

Section 1: Identification

Product identifier

Product Name • Metglas Braze Foil MBF 60, MBF 62, MBF 64, MBF 67, MBF 601 and MBF 602

Synonyms • Amorphous Braze Foil

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

Recommended use • Braze Filler Metal

Restrictions on use • None

Details of the supplier of the safety data sheet

Manufacturer • Metglas Inc.
440 Allied Drive
Conway, SC 29526
United States
www.metglas.com

Telephone • 843-349-6800
(General)

Emergency telephone number

Manufacturer • 800-581-7654

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • The Metglas Braze Foil is intended to be used as a braze filler metal in a vacuum or inert atmosphere braze furnace. Since the actual use by others is beyond our control, it is the user's responsibility to determine the suitability of the product for its use and to adopt such safety precautions as may be necessary. Since the conditions of use are not under our control, Metglas disclaims all liability with respect to the use of any material supplied by Metglas.
Skin Sensitization 1A
Respiratory Sensitization 1B
Carcinogenicity 2
Reproductive Toxicity 2
Specific Target Organ Toxicity Repeated Exposure 2

Label elements

OSHA HCS 2012

DANGER



Hazard statements • May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled

Suspected of causing cancer.
 Suspected of damaging fertility or the unborn child.
 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention** • Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breathe dust.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.
 In case of inadequate ventilation wear respiratory protection.
- Response** • IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
 If on skin: Wash with plenty of water.
 Specific treatment, see supplemental first aid information.
 Wash contaminated clothing before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
 IF exposed or concerned: Get medical advice/attention.
 Get medical advice/attention if you feel unwell.

Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

OSHA HCS 2012 • Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Nickel, massive, ≥ 1 mm	CAS:7440-02-0	45% TO 89.15%	NDA	OSHA HCS 2012: Flam. Sol. 1; Comb. Dust; Resp. Sens. 1B; Skin Sens. 1A; Carc. 2 (Inhl); STOT RE 2 (Lungs / OrI, Inhl)	NDA
Iron	CAS:7439-89-6	0% TO 40%	NDA	OSHA HCS 2012: Acute Tox. 4 (OrI)	NDA
Chromium, massive	CAS:7440-47-3	10% TO 30%	NDA	OSHA HCS 2012: Not Classified	NDA
Phosphorus	CAS:7723-14-0	3% TO 12%	NDA	OSHA HCS 2012: Flam. Sol. 2; Acute Tox. 2 (OrI); Skin Corr. 1; Eye Dam. 1	NDA
Silicon	CAS:7440-21-3	0% TO 10%	Ingestion/Oral-Rat LD50 • 3160 mg/kg	OSHA HCS 2012: Flam. Sol. 2	NDA
Molybdenum (powder)	CAS:7439-98-7	0% TO 5%	NDA	OSHA HCS 2012: Flam. Sol. 1; Comb. Dust; Repr. 2 (OrI)	NDA
Boron	CAS:7440-42-8	0% TO 2%	Ingestion/Oral-Rat LD50 • 650 mg/kg	OSHA HCS 2012: Acute Tox. 4 (OrI)	NDA

Section 4: First-Aid Measures

Description of first aid measures

- Inhalation** • Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
- Skin** • In case of contact with substance, immediately flush skin with running water for at least 20 minutes.
- Eye** • In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion** • Rinse mouth. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician** • All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media** • In case of fire use media as appropriate for surrounding fire.

- Unsuitable Extinguishing Media** • No data available

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards** • None

- Hazardous Combustion Products** • Toxic and irritating vapors may be released if the product melts or burns in a fire.

Advice for firefighters

- Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Personal Precautions** • Use caution in handling as edges are very sharp. Wear appropriate personal protective equipment.

- Emergency Procedures** • Use normal clean up procedures.

Environmental precautions

- Avoid release to the environment.

Methods and material for containment and cleaning up

- Containment/Clean-up Measures** • Pick up and place into proper storage.

Section 7 - Handling and Storage

Precautions for safe handling

- Handling** • Use good safety and industrial hygiene practices. Wear appropriate personal protective equipment. Do not breathe dust. Cut hazard. Ribbon must be handled with care and use cut resistant gloves. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

- Storage** • Store in a facility that will protect product from physical damage and/or contamination with foreign material. Store material in a dry place.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Silicon (7440-21-3)	TWAs	Not established	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Molybdenum (powder) (7439-98-7)	TWAs	10 mg/m ³ TWA (inhalable fraction); 3 mg/m ³ TWA (respirable fraction)	Not established	Not established
Chromium, massive (7440-47-3)	TWAs	0.5 mg/m ³ TWA	0.5 mg/m ³ TWA	1 mg/m ³ TWA
Nickel, massive, ≥ 1 mm (7440-02-0)	TWAs	1.5 mg/m ³ TWA (inhalable fraction)	0.015 mg/m ³ TWA	1 mg/m ³ TWA

Exposure controls

Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment).

Personal Protective Equipment

Respiratory

- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety glasses.

Skin/Body

- Wear cut-resistant gloves. Wear long sleeves and/or protective coveralls.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Shiny gray metallic metal foil with no odor.
Color	Shiny gray.	Odor	No odor.
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	878 to 1060 °C(1612.4 to 1940 °F)
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	7.4 to 8.2 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		

Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- No data available

Incompatible materials

- Product can be attacked by moisture and corrosive materials.

Hazardous decomposition products

- Toxic vapors and metallic fumes may be released if melted in a fire.

Section 11 - Toxicological Information

Information on toxicological effects

		Components
Boron (0% TO 2%)	7440-42-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 650 mg/kg; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 32 g/kg 30 Day(s)-Intermittent; <i>Brain and Coverings:Other degenerative changes; Cardiac:Other changes; Liver:Liver function tests impaired;</i> Reproductive: Ingestion/Oral-Rat TDLo • 4.95 mg/kg (1-22D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Effects on Embryo or Fetus:Fetal death</i>
Nickel, massive, ≥ 1 mm (45% TO 89.15%)	7440-02-0	Acute Toxicity: Ingestion/Oral-Rat TDLo • 200 mg/kg; <i>Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Behavioral:Somnolence (general depressed activity);</i> Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 500 mg/kg 5 Day(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Fibrosis, focal (pneumoconiosis); Related to Chronic Data:Death in the Other Multiple Dose data type field;</i> Inhalation-Rabbit TCLo • 1 mg/m ³ 6 Hour(s) 13 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Other changes; Lungs, Thorax, or Respiration:Changes in lung weight;</i> <i>Blood:Hemorrhage;</i> Inhalation-Rat TCLo • 0.4 mg/m ³ 40 Week(s)-Intermittent; <i>Vascular:Thrombosis distant from injection site; Lungs, Thorax, or Respiration:Other changes; Related to Chronic Data:Death in the Other Multiple Dose data type field;</i> Reproductive: Ingestion/Oral-Rat TDLo • 158 mg/kg (multigenerations); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Effects on Embryo or Fetus:Fetal death;</i> Tumorigen / Carcinogen: Inhalation-Guinea Pig TCLo • 15 mg/m ³ 91 Week(s)-Intermittent; <i>Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Lungs, Thorax, or Respiration:Bronchiogenic carcinoma</i>
Phosphorus (3% TO 12%)	7723-14-0	Acute Toxicity: Ingestion/Oral-Rat LD50 • 11.5 mg/kg; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 12 mg/kg 4 Day(s)-Intermittent; <i>Liver:Hepatitis (hepatocellular necrosis), diffuse; Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol); Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Transaminases;</i> Reproductive: Ingestion/Oral-Rat TDLo • 11 µg/kg (1-22D preg); <i>Reproductive Effects:Effects on Fertility:Female fertility index; Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Fertility:Litter size (e.g., # fetuses per litter; measured before birth)</i>
Molybdenum (powder) (0% TO 5%)	7439-98-7	Mutagen: Cytogenetic analysis • Inhalation-Rat • 19500 µg/m ³ ; Reproductive: Ingestion/Oral-Mouse TDLo • 448 mg/kg (multigenerations); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Effects on Embryo or</i>

		<i>Fetus:Fetal death</i> ; Ingestion/Oral-Rat TDLo • 5800 µg/kg (30W pre/1-20D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i> ; Ingestion/Oral-Rat TDLo • 6050 µg/kg (35W pre); <i>Reproductive Effects:Effects on Fertility:Pre-implantation mortality</i> ; <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality</i> ; <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i>
Silicon (0% TO 10%)	7440-21-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 3160 mg/kg; Irritation: Eye-Rabbit • 3 mg • Mild irritation
Iron (0% TO 40%)	7439-89-6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 750 mg/kg; <i>Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol)</i> ; <i>Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Transaminases</i> ; Ingestion/Oral-Child TDLo • 77 mg/kg; <i>Behavioral:Irritability</i> ; <i>Gastrointestinal:Nausea or vomiting</i> ; <i>Blood:Normocytic anemia</i> ; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 105 mg/kg 5 Week(s)-Continuous; <i>Liver:Tumors</i> ; <i>Tumorigenic:Active as anti-cancer agent</i> ; <i>Tumorigenic:Protects against induction of experimental tumors</i>

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012•No data available
Skin corrosion/Irritation	OSHA HCS 2012•No data available
Serious eye damage/Irritation	OSHA HCS 2012•No data available
Skin sensitization	OSHA HCS 2012•Skin Sensitizer 1A
Respiratory sensitization	OSHA HCS 2012•Respiratory Sensitizer 1B
Aspiration Hazard	OSHA HCS 2012•No data available
Carcinogenicity	OSHA HCS 2012•Carcinogenicity 2
Germ Cell Mutagenicity	OSHA HCS 2012•No data available
Toxicity for Reproduction	OSHA HCS 2012•Toxic to Reproduction 2
STOT-SE	OSHA HCS 2012•No data available
STOT-RE	OSHA HCS 2012•Specific Target Organ Toxicity Repeated Exposure 2

Potential Health Effects

Inhalation

Acute (Immediate)

- Exposure to dust may cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.

Chronic (Delayed)

- Chronic effects such as rhinitis, sinusitis, nasal septal perforations and asthma have been reported in nickel refinery and nickel plating workers. Some researchers reported pulmonary changes with fibrosis in workers handling nickel dust. Long term inhalation exposure to metallic nickel caused mucosal damage and inflammatory reaction, sometimes accompanied by slight fibrosis, was observed in rabbits after high level exposure to nickel graphite dust. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin

Acute (Immediate)

- Handling of sharp edges may cause cuts. Exposure to dust may cause mechanical irritation. May cause skin sensitization. Symptoms include redness, and skin rash.

Chronic (Delayed)

- No data available

Eye

Acute (Immediate)

- Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.

Chronic (Delayed)

- No data available

Ingestion

Acute (Immediate)

- Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

Chronic (Delayed) • No data available

Carcinogenic Effects • Repeated and prolonged exposure may cause cancer. Nickel and nickel compounds have caused cancer in laboratory animals and should be treated as 'possible' carcinogens. At present there is no reliable evidence that nickel metal has caused cancer in humans.

Carcinogenic Effects			
	CAS	IARC	NTP
Nickel, massive, ≥ 1 mm	7440-02-0	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen

Reproductive Effects • Repeated and prolonged exposure may cause reproductive effects.

Other information

- Heating above the melting point releases metallic oxides which may cause metal fume fever which is an influenza like illness. Symptoms include headache, metallic taste in the mouth, cough, thirst, throat irritation, shortness of breath, fever, sweating and pain in the limbs. This illness is not permanent and recovery usually occurs within 24-48 hours after onset.

Key to abbreviations

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

- Non-mandatory section - information not compiled for this reason.

Persistence and degradability

- Non-mandatory section - information not compiled for this reason.

Bioaccumulative potential

- Non-mandatory section - information not compiled for this reason.

Mobility in Soil

- Non-mandatory section - information not compiled for this reason.

Other adverse effects

- Non-mandatory section - information not compiled for this reason.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA

Special precautions for user

- None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Section 15 - Regulatory Information

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

SARA Hazard Classifications

- Acute, Chronic

Inventory		
Component	CAS	TSCA
Boron	7440-42-8	Yes
Chromium, massive	7440-47-3	Yes
Iron	7439-89-6	Yes
Molybdenum (powder)	7439-98-7	Yes
Nickel, massive, ≥ 1 mm	7440-02-0	Yes
Phosphorus	7723-14-0	Yes
Silicon	7440-21-3	Yes

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

•Phosphorus	7723-14-0	
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

•Phosphorus	7723-14-0	1 lb final RQ; 0.454 kg final RQ
•Chromium, massive	7440-47-3	5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

•Molybdenum (powder)	7439-98-7	Not Listed 100 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 45.4 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
•Nickel, massive, ≥ 1 mm	7440-02-0	
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed
U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities		
•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
•Phosphorus	7723-14-0	1 lb EPCRA RQ
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
•Phosphorus	7723-14-0	100 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed
U.S. - CERCLA/SARA - Section 313 - Emission Reporting		
•Phosphorus	7723-14-0	1.0 % de minimis concentration (yellow or white)
•Chromium, massive	7440-47-3	1.0 % de minimis concentration
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	0.1 % de minimis concentration
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed
U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing		
•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

U.S. - California - Proposition 65 - Carcinogens List

•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	carcinogen, 10/1/1989 (metallic)
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

•Phosphorus	7723-14-0	Not Listed
•Chromium, massive	7440-47-3	Not Listed
•Molybdenum (powder)	7439-98-7	Not Listed
•Nickel, massive, ≥ 1 mm	7440-02-0	Not Listed
•Silicon	7440-21-3	Not Listed
•Iron	7439-89-6	Not Listed
•Boron	7440-42-8	Not Listed

Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Revision Date • 25/August/2016

Last Revision Date • 17/August/2016

Preparation Date • 17/August/2016

Disclaimer/Statement of Liability • All information appearing herein concerning Metglas products are based on data believed to be accurate and reliable. The information is provided as guidance for safe transportation, handling, use, processing, storage, disposal and release. It is not

considered a warranty or quality specification. Since the actual use is determined by the user, it is the user's responsibility to determine the suitability of the product for its use and to adopt appropriate safety precautions as necessary.

Key to abbreviations

NDA = No Data Available