

Print date 2018-01-10 Revision date 2018-01-10 Revision number 1

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

1.1 Product Identifier

Product Type Welding powder
Product Name Deloro 20 powder

Product Code KSPN1064-1

**Type** powder

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

Recommended use Industrial Manufacturing (all). Service life. cobalt and/or nickel containing alloys, steels,

prefabricated parts and tools. Industrial use. Professional use. Wear and Corrosion Resistant Welding Consumable. Wear and Corrosion Resistant Components. Metallurgical

Products. For use in industrial installations only.

Uses advised against Consumer use.

#### 1.3 Details of the supplier of the safety data sheet

Supplier Identification India: Kennametal India Limited 8/9th Mile, Tumkur Road Bangalore, Karnataka - 560073

bangalore.information@kennametal.com Phone: 1 800 10352271031

Singapore: Kennametal Pte Ltd. 3A International Business Park Unit #01-02/03/05

Singapore 609935 k-sg.sales@kennametal.com Phone: 1 800 622 1031

Pakistan: itsystem@brain.net.pk

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Company Emergency Phone Kennametal Security, Latrobe, US, PA +1-724-539-5610 (english)

Number

1.4 Emergency telephone number

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

Skin Sensitization	Category 1
carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1

#### 2.2 Label Elements

**Product Name** Deloro 20 powder **Product Code** KSPN1064-1





Signal Word Danger

hazard statements H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer

H372 - Causes damage to organs through prolonged or repeated exposure if inhaled

**Precautionary Statements** P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash hands thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P273 - Avoid release to the environment

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

**Precautionary Statements** P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking

P271 - Use only outdoors or in a well-ventilated area

P272 - Contaminated work clothing should not be allowed out of the workplace

P285 - In case of inadequate ventilation wear respiratory protection

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel

unwell

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

2.3 Other Hazards

Warning May cause sensitization by skin contact. Vapors may be irritating to eyes, nose, throat, and

lungs. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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. Arc Rays can injur eyes and burn skin. Electric shock can kill. The

product and work surface will be hot during and after welding.

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 Contact with eyes may cause irritation. Particulates may cause irritation due to mechanical

abrasion. 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 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.

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, Blood disorders, Kidney disorders, Liver disorders, Overexposure may cause

female and male reproductive disorder(s)

Environmental Hazard See section 12 for additional ecological information

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Formula	CAS-No	Weight-%	GHS Classification
Nickel	Ni	7440-02-0	> 50	STOT RE 1 (H372) Resp. tract, inhalation Carc. 2 (H351) Inhalation Skin Sens. 1 (H317) S,7 Aquatic Chronic 3 (H412)
Chromium	Cr	7440-47-3	3 - 5	Not classified
Silicon Metal	Si	7440-21-3	1 - 2.5	Not classified
Boron	В	7440-42-8	0.1 - 1	Not classified

Note This product may contain additional substances with a content of less than 0.1 % per

substance, which are not listed. May contain additional substances in a range up to 2 % which are not classified hazardous or may not contribute to the products overall

classification.

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

H228 - Flammable solid

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer if inhaled

H372 - Causes damage to the following organs through prolonged or repeated exposure if inhaled:

Lungs

H412 - Harmful to aquatic life with long lasting effects

## 4. FIRST AID MEASURES

General Advice Immediate medical attention is required. 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. Call a physician immediately. Rinse thoroughly with

plenty of water for at least 15 minutes and consult a physician.



Immediate medical attention is required. Wash off immediately with soap and plenty of Skin Contact

water while removing all contaminated clothes and shoes. Wash off immediately with soap

and plenty of water.

Move to fresh air. Immediate medical attention is required. If not breathing, give artificial **INHALATION** 

respiration.

Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an INGESTION

unconscious person. Call a physician or poison control center immediately. Rinse mouth.

Self-Protection of the First Aider Wear suitable gloves. Self-Protection of the First Aider.

effects, both acute and delayed

4.2. Most important symptoms and 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. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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 None. Not Be Used For Safety Reasons

5.2 Special hazards arising from the Non-combustible, substance itself does not burn but may decompose upon heating to

substance or mixture

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.

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

breathing apparatus.

Component information

Component information		
Chemical Name	Extuinguishing Media for Fires (Suitable)	Extinguishing Media for Fires (Unsuitable)
Chromium	Use extinguishing media appropriate for surrounding fire.	Do not use carbon dioxide, which may form an explosive mixture with powdered chromium.
Silicon Metal	SMALL FIRES: Dry chemical, sand, water spray, foam.; LARGE FIRES: Water spray, fog, foam	-

# 6. ACCIDENTAL RELEASE MEASURES

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

procedures

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. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust.

6.4 Reference to other sections

## 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Wear suitable protective clothing. Use only with adequate ventilation. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Keep in properly labeled containers. 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

**Incompatible Materials** 

7.3 Specific end use(s)

Welding. Restricted to professional users. For use in industrial installations only.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Chemical Name	China	Hong Kong	India	Indonesia	Japan
Nickel	TWA: 1 mg/m <sup>3</sup>	TWA: 1.5 mg/m <sup>3</sup>	=	TWA: 1.5 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> OEL
	STEL: 2.5 mg/m <sup>3</sup>				
Chromium	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	-	TWA: 0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup> OEL
	STEL: 0.15 mg/m <sup>3</sup>				
Silicon Metal	-	•	-	TWA: 10 mg/m <sup>3</sup>	-
Chemical Name	Korea	Philippines	Singapore	Taiwan	Thailand
Nickel	TWA: 1 mg/m <sup>3</sup>	1 mg/m³ TWA	PEL: 1 mg/m <sup>3</sup>	1 mg/m³ TWA	-
Chromium	TWA: 0.5 mg/m <sup>3</sup>	1 mg/m³ TWA	PEL: 0.5 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> TWA	=
Silicon Metal	TWA: 10 mg/m <sup>3</sup>	-	PEL: 10 mg/m <sup>3</sup>	-	-
Chemical Name	Vietnam			•••	•••
Nickel	0.05 mg/m <sup>3</sup> TWA	=	=	=	=
	0.25 mg/m <sup>3</sup> STEL				

If welding is performed on plated or coated materials such as galvanised or **During Welding** 

painted steel, excessive fume may be produced which contains additional

hazardous components, and may result in metal fume fever or other health effects

8.2 Exposure controls

Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. **Personal Precautions** 

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.

Ensure adequate ventilation, especially in confined areas. **Engineering Controls** 

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

Skin protection Wear impervious gloves and/or clothing if needed to prevent contact with the material. Wear

gloves according to EN 374 to protect against skin effects from powders. Always ensure



that gloves are free from defects and that they are stored and used correctly. Wear protective natural rubber, nitrile rubber, Neoprene  $^{\text{TM}}$  or PVC gloves. Glove thickness  $\geq 0.5$  mm

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** 

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. 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. Wear a positive-pressure supplied-air respirator with full facepiece. Full-/Half-/quarter-face masks (DIN EN 136/140), P2, P3, FFP2, FFP3. Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive pressure mode. Apply within a vented cab supplied with filtered air under positive pressure and with a protection factor of >20. High efficiency particulate air filter (HEPA filter).

**Hygiene Measures** 

Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Wash hands before breaks and at the end of workday. Avoid contact with skin, eyes and clothing. Keep working clothes separately.

**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

**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 @20°C Solid appearance Metallic, powder

particle size ~90 µm / 170 mesh Odor None

Melting Point / Melting 965-1040 °C / 1770-1900 °F Flash Point Not applicable

Range

vapor pressure Not applicable vapor density Not applicable

Water Solubility Insoluble in water Autoignition Temperature N/A

Dynamic ViscositySolidDensity VALUE8.44 g/cm3Explosive PropertiesNot applicable

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.
Nickel	58.69 g/mol	-	1 mmHg at 1810 °C	=	-	ī	=	-
Chromium	51.99 g/mol	-	-	-	-	-	-	2642 °C
Silicon Metal	28.08 g/mol	<1 mg/L	ū	-	-	ū	-	-
Boron	10.81 g/mol	-	0.0000156 atm at 2140 °C	-	-	-	-	-
Chemical Name	Density	Melt. Temp.	flash point	Water Sol.	Bulk Dens.	Odor	State	Color



	VALUE							
Nickel	8.9 g/cm3 at 25 °C	-	=	insoluble	-	=	=	=
Chromium	7.19 g/cm3 at 20 °C	1900 °C	=	insoluble	-	=	=	grey
Silicon Metal	2.33 g/cm3 at 25 °C	1410 °C	-	-	-	-	-	dark grey; dark brown

## 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**Contact with eyes may cause irritation. Particulates may cause irritation due to mechanical

abrasion. 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.

carcinogenicity Category 2

**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
Nickel	>9000 mg/kg bw	Data waiving - Other Justification	NOAEC >=10.2 mgL air
Chromium	LD50 >5000 mg/kg bw	Data waiving - Study Scientifically Unjustified	LC50 >5.41 mg/L air (analytical)
Silicon Metal	LD50 >3160 mg/kg bw	LD50 >5000 mg/kg bw	Acutely Non Toxic
Boron	650 mg/kg (Rat)	Not Listed in C&L Inventory	> 5.08 mg/l



<u>Chronic Toxicity</u> 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.

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
Nickel	Nickel Compounds: Group 1	Possibly carcinogenic to	-	-
	- Known Human Carcinogen	humans		
	<ul> <li>Nickel, Metalic &amp; Alloy:</li> </ul>			
	Group 2B - Possible Human			
	Carcinogen			
Chromium	Group 3 - Not Classified as a	-	-	A4 - not classifiable as a
	Human Carcinogen			human carcinogen
Chemical Name	Japan	Japan - ISHL Designated	Korea - Carcinogens	Philippines
		Carcinogens		
Nickel	Group 1	-	2 - Limited evidence of	-
	Group 2B		human or animal	
			carcinogenicity (metal, Serial	
			No. 045)	

Mutagenic effects None known

Reproductive Toxicity None known.

developmental toxicity None known

Target Organ Effects Blood, EYES, Jaw, Kidney, Liver, Lungs, Nasal cavities, Respiratory system, skin, Teeth

**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
Substance related information

None

### 12. ECOLOGICAL INFORMATION

### 12.1. Ecotoxicity

**ecotoxicity** Very toxic to aquatic organisms.

Chemical Name	Algae Toxicity	Acute Fish Toxicity	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
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)
Chromium	Data Waiving - Study Scientifically Unjustified	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



Boron | EC0 1 mg/l (72h, green | LC0 >= 1 mg/l (96h, Zebra | - | EC0 >= 1 mg/l (48h, algae) | Daphnia)

**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

## 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.

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 (IECSC) NOT REGULATED

Australia Dangerous Goods NOT REGULATED

Japan NOT REGULATED

### 15. REGULATORY INFORMATION

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

Other Regulations None

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

Chemical Name	China - Chemicals Regulated under National Standard (GB)	China - List of Dangerous Chemicals
Silicon Metal	-	Present (powder, amorphous)



Chemical Name	India - Hazardous and Toxic Chemicals	Japan - ISHL Disclosure cut-off list
Nickel	Present (powder)	>=0.1%
Chromium	Present (powder)	>=0.1%
Silicon Metal	-	Ignitable substance (listed under Metallic powder)
Boron	Present (powder)	-
Chemical Name	Korea - Substances to Control - Metals	Singapore - Hazardous Substances
Nickel	1 %	-
Chromium	1 %	-
Chemical Name	Thailand - Hazardous Substances	Vietnam - Chemicals
Nickel	-	1000 kg (inhalable powder)
Boron	-	2804 50 (Hazardous chemicals require chemical safety
		data sheets)

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

Chemical Name	IECSC - China Inventory of Existing Chemical Substances	- Existing and	Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)		Inventory - Philippines - Inventory of Chemicals and Chemical Substances (PICCS)	Inventory - Taiwan - Taiwan Chemical Substance Inventory (TCSI)
Nickel	Present [25343]	-	-	Present [KE-25818]	Present	Present
Chromium	Present [13603]	-	-	Present [KE-05970]	Present	Present
Silicon Metal	Present [13814]	-	-	Present [KE-31029]	Present	Present
Boron	Present [25541]	-	-	Present [KE-03518]	Present	Present

15.2 Chemical Safety Assessment Chemical Safety Assessment available for this product.

## 16. OTHER INFORMATION

# **Global Automotive Declarable Substance List Classifications**

Chemical Name	Global Automotive Declarable Substance List	Global Automotive Declarable Substance List
	Classifications	Thresholds
Nickel	Declarable Substance (FI)	0.1 %

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

Issuing Date2018-01-10Revision date2018-01-10Revision noteNot 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**