MATERIAL DATA SAFETY SHEET

(DEW)



SECTION 1.

MATERIAL USED

MANUFACTURER'S NAME

SAKSHI INNOVATIONS PRIVATE LIMITED Gurudwara Somasar Road, P.O. Sahnewal, Village TIBBA, Distt. LUDHIANA-141 120 (INDIA)

	Nitrogen

EMERGENCY OVERVIEW

MOLYBDENUM

INHALATION

EXTINGUISHER MEDIA

SPECIAL EXPOSURE HAZARDS

SUITABLE

SECTION 7.

SECTION 8.

HYGIENE MEASURES

MELTING TEMPERATURE

SECTION 10.

SECTION 11.

SECTION 12.

SECTION 13.

GENERAL INFORMATION

SECTION 14.

CATEGORIZATION

HANDLING PRECAUTIONS

STORAGE REQUIREMENTS

PACKAGING MATERIAL RECOMMENDED

ENVIRONMENTAL EXPOSURE CONTROLS

		when subjected to Welding, Burning, Sawing, Brazing & grinding etc. Potentially
		hazardous fumes or dust may be generated. Needs adequate exhaust ventilation
		& appropriate protective equipment for workers.
EFFECT OF SHORT TERM (ACUTE) EXPOSU	RE	
INILIALATION		Fumos & dust may be irritating to respiratory system

associated with the following conditions. IRON OXIDE Chronic inhalation of excessive concentrations of iron oxide fumes or dust may results in development of a benign pneumoconiosis, called siderosis, which is

observable as an x-ray change. Chronic exposure to high concentrations of manganese fumes and dusts may **MANGANESE**

very low toxicity. The hexavalent form is very toxic. Nickel is a common contact allergen & causes some sensitization, allergic contact NICKEL dermatitis (ACD). Fumes are respiratory irritants and may cause respiratory

reported in Laboratory animals from intratracheal ingestion of silicon dust. Silicon dust has little adverse effect on lungs and does not appear to produce significant organic disease or toxic effects when exposures are kept under the TLV. Silicon may cause chronic respiratory e ffects.

EYES If dust/fumes get in eyes, immediately flush with large amounts of running water for several minutes and seek Prompt medical attention. SKIN If dust gets on skin wash contaminated area with mild soap and water. Remove and wash contaminated clothing if rash or irritation persists, seek medical attention.

HAZARDOUS COMBUSTION Not applicable for solid form alloy. Toxic metal and metallic Oxide.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Store in a dry place.

Use original container.

HANDELING & STORAGE

limits are exceeded.

EXPOSURE CONTROLS/ PERSONAL PROTECTIONS

TECHNICAL MEASURES Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process

DENSITY (G/CM3) 7.750 HARDNESS (HV5) 205 **FINISH** No.4 or B.A

1375-1400 °C

According to our experience and information the product has no harmful effects on health if properly handled.

REACTIVITY AND STABILITY

TOXICOLOGICAL INFORMATION

ECHOLOGICAL INFORMATION

DISPOSAL CONSIDERATIONS

METHODS OF DISPOSAL Steel scrap should be recycled wherever possible

SECTION 15. **REGULATORY INFORMATION**

and a delayed (chronic) Health hazard is defined by 40 CFR 370.

Dispose of in accordance with federal, provincial, state Or local regulations.

SARA TITLE III SECTION 302 No components are listed as extremely hazardous substances EXTREMELY HAZARDOUS SUBSTANCES (EHSS):

OTHER INFORMATION SECTION 16.

The information provided herein is Compiled by Sakshi to be accurate from sources believed to be reliable, but it is the responsibility of the user investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of this product, and to determine the suitability of the product for its intended use. Sakshi makes no warranty, express or implied, concerning the product or the

merchantability or fitness thereof for any purpose or concerning the accuracy of any information provided.

MATERIAL IDENTIFICATION PRODUCT DESCRIPTION Our Grating and frame are functional, attractive and economical solution to exterior and interior drainage problem provides a dynamic and contemporary appearance to complement today's architectural spaces. Stainless Steel - Grade 316

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS Chemical Composition CAS No. % Weight Carbon 7440-44-0 0.022 Chromium 7440-47-3 16.77 Iron *7*439-89-6 67.91 Manganese 7439-96-5 1.761 **Phosphorus** 7723-14-0 0.039 Silicon 7440-21-3 0.359 Sulphur 7704-34-9 0.0055 Nickel 7440-02-0 10.24 Molybdenum 7439-98-7 2.074 Aluminium 7429-90-5 0.013 Cobalt 7440-48-4 0.21 copper 7440-50-8 0.403

Niobium 7440-03-1 0.019 Titanium 7440-32-6 0.0060 Vanadium 7440-62-2 0.069 7440-33-7 0.014 **Tungsten** Tin 7440-31-5 0.012 Arsenic 7440-38-2 0.0075 7727-37-9 0.066 SECTION 3. HAZARDS IDENTIFICATION

Welding, brazing, cutting, grinding and machining of this material may liberate

Steel production sheet, coil do not pose a significant health hazardous. However

on its oxidation state. The metal form (chromium as it exists in this product) is of

Based on animal experiments, molybdenum and its compounds are highly toxic. Some evidence of liver dysfunction with hyperbilirubinemia have been reported in workmen chronically exposed . In addition signs of gout have been found in factory workers . The main features were joint pains in the knees, hands, feet, articular

If inhalation of dust / fumes occurs, immediately remove victim from the adverse environment to fresh air and seek medical attention. If breathing has stopped,

: In case of fire, use water spray (Fog), foam, dry chemical extinguisher or Co².

: No special fire or explosion hazard. Promptly isolate the scene by removing all

Fire Fighters self-contained breathing apparatus (SCBA) with afull face-piece

Providing good ventilation and/or local exhaust systems are used.

Wash all exposed skin and face thoroughly after handling products before eating,

smoking or using the lavatory and at the end of the working period.

disease, skin contact can also cause an allergic skin rash, nickel and its

potentially hazardous fumes & dust. This dust or fumes may be harmful if inhaled. Molten material may cause thermal burns. **FLAMMABILITY** Not Applicable PRIMARY ROUTE OF EXPOSURE Inhalation of fumes from Welding or Burning, Dust from Grinding or Cutting. **ROUTE OF EXPOSURE** Eye, Skin contact or Inhalation

Fumes & dust may be irritating to respiratory system. INHALATION EYE CONTACT Dust or particles may cause mechanical irritation. SKIN CONTACT Dust or particles may cause irritation due to abrasion. INGESTION Not anticipated under normal circumstances. As such this material is not expected to be acutely toxic via ingestion. EFFECT OF LONG-TERM (CHRONIC) EXPOSURE Chronic inhalation of high concentrations of metallic fumes and dusts are

increase the incidence of bronchitis pneumonia and lung damage and may adversely affect the central nervous system with symptoms resembling Parkinson's disease. The alleged health hazards associated with exposure to chromium are dependent **CHROMIUM**

compounds have been reported to cause cancer of the lungs and sinuses. Elementary silicon is an inert material which appears to lack the property of SILICON causing fibrosis in lung tissue. However, slight pulmonary lesions have been

SECTION 4. FIRST AIDS MEASURES

deformities, erythema, and edema of the joint areas.

certified individuals should perform CPR. Keep affected person warm and at rest. INGESTION If significant amounts of metal are ingested, seek medical attention. FIRE FIGHTING MEASURES SECTION 5.

persons. Vicinity of the incident if there is a fire.

PRODUCTS Fumes may be evolved from fires involving finely divided alloy SPECIAL PROTECTIVE Fire Fighters should wear appropriate protective equipment and Equipment of

Minimal problems with spills of this product would be expected to occur because of its solid form. Protective Equipment: Gloves and barrier creams may be necessary to prevent skin sensitization and dermatitis. If your process involves grinding or any other action that causes the release of dust or fumes, approved safety

glasses or goggles should be worn

operated in positive pressure mode.

RESPIRATORY PROTECTION NIOSH / MSHA approved dust/mist/fume respirators should be used during welding, burning and grinding operations, if applicable exposure

EYE PROTECTION Safety glasses should always be worn when grinding or cutting. Face shields should be worn when welding or burning. SKIN PROTECTION Skin covering working clothes, wear dust proof overalls if large quantity of

equipment will be necessary to reduce emissions to acceptable levels. **PHYSICAL & CHEMICAL PROPERTIES** SECTION 9. Solid PHYSICAL STATE

STABILITY The product is stable. POSSIBILITY OF HAZARDOUS Under normal conditions of storage and use, hazardous reactions will Not Occur. **REACTIONS**

The product is practically insoluble in water. In views of its consistency and insolubility in water, no ecological Problems are to be expected if the product is properly handled.

TRANSPORT INFORMATION Material is not listed as a hazardous substance for any mode of transportation.

SARA TITLE III HAZARD Product (Dust and Fume) is categorized as an immediate (acute) health hazard

MATERIAL SAFETY DATA SHEET (DEW)



PRODUCT DESCRIPTION

MATERIAL IDENTIFICATION

SECTION 1.

SECTION 2.

SECTION 3.

FLAMMABILITY

INHALATION

INGESTION

SECTION 4.

EYES

SKIN

INHALATION

INGESTION

SUITABLE

PRODUCTS

SECTION 5.

EXTINGUISHER MEDIA

HAZARDOUS COMBUSTION

SPECIAL PROTECTIVE

HANDLING PRECAUTIONS

STORAGE REQUIREMENTS

EYE PROTECTION

SKIN PROTECTION

TECHNICAL MEASURES

PHYSICAL STATE

SECTION 10.

POSSIBILITY OF HAZARDOUS

STABILITY

REACTIONS

SECTION 12.

SECTION 13.

SECTION 14.

SECTION 16.

PACKAGING MATERIAL RECOMMENDED

EMERGENCY OVERVIEW

ROUTE OF EXPOSURE

Our Grating and frame are functional, attractive and economical solution to exterior and interior drainage problem provides

a dynamic and contemporary appearance to complement today's architectural spaces. **MATERIAL USED**

Stainless Steel - Grade 304

MANUFACTURER'S NAME

SAKSHI INNOVATIONS PRIVATE LIMITED Gurudwara Somasar Road, P.O. Sahnewal, Village TIBBA, Distt. LUDHIANA-141 120 (INDIA)

COMPOSITION / INFORMATION ON INGREDIENTS

CAS No.

% Weight

0.065

0.330

Welding, brazing, cutting, grinding and machining of this material may liberate potentially hazardous fumes & dust. This dust or fumes may be harmful if inhaled.

Steel production sheet, coil do not pose a significant health hazardous. However when subjected to Welding, Burning, Sawing, Brazing & grinding etc. Potentially hazardous fumes or dust may be generated. Needs adequate exhaust ventilation

Not anticipated under normal circumstances. As such this material is not expected

results in development of a benign pneumoconiosis, called siderosis, which is

on its oxidation state. The metal form (chromium as it exists in this product) is of

disease, skin contact can also cause an allergic skin rash, nickel and its compounds have been reported to cause cancer of the lungs and sinuses.

Carbon 7440-44-0 Silicon 7440-21-3

Chemical Composition

Manganese	<i>7</i> 439-96-5	1.030			
Phosphorus	7723-14-0	0.041			
Sulphur	<i>77</i> 04-34-9	0.006			
Chromium	7440-47-3	18.250			
Molybdenum	<i>7</i> 439-98-7	0.240			
■ Nickel	7440-02-0	8.240			
Aluminium	<i>7</i> 429-90-5	0.0034			
■ Cobalt	7440-48-4	0.220			
Copper	<i>7</i> 440-50-8	0.360			
Niobium	7440-03-1	0.0079			
■ Titanium	7440-32-6	0.004			
■ Venadium	7440-62-2	0.006			
■ Tungsten	7440-33-7	0.021			
■ Tin	<i>7</i> 440-31-5	0.008			
Arsenic	7440-38-2	0.003			
■ Boron	7440-42-8	0.0007			
■ Nitrogen	7727-37-9	0.024			
■ Iron	<i>7</i> 439-89-6	71.140			
HAZARDS IDENTIFICATION					

PRIMARY ROUTE OF EXPOSURE Inhalation of fumes from Welding or Burning, Dust from Grinding or Cutting.

EFFECT OF SHORT TERM (ACUTE) EXPOSURE

EYE CONTACT Dust or particles may cause mechanical irritation. SKIN CONTACT Dust or particles may cause irritation due to abrasion.

Not Applicable

to be acutely toxic via ingestion. EFFECT OF LONG-TERM (CHRONIC) EXPOSURE Chronic inhalation of high concentrations of metallic fumes and dusts are

associated with the following conditions. Chronic inhalation of excessive concentrations of iron oxide fumes or dust may **IRON OXIDE**

observable as an x-ray change.

Molten material may cause thermal burns.

& appropriate protective equipment for workers.

Fumes & dust may be irritating to respiratory system.

Eye, Skin contact or Inhalation

MANGANESE Chronic exposure to high concentrations of manganese fumes and dusts may increase the incidence of bronchitis pneumonia and lung damage and may

adversely affect the central nervous system with symptoms resembling Parkinson's disease. The alleged health hazards associated with exposure to chromium are dependent **CHROMIUM**

very low toxicity. The hexavalent form is very toxic. **NICKEL** Nickel is a common contact allergen & causes some sensitization, allergic contact dermatitis (ACD). Fumes are respiratory irritants and may cause respiratory

Elementary silicon is an inert material which appears to lack the property of SILICON causing fibrosis in lung tissue. However, slight pulmonary lesions have been reported in Laboratory animals from intratracheal ingestion of silicon dust. Silicon dust has little adverse effect on lungs and does not appear to produce

TLV. Silicon may cause chronic respiratory effects.

If dust/fumes get in eyes, immediately flush with large amounts of running water for several minutes and seek Prompt medical attention. If dust gets on skin wash contaminated area with mild soap and water. Remove and wash contaminated clothing if rash or irritation persists, seek medical attention.

If inhalation of dust / fumes occurs, immediately remove victim from the adverse

significant organic disease or toxic effects when exposures are kept under the

environment to fresh air and seek medical attention. If breathing has stopped, certified individuals should perform CPR. Keep affected person warm and at rest.

FIRST AIDS MEASURES

FIRE FIGHTING MEASURES

If significant amounts of metal are ingested, seek medical attention.

In case of fire, use water spray (Fog), foam, dry chemical extinguisher or Co².

Fire Fighters should wear appropriate protective equipment and Equipment of Fire Fighters self-contained breathing apparatus (SCBA) with afull face-piece

Not applicable for solid form alloy. Toxic metal and metallic Oxide.

Providing good ventilation and/or local exhaust systems are used.

Safety glasses should always be worn when grinding or cutting. Face shields

Skin covering working clothes, wear dust proof overalls if large quantity of

Emissions from ventilation or work process equipment should be checked to

equipment will be necessary to reduce emissions to acceptable levels.

ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process

Under normal conditions of storage and use, hazardous reactions will Not Occur.

The product is practically insoluble in water. In views of its consistency and

Fumes may be evolved from fires involving finely divided alloy

SPECIAL EXPOSURE HAZARDS No special fire or explosion hazard. Promptly isolate the scene by removing all persons. Vicinity of the incident if there is a fire.

operated in positive pressure mode.

Minimal problems with spills of this product would be expected to occur because of its solid form. Protective Equipment: Gloves and barrier creams may be necessary to prevent skin sensitization and dermatitis. If your process involves grinding or any other action that causes the release of dust or fumes, approved safety

SECTION 6. ACCIDENTAL RELEASE MEASURES

glasses or goggles should be worn **HANDELING & STORAGE** SECTION 7.

Store in a dry place.

Use original container.

dust is generated.

Solid

EXPOSURE CONTROLS/ PERSONAL PROTECTIONS SECTION 8. NIOSH / MSHA approved dust/mist/fume respirators should be used during RESPIRATORY PROTECTION welding, burning and grinding operations, if applicable exposure limits are exceeded.

should be worn when welding or burning.

HYGIENE MEASURES Wash all exposed skin and face thoroughly after handling products before eating, smoking or using the lavatory and at the end of the working period. **ENVIRONMENTAL EXPOSURE CONTROLS**

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

MELTING TEMPERATURE 1400-1450 °C DENSITY (G/CM3) 7.750 HARDNESS (HV5) 220 **FINISH** No.4 or B.A

According to our experience and information the product has no harmful effects

ECHOLOGICAL INFORMATION

DISPOSAL CONSIDERATIONS

REACTIVITY AND STABILITY

insolubility in water, no ecological Problems are to be expected if the product is properly handled.

on health if properly handled.

The product is stable.

METHODS OF DISPOSAL Steel scrap should be recycled wherever possible GENERAL INFORMATION Dispose of in accordance with federal, provincial, state Or local regulations.

TRANSPORT INFORMATION Material is not listed as a hazardous substance for any mode of transportation.

SECTION 15. **REGULATORY INFORMATION** SARA TITLE III HAZARD

Product (Dust and Fume) is categorized as an immediate (acute) health hazard **CATEGORIZATION** and a delayed (chronic) Health hazard is defined by 40 CFR 370.

SARA TITLE III SECTION 302 No components are listed as extremely hazardous substances EXTREMELY HAZARDOUS SUBSTANCES (EHSS):

OTHER INFORMATION

The information provided herein is Compiled by Sakshi to be accurate from sources believed to be reliable, but it is the responsibility of the user investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of this product, and to determine the suitability of the product for its intended use. Sakshi makes no warranty, express or implied, concerning the product or the merchantability or fitness thereof for any purpose or concerning the accuracy of any information provided.

MATERIAL SAFETY DATA SHEET (DEW)



PRODUCT DESCRIPTION

SECTION 1.

SECTION 2.

MATERIAL IDENTIFICATION

Our Grating and frame are functional, attractive and economical solution to exterior and interior drainage problem provides

a dynamic and contemporary appearance to complement today's architectural spaces. **MATERIAL USED**

Stainless Steel - Grade 430

MANUFACTURER'S NAME

SAKSHI INNOVATIONS PRIVATE LIMITED Gurudwara Somasar Road, P.O. Sahnewal, Village TIBBA, Distt. LUDHIANA-141 120 (INDIA)

COMPOSITION / INFORMATION ON INGREDIENTS

CAS No.

7440-44-0

% Weight

0.072

16.33

82.21

Welding, brazing, cutting, grinding and machining of this material may liberate potentially hazardous fumes & dust. This dust or fumes may be harmful if inhaled.

Steel production sheet, coil do not pose a significant health hazardous. However when subjected to Welding, Burning, Sawing, Brazing & grinding etc. Potentially hazardous fumes or dust may be generated. Needs adequate exhaust ventilation

Chronic inhalation of high concentrations of metallic fumes and dusts are

Chronic inhalation of excessive concentrations of iron oxide fumes or dust may results in development of a benign pneumoconiosis, called siderosis, which is

increase the incidence of bronchitis pneumonia and lung damage and may

compounds have been reported to cause cancer of the lungs and sinuses. Elementary silicon is an inert material which appears to lack the property of

causing fibrosis in lung tissue. However, slight pulmonary lesions have been reported in Laboratory animals from intratracheal ingestion of silicon dust. Silicon dust has little adverse effect on lungs and does not appear to produce

: If dust/fumes get in eyes, immediately flush with large amounts of running water

If dust gets on skin wash contaminated area with mild soap and water. Remove

If inhalation of dust / fumes occurs, immediately remove victim from the adverse

In case of fire, use water spray (Fog), foam, dry chemical extinguisher or Co².

No special fire or explosion hazard. Promptly isolate the scene by removing all

Fire Fighters should wear appropriate protective equipment and Equipment of

Fire Fighters self-contained breathing apparatus (SCBA) with afull face-piece

Safety glasses should always be worn when grinding or cutting. Face shields

Skin covering working clothes, wear dust proof overalls if large quantity of

smoking or using the lavatory and at the end of the working period.

equipment will be necessary to reduce emissions to acceptable levels.

Wash all exposed skin and face thoroughly after handling products before eating,

ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process

Under normal conditions of storage and use, hazardous reactions will Not Occur.

The product is practically insoluble in water. In views of its consistency and insolubility in water, no ecological Problems are to be expected if the product is

Material is not listed as a hazardous substance for any mode of transportation.

and a delayed (chronic) Health hazard is defined by 40 CFR 370.

If significant amounts of metal are ingested, seek medical attention.

and wash contaminated clothing if rash or irritation persists, seek medical attention.

Chromium 7440-47-3 Iron 7439-89-6

Chemical Composition

Carbon

■ Manganese 7439-96-5 0.616 ■ Phosphorus 7723-14-0 0.033 ■ Silicon 7440-21-3 0.315 ■ Sulphur 7704-34-9 0.0066 ■ Nickel 7440-02-0 0.171 ■ Molybdenum 7439-98-7 0.020 ■ Aluminium 7429-90-5 0.036 ■ Cobalt 7440-48-4 0.031 ■ Copper 7440-50-8 0.082 ■ Niobium 7440-33-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028				
■ Silicon 7440-21-3 0.315 ■ Sulphur 7704-34-9 0.0066 ■ Nickel 7440-02-0 0.171 ■ Molybdenum 7439-98-7 0.020 ■ Aluminium 7429-90-5 0.036 ■ Cobalt 7440-48-4 0.031 ■ Copper 7440-50-8 0.082 ■ Niobium 7440-03-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		Manganese	<i>7</i> 439-96-5	0.616
■ Sulphur 7704-34-9 0.0066 ■ Nickel 7440-02-0 0.171 ■ Molybdenum 7439-98-7 0.020 ■ Aluminium 7429-90-5 0.036 ■ Cobalt 7440-48-4 0.031 ■ Copper 7440-50-8 0.082 ■ Niobium 7440-03-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		Phosphorus	7723-14-0	0.033
■ Nickel 7440-02-0 0.171 ■ Molybdenum 7439-98-7 0.020 ■ Aluminium 7429-90-5 0.036 ■ Cobalt 7440-48-4 0.031 ■ Copper 7440-50-8 0.082 ■ Niobium 7440-03-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		Silicon	7440-21-3	0.315
■ Molybdenum 7439-98-7 0.020 ■ Aluminium 7429-90-5 0.036 ■ Cobalt 7440-48-4 0.031 ■ Copper 7440-50-8 0.082 ■ Niobium 7440-03-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		■ Sulphur	7704-34-9	0.0066
■ Aluminium 7429-90-5 0.036 ■ Cobalt 7440-48-4 0.031 ■ Copper 7440-50-8 0.082 ■ Niobium 7440-03-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		■ Nickel	7440-02-0	0.171
■ Cobalt 7440-48-4 0.031 ■ Copper 7440-50-8 0.082 ■ Niobium 7440-03-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		■ Molybdenum	7439-98-7	0.020
■ Copper 7440-50-8 0.082 ■ Niobium 7440-03-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		Aluminium	7429-90-5	0.036
■ Niobium 7440-03-1 0.0069 ■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		■ Cobalt	7440-48-4	0.031
■ Titanium 7440-32-6 0.0039 ■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		■ Copper	<i>7</i> 440-50-8	0.082
■ Vanadium 7440-62-2 0.031 ■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		■ Niobium	7440-03-1	0.0069
■ Tin 7440-31-5 0.0055 ■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		■ Titanium	7440-32-6	0.0039
■ Arsenic 7440-38-2 0.0021 ■ Nitrogen 7727-37-9 0.028		■ Vanadium	7440-62-2	0.031
■ Nitrogen 7727-37-9 0.028		■ Tin	7440-31-5	0.0055
		■ Arsenic	7440-38-2	0.0021
SECTION 3. HAZARDS IDENTIFICATION		■ Nitrogen	7727-37-9	0.028
SECTION 3. HAZARDS IDENTIFICATION				
	SECTION 3.	HAZARDS IDENTIFICATION		

Inhalation of fumes from Welding or Burning, Dust from Grinding or Cutting. **ROUTE OF EXPOSURE** Eye, Skin contact or Inhalation

EMERGENCY OVERVIEW

PRIMARY ROUTE OF EXPOSURE

FLAMMABILITY

IRON OXIDE

SILICON

EYES

SKIN

INHALATION

INGESTION

SUITABLE

PRODUCTS

SPECIAL PROTECTIVE

SECTION 7.

SECTION 8.

EYE PROTECTION

SKIN PROTECTION

HYGIENE MEASURES

SECTION 9.

PHYSICAL STATE

DENSITY (G/CM3)

HARDNESS (HV5)

SECTION 10.

STABILITY

REACTIONS

SECTION 12.

SECTION 13.

SECTION 14.

CATEGORIZATION

SUBSTANCES (EHSS):

MELTING TEMPERATURE

POSSIBILITY OF HAZARDOUS

EXTINGUISHER MEDIA

SPECIAL EXPOSURE HAZARDS

& appropriate protective equipment for workers. EFFECT OF SHORT TERM (ACUTE) EXPOSURE Fumes & dust may be irritating to respiratory system. INHALATION

Not Applicable

EYE CONTACT Dust or particles may cause mechanical irritation. SKIN CONTACT Dust or particles may cause irritation due to abrasion. **INGESTION** Not anticipated under normal circumstances. As such this material is not expected to be acutely toxic via ingestion.

associated with the following conditions.

Molten material may cause thermal burns.

observable as an x-ray change. **MANGANESE** Chronic exposure to high concentrations of manganese fumes and dusts may

EFFECT OF LONG-TERM (CHRONIC) EXPOSURE

adversely affect the central nervous system with symptoms resembling Parkinson's disease. The alleged health hazards associated with exposure to chromium are dependent **CHROMIUM**

on its oxidation state. The metal form (chromium as it exists in this product) is of very low toxicity. The hexavalent form is very toxic. NICKEL Nickel is a common contact allergen & causes some sensitization, allergic contact dermatitis (ACD). Fumes are respiratory irritants and may cause respiratory disease, skin contact can also cause an allergic skin rash, nickel and its

significant organic disease or toxic effects when exposures are kept under the TLV. Silicon may cause chronic respiratory effects. SECTION 4. FIRST AIDS MEASURES

for several minutes and seek Prompt medical attention.

environment to fresh air and seek medical attention. If breathing has stopped, certified individuals should perform CPR. Keep affected person warm and at rest.

SECTION 5. FIRE FIGHTING MEASURES

HAZARDOUS COMBUSTION Not applicable for solid form alloy. Toxic metal and metallic Oxide.

operated in positive pressure mode.

If your process involves grinding or any other action that causes the release of dust or fumes, approved safety glasses or goggles should be worn

persons. Vicinity of the incident if there is a fire.

Fumes may be evolved from fires involving finely divided alloy

Minimal problems with spills of this product would be expected to occur because of its solid form. Protective Equipment: Gloves and barrier creams may be necessary to prevent skin sensitization and dermatitis.

Use original container.

dust is generated.

EXPOSURE CONTROLS/ PERSONAL PROTECTIONS

HANDLING PRECAUTIONS Providing good ventilation and/or local exhaust systems are used. Store in a dry place. STORAGE REQUIREMENTS

PACKAGING MATERIAL RECOMMENDED

HANDELING & STORAGE

SECTION 6. ACCIDENTAL RELEASE MEASURES

RESPIRATORY PROTECTION NIOSH / MSHA approved dust/mist/fume respirators should be used during welding, burning and grinding operations, if applicable exposure limits are exceeded.

should be worn when welding or burning.

ENVIRONMENTAL EXPOSURE CONTROLS TECHNICAL MEASURES Emissions from ventilation or work process equipment should be checked to

PHYSICAL & CHEMICAL PROPERTIES

Solid

7.750

175

1425-1510 °C

FINISH No.4 or B.A **REACTIVITY AND STABILITY**

The product is stable.

According to our experience and information the product has no harmful effects on health if properly handled.

ECHOLOGICAL INFORMATION

DISPOSAL CONSIDERATIONS

TRANSPORT INFORMATION

SECTION 11. TOXICOLOGICAL INFORMATION

METHODS OF DISPOSAL Steel scrap should be recycled wherever possible GENERAL INFORMATION Dispose of in accordance with federal, provincial, state Or local regulations.

properly handled.

REGULATORY INFORMATION SECTION 15. SARA TITLE III HAZARD Product (Dust and Fume) is categorized as an immediate (acute) health hazard

SARA TITLE III SECTION 302 No components are listed as extremely hazardous substances **EXTREMELY HAZARDOUS**

OTHER INFORMATION SECTION 16.

The information provided herein is Compiled by Sakshi to be accurate from sources believed to be reliable, but it is the responsibility of the user investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of this product, and to determine the suitability of the product for its intended use. Sakshi makes no warranty, express or implied, concerning the product or the merchantability or fitness thereof for any purpose or concerning the accuracy of any information provided.