# MATERIAL DATA SAFETY SHEET

(ARCH)



## PRODUCT DESCRIPTION

SECTION 2.

SECTION 3.

**FLAMMABILITY** 

INHALATION

**MANGANESE** 

NICKEL

SECTION 4.

INHALATION

INGESTION

**SUITABLE** 

**PRODUCTS** 

SECTION 5.

EXTINGUISHER MEDIA

HAZARDOUS COMBUSTION

STORAGE REQUIREMENTS

RESPIRATORY PROTECTION

SECTION 8.

EYE PROTECTION

SKIN PROTECTION

TECHNICAL MEASURES

SECTION 9.

DENSITY (G/CM3)

HARDNESS (HV5)

SECTION 10.

SECTION 12.

SECTION 13.

SECTION 14.

METHODS OF DISPOSAL

SARA TITLE III SECTION 302

EXTREMELY HAZARDOUS

**FINISH** 

STABILITY

PACKAGING MATERIAL RECOMMENDED

EYE CONTACT

EMERGENCY OVERVIEW

SECTION 1. 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 316

SAKSHI INNOVATIONS PRIVATE LIMITED

# MANUFACTURER'S NAME

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

Chemical Composition CAS No. % Weight

Carbon

COMPOSITION / INFORMATION ON INGREDIENTS

|                   |                   | 0.022  |
|-------------------|-------------------|--------|
| Chromium          | 7440-47-3         | 16.77  |
| <b>■</b> Iron     | <i>7</i> 439-89-6 | 67.91  |
| Manganese         | <i>7</i> 439-96-5 | 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         | <i>7</i> 429-90-5 | 0.013  |
| <b>■</b> Cobalt   | 7440-48-4         | 0.21   |
| <b>■</b> copper   | <i>7</i> 440-50-8 | 0.403  |
| ■ Niobium         | 7440-03-1         | 0.019  |
| <b>■</b> Titanium | 7440-32-6         | 0.0060 |
| ■ Vanadium        | 7440-62-2         | 0.069  |
| ■ Tungsten        | 7440-33-7         | 0.014  |
| <b>■</b> Tin      | 7440-31-5         | 0.012  |
| Arsenic           | 7440-38-2         | 0.0075 |
| Nitrogen          | 7727-37-9         | 0.066  |
|                   |                   |        |

Molten material may cause thermal burns.

& appropriate protective equipment for workers.

Fumes & dust may be irritating to respiratory system. Dust or particles may cause mechanical irritation.

7440-44-0

0.022

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 exposure to high concentrations of manganese fumes and dusts may

Nickel is a common contact allergen & causes some sensitization, allergic contact 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

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, certified individuals should perform CPR. Keep affected person warm and at rest.

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

: In case of fire, use water spray (Fog), foam, dry chemical extinguisher or Co<sup>2</sup>.

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

NIOSH / MSHA approved dust/mist/fume respirators should be used during

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

welding, burning and grinding operations, if applicable exposure

Fumes may be evolved from fires involving finely divided alloy

increase the incidence of bronchitis pneumonia and lung damage and may adversely affect the central nervous system with symptoms resembling

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

EFFECT OF SHORT TERM (ACUTE) EXPOSURE

EFFECT OF LONG-TERM (CHRONIC) EXPOSURE

HAZARDS IDENTIFICATION

| 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. **IRON OXIDE** Chronic inhalation of excessive concentrations of iron oxide fumes or dust may

Not Applicable

results in development of a benign pneumoconiosis, called siderosis, which is observable as an x-ray change.

Parkinson's disease. The alleged health hazards associated with exposure to chromium are dependent **CHROMIUM** 

FIRST AIDS MEASURES

FIRE FIGHTING MEASURES

SECTION 6. ACCIDENTAL RELEASE MEASURES

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.

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. 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

significant organic disease or toxic effects when exposures are kept under the TLV. Silicon may cause chronic respiratory e ffects. **MOLYBDENUM** 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

deformities, erythema, and edema of the joint areas.

**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.

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

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

operated in positive pressure mode.

**HANDELING & STORAGE** SECTION 7. Providing good ventilation and/or local exhaust systems are used. HANDLING PRECAUTIONS

Store in a dry place.

Use original container.

limits are exceeded.

should be worn when welding or burning.

**EXPOSURE CONTROLS/ PERSONAL PROTECTIONS** 

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

### 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**

**PHYSICAL & CHEMICAL PROPERTIES** Solid PHYSICAL STATE MELTING TEMPERATURE 1375-1400 °C

7.750

No.4 or B.A

The product is stable.

on health if properly handled.

properly handled.

205

POSSIBILITY OF HAZARDOUS Under normal conditions of storage and use, hazardous reactions will Not Occur. **REACTIONS** SECTION 11. TOXICOLOGICAL INFORMATION According to our experience and information the product has no harmful effects

**ECHOLOGICAL INFORMATION** 

**DISPOSAL CONSIDERATIONS** 

**REACTIVITY AND STABILITY** 

# 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

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

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

## SECTION 15. **REGULATORY INFORMATION**

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

No components are listed as extremely hazardous substances

Steel scrap should be recycled wherever possible

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

# GENERAL INFORMATION TRANSPORT INFORMATION

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

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 (ARCH)



## PRODUCT DESCRIPTION

MATERIAL IDENTIFICATION

SECTION 1.

SECTION 2.

SECTION 3.

**FLAMMABILITY** 

INHALATION

**IRON OXIDE** 

**CHROMIUM** 

**EYES** 

SKIN

EXTINGUISHER MEDIA

SPECIAL EXPOSURE HAZARDS

**SUITABLE** 

PRODUCTS

SPECIAL PROTECTIVE

HANDLING PRECAUTIONS

STORAGE REQUIREMENTS

RESPIRATORY PROTECTION

SECTION 8.

HYGIENE MEASURES

TECHNICAL MEASURES

MELTING TEMPERATURE

POSSIBILITY OF HAZARDOUS

DENSITY (G/CM3)

HARDNESS (HV5)

**SECTION 10.** 

STABILITY

**REACTIONS** 

SECTION 13.

SECTION 15.

METHODS OF DISPOSAL

GENERAL INFORMATION

SARA TITLE III SECTION 302

EXTREMELY HAZARDOUS SUBSTANCES (EHSS):

PACKAGING MATERIAL RECOMMENDED

ENVIRONMENTAL EXPOSURE CONTROLS

**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

Chronic inhalation of excessive concentrations of iron oxide fumes or dust may

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

dermatitis (ACD). Fumes are respiratory irritants and may cause respiratory disease, skin contact can also cause an allergic skin rash, nickel and its

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

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

In case of fire, use water spray (Fog), foam, dry chemical extinguisher or Co<sup>2</sup>.

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

Fumes may be evolved from fires involving finely divided alloy

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

welding, burning and grinding operations, if applicable exposure

NIOSH / MSHA approved dust/mist/fume respirators should be used during

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

Emissions from ventilation or work process equipment should be checked to

equipment will be necessary to reduce emissions to acceptable levels.

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

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

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

Chemical Composition

| Manganese              | <i>7</i> 439-96-5 | 1.030  |  |  |  |  |  |
|------------------------|-------------------|--------|--|--|--|--|--|
| Phosphorus             | 7723-14-0         | 0.041  |  |  |  |  |  |
| Sulphur                | 7704-34-9         | 0.006  |  |  |  |  |  |
| Chromium               | 7440-47-3         | 18.250 |  |  |  |  |  |
| Molybdenum             | <i>7</i> 439-98-7 | 0.240  |  |  |  |  |  |
| Nickel                 | 7440-02-0         | 8.240  |  |  |  |  |  |
| Aluminium              | 7429-90-5         | 0.0034 |  |  |  |  |  |
| Cobalt                 | 7440-48-4         | 0.220  |  |  |  |  |  |
| Copper                 | 7440-50-8         | 0.360  |  |  |  |  |  |
| Niobium                | 7440-03-1         | 0.0079 |  |  |  |  |  |
| <b>■</b> Titanium      | 7440-32-6         | 0.004  |  |  |  |  |  |
| Venadium               | 7440-62-2         | 0.006  |  |  |  |  |  |
| ■ Tungsten             | 7440-33-7         | 0.021  |  |  |  |  |  |
| <b>■</b> Tin           | 7440-31-5         | 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

when subjected to Welding, Burning, Sawing, Brazing & grinding etc. Potentially hazardous fumes or dust may be generated. Needs adequate exhaust ventilation

Eye, Skin contact or Inhalation

Molten material may cause thermal burns.

& appropriate protective equipment for workers.

Fumes & dust may be irritating to respiratory system.

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

Not Applicable

**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

associated with the following conditions.

observable as an x-ray change. **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 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

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 reported in Laboratory animals from intratracheal ingestion of silicon dust.

**SECTION 4.** FIRST AIDS MEASURES If dust/fumes get in eyes, immediately flush with large amounts of running water for several minutes and seek Prompt medical attention.

TLV. Silicon may cause chronic respiratory effects.

### INHALATION If inhalation of dust / fumes occurs, immediately remove victim from the adverse environment to fresh air and seek medical attention. If breathing has stopped, certified individuals should perform CPR. Keep affected person warm and at rest.

If significant amounts of metal are ingested, seek medical attention. INGESTION FIRE FIGHTING MEASURES **SECTION 5.** 

persons. Vicinity of the incident if there is a fire. HAZARDOUS COMBUSTION Not applicable for solid form alloy. Toxic metal and metallic Oxide.

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.

**EXPOSURE CONTROLS/ PERSONAL PROTECTIONS** 

## limits are exceeded. EYE PROTECTION Safety glasses should always be worn when grinding or cutting. Face shields

SKIN PROTECTION Skin covering working clothes, wear dust proof overalls if large quantity of dust is generated.

should be worn when welding or burning.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES PHYSICAL STATE Solid

**FINISH** No.4 or B.A

The product is stable.

on health if properly handled.

properly handled.

1400-1450 °C

7.750

220

**REACTIVITY AND STABILITY** 

SECTION 12. **ECHOLOGICAL INFORMATION** The product is practically insoluble in water. In views of its consistency and

DISPOSAL CONSIDERATIONS

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

Steel scrap should be recycled wherever possible

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

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

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

## TRANSPORT INFORMATION SECTION 14.

**REGULATORY INFORMATION** Product (Dust and Fume) is categorized as an immediate (acute) health hazard

No components are listed as extremely hazardous substances

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

# SARA TITLE III HAZARD CATEGORIZATION

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

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 SAFETY DATA SHEET (ARCH)



## PRODUCT DESCRIPTION

SECTION 1.

SECTION 2.

SECTION 3.

**FLAMMABILITY** 

SKIN CONTACT

**INGESTION** 

SILICON

SECTION 4.

**EYES** 

SKIN

INHALATION

INGESTION

**SUITABLE** 

**PRODUCTS** 

SPECIAL PROTECTIVE

HANDLING PRECAUTIONS

STORAGE REQUIREMENTS

SECTION 8.

EYE PROTECTION

SKIN PROTECTION

TECHNICAL MEASURES

SECTION 9.

DENSITY (G/CM3)

HARDNESS (HV5)

SECTION 10.

**SECTION 12.** 

SECTION 13.

**SECTION 14.** 

SECTION 16.

METHODS OF DISPOSAL

GENERAL INFORMATION

POSSIBILITY OF HAZARDOUS

**FINISH** 

STABILITY

PACKAGING MATERIAL RECOMMENDED

ENVIRONMENTAL EXPOSURE CONTROLS

**EXTINGUISHER MEDIA** 

SPECIAL EXPOSURE HAZARDS

**EMERGENCY OVERVIEW** 

**ROUTE OF EXPOSURE** 

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

7/, 30-80-6

% Weight

0.072

16.33

Q2 21

### Carbon 7440-47-3 Chromium Iron

Chemical Composition

| ■ Iron             | /439-89-6         | 82.21  |  |
|--------------------|-------------------|--------|--|
| Manganese          | <i>7</i> 439-96-5 | 0.616  |  |
| Phosphorus         | 7723-14-0         | 0.033  |  |
| Silicon            | 7440-21-3         | 0.315  |  |
| ■ Sulphur          | <i>77</i> 04-34-9 | 0.0066 |  |
| ■ Nickel           | 7440-02-0         | 0.171  |  |
| Molybdenum         | <i>7</i> 439-98-7 | 0.020  |  |
| Aluminium          | <i>7</i> 429-90-5 | 0.036  |  |
| Cobalt             | 7440-48-4         | 0.031  |  |
| Copper             | <i>7</i> 440-50-8 | 0.082  |  |
| ■ Niobium          | 7440-03-1         | 0.0069 |  |
| <b>■</b> Titanium  | 7440-32-6         | 0.0039 |  |
| ■ Vanadium         | 7440-62-2         | 0.031  |  |
| <b>■</b> Tin       | <i>7</i> 440-31-5 | 0.0055 |  |
| Arsenic            | 7440-38-2         | 0.0021 |  |
| ■ Nitrogen         | 7727-37-9         | 0.028  |  |
|                    |                   |        |  |
| RDS IDENTIFICATION |                   |        |  |

Molten material may cause thermal burns.

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

HAZA

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.

Eye, Skin contact or Inhalation

Not Applicable

Fumes & dust may be irritating to respiratory system. INHALATION EYE CONTACT Dust or particles may cause mechanical irritation.

Dust or particles may cause irritation due to abrasion. 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

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

adversely affect the central nervous system with symptoms resembling

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

: 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

In case of fire, use water spray (Fog), foam, dry chemical extinguisher or Co<sup>2</sup>.

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

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

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

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

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

EFFECT OF SHORT TERM (ACUTE) EXPOSURE

observable as an x-ray change. MANGANESE Chronic exposure to high concentrations of manganese fumes and dusts may increase the incidence of bronchitis pneumonia and lung damage and may

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

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

very low toxicity. The hexavalent form is very toxic.

for several minutes and seek Prompt medical attention.

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 effects.

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

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

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

Fumes may be evolved from fires involving finely divided alloy

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 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.

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

equipment will be necessary to reduce emissions to acceptable levels.

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

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.

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

Store in a dry place.

Use original container.

**EXPOSURE CONTROLS/ PERSONAL PROTECTIONS** 

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

dust is generated. HYGIENE MEASURES Wash all exposed skin and face thoroughly after handling products before eating,

should be worn when welding or burning.

PHYSICAL STATE Solid **MELTING TEMPERATURE** 1425-1510 °C

# **REACTIONS** SECTION 11. TOXICOLOGICAL INFORMATION

**REACTIVITY AND STABILITY** 

**PHYSICAL & CHEMICAL PROPERTIES** 

7.750

No.4 or B.A

The product is stable.

on health if properly handled.

175

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.

**DISPOSAL CONSIDERATIONS** 

**ECHOLOGICAL 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.

Steel scrap should be recycled wherever possible

## **REGULATORY INFORMATION** SECTION 15.

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

## SARA TITLE III HAZARD CATEGORIZATION SARA TITLE III SECTION 302 No components are listed as extremely hazardous substances

OTHER INFORMATION

**EXTREMELY HAZARDOUS** SUBSTANCES (EHSS):

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.