide, containing tungsten carbide and cobalt | - | - | Lowest reported LC50(4h) for waxed 10% Co 0.4 mg/l<br>Lowest reported LC50(4h) for non-lubricated 10% Co 0.24 mg/l |
| Cobalt | 550 mg/kg bw | >2000 mg/kg bw | 0.05 mg/L |

**Information on toxicological effects**

| Chemical name | US ACGIH - Critical effects |
|---|---|
| Carbide, containing tungsten carbide and cobalt | pneumonitis<br>respiratory sensitizer |
| Cobalt | asthma; myocardial effects; pulmonary function |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** May cause sensitization of susceptible persons. May cause sensitization by inhalation and skin contact.

**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

| Chemical name | ACGIH | IARC | NTP: (National Toxicity Program) | OSHA |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Tungsten carbide | A2 - Suspected Human Carcinogen | - | - | - |
| Carbide, containing tungsten carbide and cobalt | A2 - Suspected Human Carcinogen | Group 2A - Probably carcinogenic to humans | Reasonably Anticipated To Be A Human Carcinogen (hard metals; powder) Present (see RoC monograph for specific cobalt compounds, listed under Cobalt and certain cobalt compounds) | Present |
| Cobalt | A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans A2 - Suspected Human Carcinogen | Group 2B - Possible Human Carcinogen | Printed Long-Term and Short-Term Study Reports: Long-Term Studies 16 Male Rat - Clear Evidence; Female Rat - Clear Evidence; Male Mice - Clear Evidence; Female Mice - Clear Evidence (TR-581) Present (includes nanoparticles, listed under Cobalt and certain cobalt compounds) Present (see RoC monograph for specific cobalt compounds, listed under Cobalt and certain cobalt compounds) | Not Listed |

| **Chemical name** | **Chile** | **Argentina** | **Venezula** | **Peru** |
|---|---|---|---|---|
| Cobalt | A3 - Animal Carcinogen | A3 - Confirmed animal carcinogen with unknown relevance to humans | Present | - |

| **Chemical name** | **Canada Alberta** | **Canada British Coloumbia** | **Canada Manitoba** | **Canada Quebec** |
|---|---|---|---|---|
| Tungsten carbide | - | - | A2 Suspected Human Carcinogen | - |
| Carbide, containing tungsten carbide and cobalt | - | - | A2 Suspected Human Carcinogen | - |
| Cobalt | - | IARC Category 2B - Possible Human Carcinogen | A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans A2 Suspected Human Carcinogen | C3 carcinogen - effect detected in animals |

**Chronic toxicity** Repeated or prolonged skin contact with the unexposed coating may cause skin irritation and/or dermatitis and sensitization of susceptible persons. May produce an allergic reaction. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting. The mixture may be a skin sensitizer. It may also be a skin irritant and repeated contact may increase this effect. Listed as probable human carcinogen by IARC (Group 2A). Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Repeated contact may cause allergic reactions in very susceptible persons. Contains a known or suspected reproductive toxin.

**Target organ effects** respiratory system, Skin.

**Numerical measures of toxicity** No data available

## 12. Ecological Information

**12.1. Ecotoxicity** May cause long lasting harmful effects to aquatic life.

**12.2 Persistence and degradability** Product/Substance is inorganic. not applicable.

**12.3 Bioaccumulative potential** No information available.

**12.5 Results of PBT and vPvB assessment** The components in this formulation do not meet the criteria for classification as PBT or vPvB

**12.6 Other adverse effects** None known

## 13. Disposal Considerations

**Waste treatment methods** It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

**Waste from residues/unused products** Reuse or recycle.

**California Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical name | California Hazardous Waste Status |
|---|---|
| Carbide, containing tungsten carbide and cobalt | Toxic |
| Cobalt | Toxic<br>Ignitable |

## 14. Transport Information

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**IMO / IMDG** Not regulated

**ICAO / IATA-DGR** Not regulated

## 15. Regulatory Information

| Chemical name | TSCA |
|---|---|
| Tungsten carbide | Present |
| Cobalt | Present<br>Effective 06/01/1987, Sunset 06/01/1997<br>Added 2012 |
| Tantalum Carbide | Present |
| Niobium Carbide | Present |
| **Chemical name** | **Bolivia - hazardous substances regulated under Bolivia's Environmental Regulations for the Industrial Manufacturing Sector** |
| Cobalt | Present |

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

**U.S. Federal Regulations**

| Chemical name | CAS-No | weight-% | SARA 313 - Threshold Values % |
|---|---|---|---|
| Tungsten carbide | 12070-12-1 | > 50 | - |
| Cobalt | 7440-48-4 | 5 - 10 | Present |
| Tantalum Carbide | 12070-06-3 | 1 - 2.5 | - |
| Niobium Carbide | 12069-94-2 | 0.1 - 1 | - |

**SARA 311/312 Hazard Categories**

| | |
|---|---|
| **Acute health hazard** | yes |
| **Chronic Health Hazard** | yes |
| **Fire Hazard** | no |
| **Sudden release of pressure hazard** | no |
| **Reactive Hazard** | no |

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

## U.S. State Regulations

**California Proposition 65**

This product contains the following Proposition 65 chemicals:.

| Chemical name | California - Proposition 65 - Carcinogens List | California - Proposition 65 - Developmental Toxicity | California - Proposition 65 - Reproductive Toxicity | California - 22 CCR - Toxic and Extremely Hazardous Carcinogenic Wastes |
|---|---|---|---|---|
| Cobalt | carcinogen, 7/1/1992 (powder) | - | - | - |

**California Prop. 65**

Listed. WARNING. This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm. Additional information available from:. www.P65Warnings.ca.gov.

**U.S. State Right-to-Know Regulations**

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Tungsten carbide | sn 1960 | - | - |
| Cobalt | sn 0520 | Present | Environmental hazard; Present (fume)<br>Present |

**CANADA**

**WHMIS Statement**

In the form of a pressed and sintered item, this is a manufactured article and is not a "controlled product" under WHMIS.

| Chemical name | WHMIS Classifications of Components |
|---|---|
| Cobalt | D2A, D2B |

## 16. Other Information

**Global Automotive Declarable Substance List Classifications**

| Chemical name | Global Automotive Declarable Substance List Classifications | Global Automotive Declarable Substance List Thresholds |
|---|---|---|
| Cobalt | Declarable Substance (FI) | 0.1 % |

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health hazard** 2 | **Flammability** 0 | **Instability** 0 | **Physical and Chemical Hazards** - |
| **HMIS** | **Health hazard** 2 | **Flammability** 0 | **Physical hazards** 0 | **Personal precautions** X |

| | |
|---|---|
| **Prepared by** | Kennametal Inc. 1600 Technology Way Latrobe, PA 15650, USA |
| **Issuing Date** | 2017-02-09 |
| **Revision Date** | 2015-06-18 |
| **Revision Note** | No information available |

**Disclaimer**

**Kennametal urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDS's obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.**

**End of Safety Data Sheet**