Safety Data Sheet

Issuing Date 2015-02-06 **Revision Date** 2015-03-06 **Revision Number** 2

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

1.1 Product Identifier

Product Type Stellite - Welding rods
Stellite - Coated rod (electrode)
Welding wire

Product name **Stellite 6 Rod/Wire/Electrode/Part**

Product code KSYC1002-1

Type Powder

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

Recommended Use Wear and Corrosion Resistant Welding Consumable. For use in industrial installations only.

1.3 Details of the supplier of the safety data sheet

Importer

Prepared by Kennametal Inc. 1600 Technology Way
Latrobe, PA 15650, USA

For further information, please contact:

E-mail k-corp-product.safety@kennametal.com

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

NRC (National Response Center) India, National Poisons Information Centre +91 112 659 36 77 or +91 112 658 93 91
Pakistan, National Poisons Control Centre +92 21 9920509/35686535
Philippines, National Poison Management & Control Center +632 524 10 78/+632 544 84 00/local 2311

2. Hazards Identification

2.1 Classification of the substance or mixture

Product Statement This product does not require a hazard communication label as it does not pose a hazard in the form delivered. Hazards can occur while using this product. Please read and follow the instructions of this SDS.

Acute oral toxicity	Category 4
Respiratory sensitization	Category 1B
Skin sensitization	Category 1
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2

2.2 Label Elements

Product name Stellite 6 Rod/Wire/Electrode/Part

Product code KSYC1002-1

signal word **DANGER**

Hazard Statements	H302 - Harmful if swallowed H317 - May cause an allergic skin reaction H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled H350i - May cause cancer by inhalation H361f - Suspected of damaging fertility
precautionary statements	P202 - Do not handle until all safety precautions have been read and understood P260 - Do not breathe dust P270 - Do not eat, drink or smoke when using this product P285 - In case of inadequate ventilation wear respiratory protection P308 + P313 - IF exposed or concerned: Get medical advice/attention P280 - Wear protective gloves/protective clothing/eye protection/face protection
precautionary statements	P201 - Obtain special instructions before use P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking P264 - Wash hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P272 - Contaminated work clothing should not be allowed out of the workplace P281 - Use personal protective equipment as required P284 - Wear respiratory protection P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P330 - Rinse mouth P363 - Wash contaminated clothing before reuse P403 + P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up

2.3 Other Hazards

Welding Hazards	CAUTION. Welding will create fumes which may be toxic. If welding is performed on plated or coated materials such as galvanised or painted steel, excessive fume may be produced which contains additional hazardous components, and may result in metal fume fever or other health effects. The product and work surface will be hot during and after welding. Electric shock can kill. Arc Rays can injur eyes and burn skin.

2.4 Additional Information

Product Information

Potential health effects

Inhalation	May be harmful if inhaled. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. May cause allergy or asthma symptoms or breathing difficulties if inhaled. MAY CAUSE ALLERGIC RESPIRATORY REACTION.
Eye Contact	May cause eye irritation with susceptible persons.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may cause irritation to mucous membranes.
Irritation	Repeated exposure may cause skin dryness or cracking.
Sensitization	May cause sensitization of susceptible persons.

Chronic effects	Prolonged exposure may cause chronic effects. CNS and psychiatric effects, Parkinson-like symptoms. Languor, sleepiness and weakness in legs. A stolid masklike appearance of face, emotional disturbances such as uncontrollable laughter and spastic gait with tendency to fall in walking and findings in more advanced cases. Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Repeated or prolonged exposure may cause central nervous system damage. Contains a known or suspected reproductive toxin. 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).
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).
Main Symptoms	May cause allergy or asthma symptoms or breathing difficulties if inhaled. MAY CAUSE ALLERGIC SKIN REACTION. Neurological disorders.
Aggravated Medical Conditions	Skin disorders, Neurological disorders, Respiratory disorders, Preexisting eye disorders, Allergies, central nervous system, Blood disorders, Kidney disorders, Liver disorders, Overexposure may cause female and male reproductive disorder(s), Use of alcoholic beverages may enhance toxic effects
environmental hazard	See Section 12 for additional Ecological Information

3. Composition/information on Ingredients

Chemical name	Formula	EC No	CAS-No	weight-%	GHS Classification
Cobalt	Co	231-158-0	7440-48-4	> 50	Acute Oral 4 (H302) Acute dust/mist 1 (H330) Eye damage 2 (H319) Resp. Sens. 1B (H334) Skin Sens. 1 (H317) Carc. 1B (H350i) Repr. tox 2 (H361f) Aquatic Acute 1 M=10(H400) Aquatic Chronic 1 M=1(H410)
Chromium	Cr	231-157-5	7440-47-3	25 - 50	
Tungsten	W	231-143-9	7440-33-7	3 - 5	
Nickel	Ni	231-111-4	7440-02-0	1 - 2.5	STOT RE 1 (H372) S,7 Carc. 2 (H351) S,7 Skin Sens. 1 (H317) S,7 Aquatic Chronic 3 (H412)
Iron	Fe	231-096-4	7439-89-6	1 - 2.5	
Silicon Metal	Si	231-130-8	7440-21-3	1 - 2.5	
Carbon	C	231-153-3	7440-44-0	1 - 2.5	
Manganese	Mn	231-105-1	7439-96-5	0.1 - 1	

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
H351 - Suspected of causing cancer if inhaled
H361f - Suspected of damaging fertility
H372 - Causes damage to the following organs through prolonged or repeated exposure if inhaled: Lungs
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

4. 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).

4.1 Description of first aid measures

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. Get medical attention. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Ingestion

Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth.

Self-protection of the first aider Self-protection of the first aider. Wear suitable gloves.

Most important symptoms and effects, both acute and delayed May cause allergy or asthma symptoms or breathing difficulties if inhaled CNS and psychiatric effects, Parkinson-like symptoms. Languor, sleepiness and weakness in legs. A stolid masklike appearance of face, emotional disturbances such as uncontrollable laughter and spastic gait with tendency to fall in walking and findings in more advanced cases. Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used

4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically. May cause sensitization by inhalation and skin contact.

Notes to Physician Treat symptomatically May cause sensitization by inhalation and skin contact May cause sensitization of susceptible persons

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons none.

5.2 Special hazards arising from the substance or mixture Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. May cause sensitization by inhalation and skin contact. Carbon oxides.

5.3 Advice for fire- fighters Use personal protective equipment as required. In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Avoid contact with skin and eyes. Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust accumulation in enclosed space.

6.2 Environmental precautions Avoid release to the environment.

6.3 Methods and material for containment and cleaning up Pick up and transfer to properly labeled containers. Avoid generation of dust. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust.

6.4 Reference to other sections See Section 13: DISPOSAL CONSIDERATIONS

7. Handling and Storage

7.1 Precautions for safe handling Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray.

7.2 Conditions for safe storage, including any incompatibilities Keep out of the reach of children. Keep container tightly closed in a dry and well-ventilated place. Keep containers tightly closed in a cool, well-ventilated place.

Storage temperature

Storage Life Stable under normal conditions

7.3 Specific end use(s) Welding. .

8. Exposure Controls/Personal Protection

8.1 Control parameters

Exposure controls

Chemical name	China	Hong Kong	India	Indonesia	Japan
Cobalt	TWA: 0.05 mg/m³ STEL: 0.1 mg/m³	TWA: 0.02 mg/m³		TWA: 0.002 mg/m³	0.05 mg/m³ OEL (as Co)
Chromium	TWA: 0.05 mg/m³ STEL: 0.15 mg/m³	TWA: 0.5 mg/m³		TWA: 0.5 mg/m³	
Tungsten	TWA: 5 mg/m³ STEL: 10 mg/m³			TWA: 1 mg/m³	
Nickel	TWA: 1 mg/m³ STEL: 2.5 mg/m³	TWA: 1.5 mg/m³		TWA: 1.5 mg/m³	
Iron				TWA: 1 mg/m³	
Silicon Metal				TWA: 10 mg/m³	
Manganese	TWA: 0.15 mg/m³ STEL: 0.45 mg/m³	TWA: 0.2 mg/m³	5 mg/m³ TWA (dust); 1 mg/m³ TWA (fume) 5 mg/m³ TWA (as Mn) 5 mg/m³ Ceiling (dust) 0.03 mg/m³ STEL (fume, as Mn)	TWA: 0.2 mg/m³	

Chemical name	Korea	Philippines	Singapore	Thailand	Vietnam
Cobalt	TWA: 0.02 mg/m³	0.1 mg/m³ TWA (metal dust and fume)	PEL: 0.02 mg/m³		0.05 mg/m³ TWA 0.1 mg/m³ STEL
Chromium	TWA: 0.5 mg/m³	1 mg/m³ TWA	PEL: 0.5 mg/m³		
Tungsten	STEL: 10 mg/m³ TWA: 5 mg/m³	3 mg/m³ TWA	STEL: 10 mg/m³ PEL: 5 mg/m³		
Nickel	TWA: 1 mg/m³	1 mg/m³ TWA	PEL: 1 mg/m³		0.05 mg/m³ TWA 0.25 mg/m³ STEL
Silicon Metal	TWA: 10 mg/m³		PEL: 10 mg/m³		
Carbon	TWA: 2 mg/m³				
Manganese	STEL: 3 mg/m³ TWA: 1 mg/m³	5 mg/m³ Ceiling	STEL: 3 mg/m³ PEL: 1 mg/m³		0.3 mg/m³ TWA 0.6 mg/m³ STEL

8.2 Exposure controls

Personal precautions Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. Wash hands before eating, drinking or smoking. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product.

Engineering controls Ensure adequate ventilation, especially in confined areas.

Eye Protection Use suitable eye protection to guard against the effects of welding. Wear safety glasses with side shields (or goggles). Eye-irrigation bottle with pure water.

Skin Protection Long sleeved clothing. Wear fire/flame resistant/retardant clothing. Apron. Wear suitable protective clothing. Wear suitable gloves.

Hand Protection Protective gloves. The product and work surface will be hot during and after welding. Ensure adequate protection is in place to stop individuals from burning themselves.

Respiratory protection Use only with adequate ventilation. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

Special Precautions for users Eye-irrigation bottle with pure water. Health Surveillance should be in place for employees who are exposed while using this product. Training required.

Biological standards

Chemical name	USA ACGIH -BEI
Cobalt	15 µg/L Medium: urine Time: end of shift at end of workweek Parameter: Cobalt (background); 1 µg/L Medium: blood Time: end of shift at end of workweek Parameter: Cobalt (background, semi-quantitative)

Environmental exposure controls Do not allow to enter into soil/subsoil. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State	solid	**Appearance**	solid, metallic
Odor	odorless	**Melting point / melting range**	1285-1395 °C / 2340-2540 °F
flash point	not applicable	**Vapor Pressure**	not applicable
Vapor Density	not applicable	**Water solubility**	Insoluble in water
Viscosity	solid	**Density**	8.44 g/cm3

9.2. Other information

VOC Content (%) Not Applicable

10. Stability and Reactivity

10.1 Reactivity Stable under normal conditions

10.2 Chemical stability Stable under normal conditions

10.3 Possibility of hazardous reactions Stable under normal conditions

10.4 Conditions to avoid Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

10.5 Incompatible materials Acids. Strong oxidizing agents.

10.6 Hazardous decomposition products Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

11. Toxicological Information

11.1 Information on toxicological effects

Product Information

Acute toxicity

Inhalation May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Eye Contact May cause eye irritation with susceptible persons.

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Prolonged contact may cause redness and irritation. Prolonged skin contact may defat the skin and produce dermatitis. May cause sensitization by skin contact.

Respiratory sensitization Category 1B
Carcinogenicity Category 1B
Reproductive, developmental and teratogenic effects Contains a known or suspected reproductive toxin.

Neurological effects Repeated or prolonged exposure may cause central nervous system damage. Prolonged or excessive exposure to manganese in dust or fume may cause irreversible central nervous system damage (Manganism). Symptoms resemble Parkinson's disease and include tremors, impaired speech, mask like face and impaired movement.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea Ingestion may cause irritation to mucous membranes

Irritation Repeated exposure may cause skin dryness or cracking.

Corrosivity No information available

Sensitization May cause sensitization of susceptible persons

Chemical name	Oral LD50	dermal LD50	Inhalation LC50
Cobalt	550 mg/kg bw	>2000 mg/kg bw	0.05 mg/L
Chromium	LD50 >5000 mg/kg bw	Data waiving - Study Scientifically Unjustified	LC50 >5.41 mg/L air (analytical)
Tungsten	LD50 >2000 mg/kg bw	LD50 >2000 mg/kg bw	LC50 >5.4 mg/L air
Nickel	>9000 mg/kg bw	Data waiving - Other Justification	NOAEC >=10.2 mgL air
Iron	= 984 mg/kg (Rat)		
Silicon Metal	LD50 >3160 mg/kg bw	LD50 >5000 mg/kg bw	Acutely Non Toxic
Carbon	> 10000 mg/kg (Rat)		
Manganese	LD50 >2000 mg/kg bw	Data waiving - Study Scientifically Unjustified	LC50 >5.14 mg/L air (analytical)

Chronic toxicity Prolonged exposure may cause chronic effects. CNS and psychiatric effects, Parkinson-like symptoms. Languor, sleepiness and weakness in legs. A stolid masklike appearance of face, emotional disturbances such as uncontrollable laughter and spastic gait with tendency to fall in walking and findings in more advanced cases. Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Repeated or prolonged exposure may cause central nervous system damage. Contains a known or suspected reproductive toxin. 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).

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).

Carcinogenic effects The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical name	IARC	China - Carcinogens	India - Carcinogens	Indonesia - Carcinogens
Cobalt	Group 2B - Possible Human Carcinogen	Possibly carcinogenic to humans		A3 - confirmed animal carcinogen

Chromium	Group 3 - Not Classified as a Human Carcinogen			
Nickel	Nickel Compounds: Group 1 - Known Human Carcinogen - Nickel, Metalic & Alloy: Group 2B - Possible Human Carcinogen	Possibly carcinogenic to humans		

Chemical name	Japan	Japan - ISHL Designated Carcinogens	Korea - Carcinogens	Philippines
Cobalt	Group 2B		2 - Limited evidence of human or animal carcinogenicity (metal dust and fume, Serial No. 519)	
Nickel	Group 1 Group 2B			

MUTAGENIC EFFECTS None known

Reproductive toxicity Contains a known or suspected reproductive toxin.

Developmental toxicity None known

Target organ effects blood, central nervous system (CNS), Central Vascular System (CVS), Eyes, kidney, liver, Lungs, Nasal Cavities, respiratory system, Skin

Neurological effects Repeated or prolonged exposure may cause central nervous system damage. Prolonged or excessive exposure to manganese in dust or fume may cause irreversible central nervous system damage (Manganism). Symptoms resemble Parkinson's disease and include tremors, impaired speech, mask like face and impaired movement.

11.2 Other Information none

Substance related information

12. Ecological Information

12.1. Ecotoxicity

Ecotoxicity Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical name	Algae toxicity	Acute Fish toxicity	Toxicity to Microorganisms	Daphnia magna
Cobalt	EC50 - 270ug/L	NOEC - 100 mg/L - Cobalt Powder	Not available	LOEC - 5.6 mg/L, LC50 > 100 mg/L
Chromium	Data Waiving - Study Scientifically Unjustified	Data Waiving - Study Scientifically Unjustified	Not available	Data Waiving - Study Scientifically Unjustified
Tungsten	Read Across - EC50 >17.7 mg/L	Read Across - NOEC > 9.8 mg/L	Not available	EC50 50 mg/L
Nickel	EC10 - 316.5 ug/L	LC50 - 15.3 mg/L	Not available	LC50 >200ug/L (@6-6.5 pH), 13ug/L (@8-8.5pH)
Iron	NOEC - 1.4 mg/L	Data Waiving - Study Scientifically Unjustified	Not available	Data Waiving - Study Scientifically Unjustified
Silicon Metal	Data Waiving - Study Scientifically Unjustified	Data Waiving - Other Justification	Not available	Data Waiving - Study Scientifically Unjustified
Manganese	EC50 - 4.5 mg/L	NOEC - 3.6 mg/L	Not available	EC 50 > 1.6 mg/L

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

12.3 Bioaccumulative potential This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

12.4 Mobility in soil 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

13.1 Waste treatment methods

Disposal Considerations 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. Improper disposal or reuse of this container may be dangerous and illegal. Refer to applicable local, state and federal regulations as well as industry standards.

Waste from residues/unused products: Reuse or recycle. Recover or recycle if possible. Dispose of in accordance with local regulations.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

OTHER INFORMATION Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport Information

IMO / IMDG Not regulated

ICAO / IATA-DGR Not regulated

China Dangerous Goods Not regulated

Australia Dangerous Goods Not regulated

Japan Dangerous Goods Not regulated

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical name	India - Hazardous and Toxic Chemicals	Japan - ISHL Disclosure cut-off list
Cobalt	Present (powder)	Ignitable substance (listed under Metallic powder); Ignitable substance (listed under Metallic powder) >0.1%
Chromium		>0.1%
Tungsten		Ignitable substance (listed under Metallic powder) >1%
Nickel		>0.1%
Silicon Metal		Ignitable substance (listed under Metallic powder)
Manganese		>1%
Chemical name	**Korea - Substances to Control - Metals**	**Singapore - Hazardous Substances**
Cobalt	1 %	
Chemical name	**Thailand - Hazardous Substances**	**Vietnam - Chemicals**
Cobalt		1000 kg (powder)
Nickel		1000 kg (inhalable powder)

All of the components in the product are on the following Inventory lists:

Chemical name	Inventory - China - Inventory of Existing Chemical Substances (IECSC)	Inventory - Japan - Existing and New Chemical Substances (ENCS)	Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)	Inventory - Korea - Existing Chemicals Inventory (KECI/KECL)	Inventory - Philippines - Inventory of Chemicals and Chemical Substances (PICCS)
Cobalt	Present [13762]	-	-	Present [KE-06060]	Present
Chromium	Present [13603]	-	-	Present [KE-05970]	Present
Tungsten	Present [34920]	-	-	Present [KE-35000]	Present
Nickel	Present [25343]	-	-	Present [KE-25818]	Present
Iron	Present [34355]	-	-	Present [KE-21059]	Present
Silicon Metal	Present [13814]	-	-	Present [KE-31029]	Present
Carbon	Present [34023]	-	-	Present [KE-04671]	Present
Manganese	Present [24928]	-	-	Present [KE-22999]	Present

Legend

16. Other Information

Prepared by Kennametal Inc. 1600 Technology Way Latrobe, PA 15650, USA

Issuing Date 2015-02-06

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Revision Note not applicable

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