MATERION

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or

Copper Beryllium Alloy By Products

designation of the mixture

Registration number

Document number A24

Synonyms Beryllium Copper Alloy By Products, Copper Beryllium Alloy Dross

30-August-2019 **Issue date**

Version number 02

Revision date 11-January-2021 Supersedes date 30-August-2019

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

Identified uses Industrial uses: Uses of substances as such or in preparations at industrial sites

Offshore industries

Manufacture of basic metals, including alloys

Manufacture of fabricated metal products, except machinery and equipment Manufacture of computer, electronic and optical products, electrical equipment

General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment

Electricity, steam, gas water supply and sewage treatment

Scientific research and development

Other: Manufacture of medical and defense equipment

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Materion Brush Inc. **Address** 6070 Parkland Boulevard

Mayfield Heights, OH 44124

United States

Division

Telephone 1.216.383.4019 ehs@materion.com e-mail Theodore Knudson Contact person 1.4. Emergency telephone 1.216.383.4019

number

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

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

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Company name Materion Brush Inc. **Address** 6070 Parkland Boulevard

Mayfield Heights, OH 44124

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number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Material name: Copper Beryllium Alloy By Products SDS FRANCE 2892 Version #: 02 Revision date: 11-January-2021 Issue date: 30-August-2019

Health hazards

Respiratory sensitisation Category 1 H334 - May cause allergy or asthma

symptoms or breathing difficulties if

inhaled.

Skin sensitisation Category 1 H317 - May cause an allergic skin

reaction.

Carcinogenicity Category 2

Specific target organ toxicity - repeated Category 1 H372 - Causes damage to organs

exposure

(respiratory system) through prolonged or repeated exposure by

inhalation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic **Hazard summary**

skin reaction. May cause cancer. May cause damage to organs through prolonged or repeated

exposure.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Aluminium, Aluminum Oxides (mixed), Beryllium, Beryllium Oxides (mixed), Cobalt, Cobalt Oxides

(mixed), COPPER FLAKES (COATED WITH ALIPHATIC ACID), Copper Oxides (mixed), Durasoil, Nickel Oxides (mixed), NICKEL POWDER; [PARTICLE DIAMETER < 1MM], Silica, ZIRCONIUM

POWDER, DRY (NON PYROPHORIC)

Hazard pictograms



Signal word Danger

Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled H334

May cause an allergic skin reaction. H317

May cause cancer. H350

H372 Causes damage to organs (respiratory system) through prolonged or repeated exposure by

inhalation.

Precautionary statements

Prevention

Minimise dust generation and accumulation.

Obtain special instructions before use. P201

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

Do not breathe dust/fume. P260 Wash thoroughly after handling. P264

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

Contaminated work clothing must not be allowed out of the workplace. P272 Wear protective gloves/protective clothing/eye protection/face protection. P280

Response

If on skin: Wash with plenty of water. P302 + P350

If exposed or concerned: Call a poison centre/doctor. P308 + P311 If skin irritation or rash occurs: Get medical advice/attention. P333 + P313 If experiencing respiratory symptoms: Call a poison centre/doctor. P342 + P311

Storage

Store locked up. P405

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations. P501

Supplemental label

information

Exposure to the elements listed in Section 3 by inhalation, ingestion, and skin contact can occur when melting, casting, dross handling, pickling, chemical cleaning, heat treating, abrasive cutting,

welding, grinding, sanding, polishing, milling, crushing, or otherwise heating or abrading the

surface of this material in a manner which generates particulate.

For further information, please contact the Product Stewardship Department at +1.216.383.4019.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information % CAS-No. / EC **REACH Registration No. Index No. Chemical name Notes** No. COPPER FLAKES (COATED WITH 65 - 90 7440-50-8 01-2119480154-42-0080 ALIPHATIC ACID) 231-159-6 Classification: -5 - 15 Copper Oxides (mixed) Not applicable Classification: -2 - 4 Durasoil Trade Secret Classification: -Beryllium 0.1 - 27440-41-7 01-2119487146-32-0000 004-001-00-7 # 231-150-7 Classification: Skin Sens. 1;H317, STOT SE 3;H335, Carc. 1B;H350i, STOT RE 1;H372 Aluminium 0,1 - 17429-90-5 01-2119529243-45-0056 013-002-00-1 231-072-3 Classification: -Τ Aluminum Oxides (mixed) 0,1 - 1Not applicable Classification: -Beryllium Oxides (mixed) 0,1 - 1Not applicable Classification: -Cobalt 0,1 - 17440-48-4 01-2119517392-44-0000 027-001-00-9 231-158-0 Classification: Acute Tox. 4;H302, Skin Sens. 1;H317, Resp. Sens. 1;H334, Carc. 1B;H350, Repr. 2;H361 Cobalt Oxides (mixed) 0,1 - 1Not applicable Classification: -Nickel Oxides (mixed) 0,1 - 1Not applicable Classification: -

7440-02-0

231-111-4

14808-60-7 238-878-4

7440-67-7

231-176-9

Classification: Skin Sens. 1;H317, STOT SE 3;H335, Carc. 2;H351, STOT RE 2;H373

SECTION 4: First aid measures

ZIRCONIUM POWDER, DRY (NON

NICKEL POWDER; [PARTICLE

DIAMETER < 1MM]

Silica

General information

PYROPHORIC)

If exposed or concerned: get medical attention/advice. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. As supplied, there is no immediate medical risk with beryllium products in article form. First aid measures provided are related to particulate containing beryllium.

01-2119438727-29-0049 028-002-00-7

040-002-00-9

4.1. Description of first aid measures

Inhalation

If symptoms develop move victim to fresh air. For breathing difficulties, oxygen may be necessary. Breathing difficulty caused by inhalation of particulate requires immediate removal to fresh air. If breathing has stopped, perform artificial respiration and obtain medical help.

Material name: Copper Beryllium Alloy By Products

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0.1 - 1

0,1 - 1

0,1 - 1

Classification: Flam. Sol. 2;H228, Pyr. Sol. 1;H250

Classification: Carc. 1A;H350

7,S #

Τ

Skin contact

Take off contaminated clothing and wash before reuse. Thoroughly wash skin cuts or wounds to remove all particulate debris from the wound. Seek medical attention for wounds that cannot be thoroughly cleansed. Treat skin cuts and wounds with standard first aid practices such as cleansing, disinfecting and covering to prevent wound infection and contamination before continuing work. Obtain medical help for persistent irritation. Material accidentally implanted or lodged under the skin must be removed.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if symptoms persist.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

May cause allergic skin reaction. May cause allergic respiratory reaction. Prolonged exposure may cause chronic effects.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment of Chronic Beryllium Disease: There is no known treatment which will cure chronic beryllium disease. Prednisone or other corticosteroids are the most specific treatment currently available. They are directed at suppressing the immunological reaction and can be effective in diminishing signs and symptoms of chronic beryllium disease. In cases where steroid therapy has had only partial or minimal effectiveness, other immunosuppressive agents, such as cyclophosphamide, cyclosporine, or methotrexate, have been used. In view of the potential side effects of all the immunosuppressive medications, including steroids such as prednisone, they should be used only under the direct care of a physician. Other treatment, such as oxygen, inhaled steroids or bronchodilators, may be prescribed by some physicians and can be effective in selected cases. In general, treatment is reserved for cases with significant symptoms and/or significant loss of lung function. The decision about when and with what medication to treat is a judgment situation for individual physicians.

In their 2014 official statement on the Diagnosis and Management of Beryllium Sensitivity and Chronic Beryllium Disease, the American Thoracic Society states that "it seems prudent for workers with BeS to avoid all future occupational exposure to beryllium."

The effects of continued low exposure to beryllium are unknown for individuals who are sensitized to beryllium or who have a diagnosis of chronic beryllium disease. It is generally recommended that persons who are sensitized to beryllium or who have CBD terminate their occupational exposure to beryllium.

SECTION 5: Firefighting measures

General fire hazards

Not available.

5.1. Extinguishing media

Suitable extinguishing

media

The product is non-combustible. Use extinguishing measures that are appropriate to loca circumstances and the surrounding environment.

Unsuitable extinguishing

media

Do not use water to extinguish fires around operations involving molten metal due to the potential for steam explosions.

5.2. Special hazards arising from the substance or mixture

Not applicable.

5.3. Advice for firefighters

Special protective equipment for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

Special firefighting

procedures

Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage.

Specific methods

Pressure-demand self-contained breathing apparatus must be worn by firefighters or any other

persons potentially exposed to the particulate released during or after a fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Wear appropriate protective equipment and clothing during clean-up. Avoid contact with skin or inhalation of spillage, dust or vapour. Avoid generation and spreading of dust. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

For emergency responders

Wear appropriate protective equipment and clothing during clean-up. Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid release to the environment. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Material name: Copper Beryllium Alloy By Products 2892 Version #: 02 Revision date: 11-January-2021 Issue date: 30-August-2019 6.3. Methods and material for containment and cleaning up

Clean up in accordance with all applicable regulations.

6.4. Reference to other

sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimise dust generation and accumulation. Do not breathe dust/fume. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection. Wash thoroughly after handling. When using, do not eat, drink or smoke. Contaminated work

clothing must not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Keep locked-up. Avoid contact with acids and alkalies. Avoid contact with oxidising agents.

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Components	Туре	Value	Form
Aluminium (CAS 7429-90-5) VME	5 mg/m3	Dust.
Regulatory status:	Indicative limit (VL)		
		5 mg/m3	Welding fume.
Regulatory status:	Indicative limit (VL)		
		10 mg/m3	
Regulatory status:	Indicative limit (VL)		
Beryllium (CAS 7440-41-7)	VME	0,002 mg/m3	
Regulatory status:	Indicative limit (VL)		
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	VLE	2 mg/m3	Dust.
Regulatory status:	Indicative limit (VL)		
	VME	1 mg/m3	Dust.
Regulatory status:	Indicative limit (VL)		
		0,2 mg/m3	Fume.
Regulatory status:	Indicative limit (VL)		
NICKEL POWDER; [PARTICLE DIAMETER < 1MM] (CAS 7440-02-0)	VME	1 mg/m3	
Regulatory status:	Indicative limit (VL)		
Silica (CAS 14808-60-7)	VME	0,1 mg/m3	Respirable fraction.
Regulatory status:	Regulatory binding (VRC)		
EU. OELs, Directive 200 Components	4/37/EC on carcinogen and mutage Type	ns from Annex III, Part A Value	Form
Beryllium (CAS 7440-41-7)	TWA	0,0002 mg/m3	Inhalable fraction.
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction ar

Biological limit values

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)						
Components	Value	Determinant	Specimen	Sampling Time		
Cobalt (CAS 7440-48-4)	15 μg/l	Cobalt	Urine	*		
	1 μg/l	Cobalt	Blood	*		
Y Tan annuling datable places are the accuracy decreases						

^{* -} For sampling details, please see the source document.

Material name: Copper Beryllium Alloy By Products

SDS FRANCE

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Recommended monitoring procedures

VENTILATION: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Whenever possible, the use of local exhaust ventilation or other engineering controls is the preferred method of controlling exposure to airborne particulate. Where utilized, exhaust inlets to the ventilation system must be positioned as close as possible to the source of airborne generation. Avoid disruption of the airflow in the area of a local exhaust inlet by equipment such as a man-cooling fan. Check ventilation equipment regularly to ensure it is functioning properly. Provide training on the use and operation of ventilation to all users. Use qualified professionals to design and install ventilation systems.

WET METHODS: Machining operations are usually performed under a liquid lubricant/coolant flood which assists in reducing airborne particulate. However, the cycling through of machine coolant containing finely divided particulate in suspension can result in the concentration building to a point where the particulate may become airborne during use. Certain processes such as sanding and grinding may require complete hooded containment and local exhaust ventilation. Prevent coolant from splashing onto floor areas, external structures or operators' clothing. Utilize a coolant filtering system to remove particulate from the coolant.

WORK PRACTICES: Develop work practices and procedures that prevent particulate from coming in contact with worker skin, hair, or personal clothing. If work practices and/or procedures are ineffective in controlling airborne exposure or visual particulate from deposition on skin, hair, or clothing, provide appropriate cleaning/washing facilities. Procedures should be written that clearly communicate the facility's requirements for protective clothing and personal hygiene. These clothing and personal hygiene requirements help keep particulate from being spread to non-production areas or from being taken home by the worker. Never use compressed air to clean work clothing or other surfaces.

Fabrication processes may leave a residue of particulate on the surface of parts, products or equipment that could result in employee exposure during subsequent material handling activities. As necessary, clean loose particulate from parts between processing steps. As a standard hygiene practice, wash hands before eating or smoking.

HOUSEKEEPING: Use vacuum and wet cleaning methods for particulate removal from surfaces. Be certain to de-energize electrical systems, as necessary, before beginning wet cleaning. Use vacuum cleaners with high efficiency particulate air (HEPA). Do not use compressed air, brooms, or conventional vacuum cleaners to remove particulate from surfaces as this activity can result in elevated exposures to airborne particulate. Follow the manufacturer's instructions when performing maintenance on HEPA filtered vacuums used to clean hazardous materials.

Derived no effect levels (DNELs)

Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Whenever possible, the use of local exhaust ventilation or other engineering controls is the preferred method of controlling exposure to airborne particulate. Where utilized, exhaust inlets to the ventilation system must be positioned as close as possible to the source of airborne generation. Avoid disruption of the airflow in the area of a local exhaust inlet by equipment such as a man-cooling fan. Check ventilation equipment regularly to ensure it is functioning properly. Provide training on the use and operation of ventilation to all users. Use qualified professionals to design and install ventilation systems.

Individual protection measures, such as personal protective equipment

General information

Not available.

Eye/face protection

Wear approved safety glasses, goggles, face shield and/or welder's helmet when risk of eye injury is present, particularly during operations that generate dust, mist or fume.

Skin protection

- Hand protection

Wear gloves to prevent contact with particulate or solutions. Wear gloves to prevent metal cuts and

skin abrasions during handling.

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- **Other** Personal protection equipment should be chosen according to the CEN standards and in discussion

with the supplier of the personal protective equipment. Protective overgarments or work clothing must be worn by persons who may become contaminated with particulate during activities. Skin contact with this material may cause, in some sensitive individuals, an allergic dermal response. Particulate that becomes lodged under the skin has the potential to induce sensitization and skin

esions.

Respiratory protection When airborne exposures exceed or have the potential to exceed the occupational exposure limits,

approved respirators must be used as specified by an Industrial Hygienist or other qualified professional. Respirator users must be medically evaluated to determine if they are physically capable of wearing a respirator. Quantitative and/or qualitative fit testing and respirator training must be satisfactorily completed by all personnel prior to respirator use. Users of tight fitting respirators must be clean shaven on those areas of the face where the respirator seal contacts the face. Use pressure-demand airline respirators when performing jobs with high potential exposures

such as changing filters in a baghouse air cleaning device.

Thermal hazards Not applicable.

Hygiene measures Handle in accordance with good industrial hygiene and safety practices.

Environmental exposure

controls

Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid.

Form Solid. Various shapes.
Colour Reddish-brown

Odour None.

Odour threshold Not applicable. **pH** Not applicable.

Melting point/freezing point 954,44 - 1093,33 °C (1750 - 2000 °F) / Not applicable.

Initial boiling point and

boiling range

Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) None known.

Upper/lower flammability or explosive limits

Explosive limit - lower (

Not applicable.

%)

Explosive limit – upper

(%)

Not applicable.

Vapour pressureNot applicable.Vapour densityNot applicable.Relative densityNot applicable.

Solubility(ies)

Solubility (water)Insoluble.Solubility (other)Not applicable.Partition coefficientNot applicable.

(n-octanol/water)

Not applicable.

Auto-ignition temperatureNot applicable.Decomposition temperatureNot applicable.ViscosityNot applicable.Explosive propertiesNot explosive.Oxidising propertiesNot oxidising.

9.2. Other information

Density 0,25 - 0,33 lb/in³ **Specific gravity** 7,74 Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity Not available.

10.2. Chemical stability Material is stable under normal conditions.10.3. Possibility of hazardous Hazardous polymerisation does not occur.

reactions

10.4. Conditions to avoid Avoid dust formation. Contact with acids. Contact with alkalis.

10.5. Incompatible materials Strong acids, alkalies and oxidizing agents.

10.6. Hazardous No hazardous decomposition products are known.

decomposition products

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation May cause sensitisation by inhalation. May cause allergy or asthma symptoms or breathing

difficulties if inhaled. May cause damage to organs (respiratory system) through prolonged or

repeated exposure.

Skin contactMay cause an allergic skin reaction.Eye contactNot likely, due to the form of the product.IngestionNot likely, due to the form of the product.

Symptoms Respiratory disorder.

11.1. Information on toxicological effects

Acute toxicity May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin

reaction.

Skin corrosion/irritation Not likely, due to the form of the product.

Serious eye damage/eye

irritation

Harmful in contact with eyes.

Respiratory sensitisation May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Due to lack of data the classification is not possible.

Carcinogenicity Cancer hazard.

IARC Monographs. Overall Evaluation of Carcinogenicity

Beryllium (CAS 7440-41-7) 1 Carcinogenic to humans.

Cobalt (CAS 7440-48-4)

NICKEL POWDER; [PARTICLE DIAMETER < 1MM]

2B Possibly carcinogenic to humans.

2B Possibly carcinogenic to humans.

(CAS 7440-02-0)

Silica (CAS 14808-60-7) 1 Carcinogenic to humans.

Reproductive toxicity Not classified.

Specific target organ toxicity May cause allergy or asthma symptoms or breathing difficulties if inhaled.

- single exposure

Specific target organ toxicity May cause damage to organs (respiratory system) through prolonged or repeated exposure by

repeated exposure inhalation.

Aspiration hazard Due to lack of data the classification is not possible.

Mixture versus substance

information

Not available.

Other information Symptoms may be delayed.

SECTION 12: Ecological information

12.1. Toxicity

Product		Species	Test Results		
Copper Beryllium Alloy By Products					
Aquatic					
Acute					
Fish	LC50	Fish	0,036 mg/l, 96 hours estimated		

Components Species Test Results

COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)

Aquatic

Acute

Crustacea EC50 Blue crab (Callinectes sapidus) 0,0031 mg/l

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Material name: Copper Beryllium Alloy By Products

Components Species Test Results

Fish LC50 Fathead minnow (Pimephales promelas) 0,0219 - 0,0446 mg/l, 96 hours

NICKEL POWDER; [PARTICLE DIAMETER < 1MM] (CAS 7440-02-0)

Aquatic

Acute

Fish LC50 Rainbow trout, donaldson trout 0,06 mg/l, 4 days

(Oncorhynchus mykiss)

* Estimates for product may be based on additional component data not shown.

12.2. Persistence and

No data is available on the degradability of this product.

degradability

12.3. Bioaccumulative Not available.

potential

Partition coefficient Not available.

n-octanol/water (log Kow)

Bioconcentration factor (BCF) Not available. **12.4. Mobility in soil** Not available.

12.5. Results of PBT and

Not a PBT or vPvB substance or mixture.

vPvB assessment

12.6. Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Empty containers or liners may retain some product residues. This material and its container must

be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

EU waste codeThe Waste code should be assigned in discussion between the user, the producer and the waste

disposal company. Waste codes should be assigned by the user based on the application for which

the product was used.

Disposal Material should be recycled if possible. Disposal recommendations are based on material as

methods/information supplied. Disposal must be in accordance with current applicable laws and regulations, and material

characteristics at time of disposal.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

SECTION 15: Regulatory information

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

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Aluminium (CAS 7429-90-5)

COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8) NICKEL POWDER; [PARTICLE DIAMETER < 1MM] (CAS 7440-02-0)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Beryllium (CAS 7440-41-7)

NICKEL POWDER; [PARTICLE DIAMETER < 1MM] (CAS 7440-02-0) ZIRCONIUM POWDER, DRY (NON PYROPHORIC) (CAS 7440-67-7)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Beryllium (CAS 7440-41-7) Silica (CAS 14808-60-7)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Aluminium (CAS 7429-90-5) Beryllium (CAS 7440-41-7)

COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8) ZIRCONIUM POWDER, DRY (NON PYROPHORIC) (CAS 7440-67-7)

Other regulationsThe product is classified and labelled in accordance with EC directives or respective national laws

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Pregnant

women should not work with the product, if there is the least risk of exposure.

National regulations Young people under 18 years old are not allowed to work with this product according to EU

Directive 94/33/EC on the protection of young people at work. Follow national regulation for work

with chemical agents.

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviationsNot available.ReferencesNot available.Information on evaluationNot available.

method leading to the classification of mixture

Training information Not available.

Further information Transportation Emergency

Call Chemtrec at: International: 703.741.5970 Spain: 900.868.538 Switzerland: 0800.564.402

Chemtrec's toll free, mobile-enabled number in Germany - 0800 1817059

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particular use and to comply with all Federal, State, Provincial and Local laws, statutes and

regulations.

Material name: Copper Beryllium Alloy By Products

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