

Material Safety Data Sheet

Date prepared : 2011/11/17

1. Product and company identification

Product name : Dicing Blade
Product code : ZHFX

Company identification

Name of supplier : Disco Corporation
Postal/ZIP Code : 143-8580
Address : 13-11 Omori-Kita 2-chome, Ota-ku, Tokyo
Department responsible : Environmental Management Office
Telephone number : +81-3-4590-1083
Fax number : +81-3-4590-1112

2. Hazards identification

GHS classification : Available

Physical hazards

Explosives : No hazard category
Flammable aerosols : No hazard category
Flammable solids : No hazard category
Self-reactive substances and mixtures : No hazard category
Pyrophoric solids : No hazard category
Self-heating substances and mixtures : No hazard category
Substances and mixtures which, in contact with water, emit flammable gases : No hazard category
Oxidizing solids : No hazard category
Organic peroxides : No hazard category
Corrosive to metals : No hazard category

Health hazards

Acute toxicity (oral) : No hazard category
Respiratory sensitization : Category 1
Skin sensitization : Category 1
Carcinogenicity : Category 2
Specification target internal organs/systemic toxicity (single exposure) :
Category 1 (respiratory system, kidney)
Specification target internal organs/systemic toxicity (repeat exposure) :
Category 1 (respiratory system)

Environment hazards

Aquatic environmental toxicity: chronic : Category 4
Any hazard not listed above are not subject to classification or cannot be classified.

GHS label elements

Pictograms or symbols :



Signal words : Danger

Hazard statement :

- May cause allergy or asthma symptoms or breathing difficulties if inhaled
- May cause an allergic skin reaction
- Suspected of causing cancer
- Causes damage to organs
- Causes damage to organs through prolonged or repeated exposure

Prevention :

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- In case of inadequate ventilation wear respiratory protection.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wash hand thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.

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 soap and water.
- If skin irritation or rash occurs: Get medical advice/attention.
- Specific treatment .
- Wash contaminated clothing before reuse.
- IF exposed or concerned: Get medical advice/attention.
- IF exposed: Call a POISON CENTER or doctor/physician.
- Get medical advice/attention if you feel unwell.

Storage :

- Store locked up.

Disposal :

- Dispose of contents/container according to the rule of international/country/administrative divisions/municipality.

3. Composition/information on ingredients

Substance or Mixture : mixture (excluding aluminum)

The common chemical name or the generic name :	Nickel	Diamond	Others
CAS number :	7440-02-0	—	—
Concentration and concentration range :	60%–90%	—	—
Chemical formula or structural formula :	Ni	—	—

4. First aid measure

General information :

- Refer to " 7. Handling and Storage Precautions "
- This product is solidified during the forming process, so there are no hazards in particular during normal use.

5. Fire fighting measures

Extinguishing media :

- no specifications in particular

6. Accidental release measures

Personal precautions :

- none

Environmental precautions :

- none

Methods for containment and cleaning up:

- not applicable (solid state precludes leakage)

7. Handling and storage

Handling

Technical measures :

- none in particular

Local and general exhaust ventilation :

- If necessary due to the above cases, a ventilation system and a dust collection should be used.

Precautions :

- This product is solidified during the forming process, so there are no hazards in particular during normal use.

Dust or particles generated during cutting and grinding may include a small portion of the product, but it is not harmful. However, such dust or particles may include the material being processed, in which case the MSDS of the material should be consulted.

Consult a doctor in the following cases, if necessary:

- * inhalation
- * skin contact
- * eye contact
- * ingestion

Storage

Technical measures :

- none in particular

Appropriate storage conditions :

- In order to prevent oxidation and deterioration, avoid high temperature and humidity by storing in a cool, dark space.

Incompatible materials :

- oxidized materials

Safe packaging materials :

- attached package

8. Exposure controls/personal protection

Permissible concentration :

Permittable concentration of work environment of Nickel particle:1mg/m³
(Japan industrial health society permittable concentration of work environment)

Protective equipment :

- In order to prevent exposure to a large amount of dust particles during cutting, protective equipment should be worn.

Protection

Respiratory protection :

- Wear protective mask (for fine dust particles)

Hand protection :

- Wear protective gloves

Eye protection :

- Safety goggles

Skin and body protection :

- Protective clothing.

Others :

- protective wear (such as ear-plugs), if necessary

9. Physical and chemical properties

Form : round and thin

Color : Blade : gray, Aluminum hub : silver

Odor : none

pH : No data available

Specific gravity or relative density: no data

Water solubility: insoluble with water and oil

Decomposition temperature : Melting point of nickel : 1453 °C (reference temperature)

Other data :

- solid, without volatility or sublimation

10. Stability and reactivity

Stability :

- stable under normal temperatures

Possible hazardous reactions :

- No data available.

Conditions to avoid :

- none

Hazardous decomposition products :

- none

11. Toxicological information

Acute toxicity :

- Acute toxicity (oral) : No hazard category.
- Acute toxicity (dermal) : Classification not possible.
- Acute toxicity (inhalation: gases) : No classification.
- Acute toxicity (inhalation: vapors) : Classification not possible.
- Acute toxicity (inhalation: dusts/mists) : Classification not possible.

Skin corrosion/irritation :

- Skin corrosion/irritation : Classification not possible.

Serious eye damage/Eye irritation :

- Serious eye damage/eye irritation : Classification not possible.

Respiratory organs sensitization or skin sensitization :

- Respiratory sensitization : Category 1.
- Skin sensitization : Category 1.

Generative cell mutagenicity :

- Germ cell mutagenicity : Classification not possible.

Carcinogenicity :

- Carcinogenicity : Category 2.

Reproductive toxicity :

- Reproductive toxicity : Classification not possible.

Specified target organ / general toxicity–single exposure :

- Specific target organ systemic toxicity (single exposure) : Category 1.

Specified target organ / general toxicity–repetitive exposure :

- Specific target organ systemic toxicity (repeated exposure) : Category 1.

Aspiration respiratory organs hazard :

- Aspiration hazard : Classification not possible.

Other :

- refer to " 7. Handling and Storage Precautions "

12. Ecological information

Ecotoxicity :

- Aquatic environmental toxicity (acute) : Classification not possible.
- Aquatic environmental toxicity (chronic) : Category 4.

Persistence/degradability :

- No data available.

Bioaccumulation :

- No data available.

Mobility in soil :

- No data available.

Other hazardous effect :

- a small quantity of residue waste (dust particles) is generated during cutting.

13. Disposal considerations

Contaminated packaging :

- none

Other :

- Commission a metal disposal business trader for the aluminum waste. (Includes nickel composition.)

14. Transport information

International restriction

UN classification : Not Available

15. Regulatory information

Local regulation :

- Industrial Safety and Health Law
- Pollutant Release and Transfer Register (First group)

16. Other information

Other :

- Material safety data sheet are provided as reference information on the safe handling of hazardous or harmful materials to companies using such materials. When referring to this data sheet, companies should remember that they must take responsibility for implementing the proper measure for their own particular situations. This data sheet is not guarantee of safety.