

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Revision Date 20-Feb-2024 Revision Number 4

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product Description: <u>Stainless Steel flake, -150 mesh, 1.2 micron thick, Type 316-L</u>

Cat No. : 4248

Molecular Formula Fe:Cr:Ni:Mo; 67.5:17:13:2.5 wt%

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

Recommended Use Laboratory chemicals. Uses advised against No Information available

### 1.3. Details of the supplier of the safety data sheet

Company

Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## **SECTION 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the substance or mixture

#### CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

#### **Physical hazards**

Based on available data, the classification criteria are not met

#### **Health hazards**

Skin Sensitization Category 1 (H317)
Carcinogenicity Category 2 (H351)
Specific target organ toxicity - (repeated exposure) Category 1 (H372)

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#### **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

#### 2.2. Label elements



#### Signal Word

## Danger

#### **Hazard Statements**

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer

H372 - Causes damage to organs through prolonged or repeated exposure

#### **Precautionary Statements**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P362 + P364 - Take off contaminated clothing and wash it before reuse

P201 - Obtain special instructions before use

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

#### 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors Toxic to terrestrial vertebrates

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.2. Mixtures

| Component  | CAS No    | EC No             | Weight % | CLP Classification - According to<br>GB-CLP Regulations UK SI 2019/720 and<br>UK SI 2020/1567 |
|------------|-----------|-------------------|----------|---|
| Iron       | 7439-89-6 | EEC No. 231-096-4 | 67.5     | -   |
| Chromium   | 7440-47-3 | EEC No. 231-157-5 | 17       | -   |
| Nickel     | 7440-02-0 | EEC No. 231-111-4 | 13       | Skin Sens. 1 (H317)<br>Carc. 2 (H351)<br>STOT RE 1 (H372)<br>Aquatic Chronic 3 (H412)         |
| Molybdenum | 7439-98-7 | EEC No. 231-107-2 | 2.5      | -   |

Full text of Hazard Statements: see section 16

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#### 4.1. Description of first aid measures

**General Advice** If symptoms persist, call a physician.

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get **Eve Contact** 

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Clean mouth with water and drink afterwards plenty of water. Get medical attention if Ingestion

symptoms occur.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Self-Protection of the First Aider No special precautions required.

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

None reasonably foreseeable. . May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and

feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

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

Notes to Physician Treat symptomatically.

#### **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

#### Suitable Extinguishing Media

approved class D extinguishers.

#### Extinguishing media which must not be used for safety reasons

Water may be ineffective.

#### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

Iron oxides, Chromium oxide, Nickel oxides, Molybdenum oxides.

#### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. No special precautions required.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Should not be released into the environment. Do not allow material to

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contaminate ground water system.

#### 6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. Pick up and transfer to properly labelled containers.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry place. Keep away from acids.

Technical Rules for Hazardous Substances (TRGS) 510 Class 6.1D Storage Class (LGK) (Germany)

#### 7.3. Specific end use(s)

Use in laboratories

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control parameters

#### **Exposure limits**

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

| Component  | The United Kingdom                 | European Union                 | Ireland                            |
|------------|------------------------------------|--------------------------------|------------------------------------|
| Chromium   | STEL: 1.5 mg/m <sup>3</sup> 15 min | TWA: 2 mg/m <sup>3</sup> (8hr) | TWA: 2 mg/m <sup>3</sup> 8 hr.     |
|            | TWA: 0.5 mg/m <sup>3</sup> 8 hr    |                                | STEL: 6 mg/m <sup>3</sup> 15 min   |
| Nickel     | STEL: 1.5 mg/m <sup>3</sup> 15 min |                                | TWA: 0.5 mg/m <sup>3</sup> 8 hr.   |
|            | TWA: 0.5 mg/m <sup>3</sup> 8 hr    |                                | STEL: 1.5 mg/m <sup>3</sup> 15 min |
|            | Skin                               |                                | -                                  |
| Molybdenum | STEL: 20 mg/m <sup>3</sup> 15 min  |                                |                                    |
|            | TWA: 10 mg/m <sup>3</sup> 8 hr     |                                |                                    |

#### **Biological limit values**

List source(s):

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| Component                  | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |  |
|----------------------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|--|
| Nickel<br>7440-02-0 ( 13 ) |                              |                                 | DNEL = 0.035mg/cm2             |                                   |  |

| Component                       | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Iron<br>7439-89-6 ( 67.5 )      |                                  |                                     | DNEL = 3mg/m <sup>3</sup>          |                                       |
| Chromium<br>7440-47-3 ( 17 )    |                                  |                                     | DNEL = 0.5mg/m <sup>3</sup>        |                                       |
| Nickel<br>7440-02-0 ( 13 )      | DNEL = 11.9mg/m <sup>3</sup>     |                                     | $DNEL = 0.05 mg/m^3$               | $DNEL = 0.05 mg/m^3$                  |
| Molybdenum<br>7439-98-7 ( 2.5 ) |                                  |                                     |                                    | DNEL = 11.7mg/m <sup>3</sup>          |

#### **Predicted No Effect Concentration (PNEC)**

See values below.

| Component                  | Fresh water          | Fresh water     | Water Intermittent | Microorganisms in | Soil (Agriculture) |
|----------------------------|----------------------|-----------------|--------------------|-------------------|--------------------|
|                            |                      | sediment        |                    | sewage treatment  |                    |
| Chromium                   | $PNEC = 6.5 \mu g/L$ | PNEC =          |                    |                   | PNEC = 21.1mg/kg   |
| 7440-47-3 ( 17 )           |                      | 205.7mg/kg      |                    |                   | soil dw            |
|                            |                      | sediment dw     |                    |                   |                    |
| Nickel                     | $PNEC = 7.1 \mu g/L$ | PNEC = 109mg/kg |                    | PNEC = 0.33mg/L   | PNEC = 29.9mg/kg   |
| 7440-02-0 ( 13 )           |                      | sediment dw     |                    | _                 | soil dw            |
| Molybdenum PNEC = 12.7mg/L |                      | PNEC =          |                    | PNEC = 21.7mg/L   | PNEC = 9.9mg/kg    |
| 7439-98-7 ( 2.5 )          | _                    | 22600mg/kg      |                    |                   | soil dw            |
|                            |                      | sediment dw     |                    |                   |                    |

| Component                       | Marine water    | Marine water sediment           | Marine water intermittent | Food chain               | Air |
|---------------------------------|-----------------|---------------------------------|---------------------------|--------------------------|-----|
| Nickel<br>7440-02-0 ( 13 )      | PNEC = 8.6µg/L  | PNEC = 109mg/kg<br>sediment dw  |                           | PNEC = 0.12mg/kg<br>food |     |
| Molybdenum<br>7439-98-7 ( 2.5 ) | PNEC = 2.28mg/L | PNEC = 2368mg/kg<br>sediment dw |                           |                          |     |

## 8.2. Exposure controls

#### **Engineering Measures**

None under normal use conditions.

Personal protective equipment

Wear safety glasses with side shields (or goggles) (European standard - EN 166) **Eye Protection** 

**Hand Protection** No special protective equipment required

| Γ | Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments        |
|---|----------------|-------------------|-----------------|-------------|-----------------------|
| 1 | Natural rubber | See manufacturers | -               | EN 374      | (minimum requirement) |
| 1 | Nitrile rubber | recommendations   |                 |             |                       |
| 1 | Neoprene       |                   |                 |             |                       |
|   | PVC            |                   |                 |             |                       |

Skin and body protection Long sleeved clothing.

**Respiratory Protection** No protective equipment is needed under normal use conditions. No special protective

equipment required.

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Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particle filter Particulates filter conforming to EN 143

Small scale/Laboratory use Maintain adequate ventilation Use a NIOSH/MSHA or European Standard EN 149:2001

approved respirator if exposure limits are exceeded or if irritation or other symptoms are

experienced. No personal respiratory protective equipment normally required

Recommended half mask:- Particle filtering: EN149:2001

Environmental exposure controls Prevent product from entering drains. Do not allow material to contaminate ground water

system. Local authorities should be advised if significant spillages cannot be contained.

Solid

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### 9.1. Information on basic physical and chemical properties

Physical State Solid Flake

Appearance Silver Grey Odor Odorless

Odor Threshold
Melting Point/Range
Softening Point
Boiling Point/Range
No data available
No data available
No information available

Flammability (liquid) Not applicable

Flammability (solid,gas) No information available

Explosion Limits No data available

Flash Point No information available Method - No information available

Autoignition Temperature

Decomposition Temperature
pH

No data available
No data available
Not applicable

Viscosity Not applicable Solid

Water Solubility Insoluble in water
Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Vapor Pressure

Density / Specific Gravity

Bulk Density

No data available

No data available

No data available

No data available

Vapor Density Not applicable Solid

No data available

Particle characteristics

9.2. Other information

Molecular Formula Fe:Cr:Ni:Mo; 67.5:17:13:2.5 wt%

Evaporation Rate Not applicable - Solid

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

**Hazardous Polymerization**No information available.

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**Hazardous Reactions** None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

None known.

#### 10.6. Hazardous decomposition products

Iron oxides. Chromium oxide. Nickel oxides. Molybdenum oxides.

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#### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### **Product Information**

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

#### Toxicology data for the components

| Component  | Component LD50 Oral     |                         | LC50 Inhalation            |  |
|------------|-------------------------|-------------------------|----------------------------|--|
| Iron       | 7500 mg/kg (Rat)        | -                       | -                          |  |
| Nickel     | LD50 > 9000 mg/kg (Rat) | -                       | LC50 > 10.2 mg/L (Rat) 1 h |  |
| Molybdenum | -                       | LD50 > 2000 mg/kg (Rat) | LC50 > 5.84 mg/L (Rat) 4 h |  |

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

RespiratoryNo data availableSkinCategory 1

May cause sensitization by skin contact

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; Category 2

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | EU | UK | Germany | IARC     |
|-----------|----|----|---------|----------|
| Nickel    |    |    | Cat. 1  | Group 2B |

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; Category 1

Target Organs No information available.

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(i) aspiration hazard; Not applicable

Solid

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

11.2. Information on other hazards

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

#### **SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity Ecotoxicity effects** 

The product contains following substances which are hazardous for the environment. Contains a substance which is:. Very toxic to aquatic organisms. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

| Component | Freshwater Fish               | Water Flea                 | Freshwater Algae                  |  |
|-----------|-------------------------------|----------------------------|-----------------------------------|--|
| Nickel    | LC50: > 100 mg/L, 96h         | EC50: = 1 mg/L, 48h Static | EC50: 0.174 - 0.311 mg/L, 96h     |  |
|           | (Brachydanio rerio)           | (Daphnia magna)            | static (Pseudokirchneriella       |  |
|           | LC50: = 1.3 mg/L, 96h         | EC50: > 100 mg/L, 48h      | subcapitata)                      |  |
|           | semi-static (Cyprinus carpio) | (Daphnia magna)            | EC50: = 0.18 mg/L, 72h            |  |
|           | LC50: = 10.4 mg/L, 96h static |                            | (Pseudokirchneriella subcapitata) |  |
|           | (Cyprinus carpio)             |                            |                                   |  |
|           |                               |                            |                                   |  |

12.2. Persistence and degradability Product contains heavy metals. Discharge into the environment must be avoided. Special

pre-treatment is necessary

Insoluble in water, May persist. **Persistence** Not relevant for inorganic substances. Degradability

Degradation in sewage Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants. treatment plant

12.3. Bioaccumulative potential May have some potential to bioaccumulate; Product has a high potential to bioconcentrate

| Component | log Pow | Bioconcentration factor (BCF) |
|-----------|---------|-------------------------------|
| Chromium  |         | 1.03 - 1.22                   |

Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water 12.4. Mobility in soil

solubility.

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

**Persistent Organic Pollutant** This product does not contain any known or suspected substance **Ozone Depletion Potential** This product does not contain any known or suspected substance

## **SECTION 13: DISPOSAL CONSIDERATIONS**

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13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives

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on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Do not empty into drains.

## **SECTION 14: TRANSPORT INFORMATION**

IMDG/IMO Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

<u>IATA</u> Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

**14.5. Environmental hazards** No hazards identified

**14.6. Special precautions for user** No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

## **SECTION 15: REGULATORY INFORMATION**

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

#### **International Inventories**

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No    | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|-----------|-----------|-----------|--------|-----|-------|------|----------|------|------|
| Iron      | 7439-89-6 | 231-096-4 | -      | -   | X     | X    | KE-21059 | X    | -    |
| Chromium  | 7440-47-3 | 231-157-5 | ı      | -   | X     | X    | KE-05970 | X    | -    |
| Nickel    | 7440-02-0 | 231-111-4 | -      | -   | Х     | X    | KE-25818 | Х    | -    |

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| Component  | CAS No    | TSCA      | TSCA In | ventory<br>ation - | DSL | NDSL | AICS     | NZIoC | PICCS |
|------------|-----------|-----------|---------|--------------------|-----|------|----------|-------|-------|
| Molybdenum | 7439-98-7 | 231-107-2 | -       | -                  | Х   | X    | KE-25427 | Х     | -     |

| Component  | CAS No    | TSCA | TSCA Inventory<br>notification -<br>Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|------------|-----------|------|---|-----|------|------|-------|-------|
| Iron       | 7439-89-6 | Х    | ACTIVE  | Х   | -    | Х    | Х     | Х     |
| Chromium   | 7440-47-3 | Х    | ACTIVE  | X   | -    | Х    | Х     | Х     |
| Nickel     | 7440-02-0 | Х    | ACTIVE  | Х   | -    | Х    | Х     | Х     |
| Molybdenum | 7439-98-7 | Х    | ACTIVE  | X   | Ī    | X    | X     | X     |

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### Authorisation/Restrictions according to EU REACH

| Component  | CAS No    | REACH (1907/2006) -<br>Annex XIV - Substances<br>Subject to Authorization | REACH (1907/2006) -<br>Annex XVII - Restrictions<br>on Certain Dangerous<br>Substances  | REACH Regulation (EC<br>1907/2006) article 59 -<br>Candidate List of<br>Substances of Very High<br>Concern (SVHC) |
|------------|-----------|---|---|---|
| Iron       | 7439-89-6 | -   | -   | -   |
| Chromium   | 7440-47-3 | -   | Use restricted. See item 75. (see link for restriction details)   | -   |
| Nickel     | 7440-02-0 | -   | Use restricted. See item 27. (see link for restriction details) Use restricted. See item 75. (see link for restriction details) | -   |
| Molybdenum | 7439-98-7 | -   | -   | -   |

#### **REACH links**

https://echa.europa.eu/substances-restricted-under-reach

#### Seveso III Directive (2012/18/EC)

| Component  | CAS No    | Seveso III Directive (2012/18/EC) -      | Seveso III Directive (2012/18/EC) -     |
|------------|-----------|--|---|
|            |           | Qualifying Quantities for Major Accident | Qualifying Quantities for Safety Report |
|            |           | Notification                             | Requirements                            |
| Iron       | 7439-89-6 | Not applicable                           | Not applicable                          |
| Chromium   | 7440-47-3 | Not applicable                           | Not applicable                          |
| Nickel     | 7440-02-0 | Not applicable                           | Not applicable                          |
| Molybdenum | 7439-98-7 | Not applicable                           | Not applicable                          |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

### **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

**WGK Classification** 

Water endangering class = 2 (self classification)

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| Component  | Germany - Water Classification (AwSV) | Germany - TA-Luft Class  |
|------------|---------------------------------------|--|
| Iron       | nwg                                   |  |
| Chromium   | nwg                                   | Class III: 1 mg/m³ (Massenkonzentration)   |
| Nickel     | WGK2                                  | Class II : 0.5 mg/m³ (Massenkonzentration)<br>Krebserzeugende Stoffe - Class II : 0.5 mg/m³<br>(Massenkonzentration) |
| Molybdenum | nwg                                   |  |

| Component | France - INRS (Tables of occupational diseases)                     |
|-----------|---|
| Iron      | Tableaux des maladies professionnelles (TMP) - RG 44,RG 44bis,RG 94 |
| Chromium  | Tableaux des maladies professionnelles (TMP) - RG 10                |

| Component        | Switzerland - Ordinance on the<br>Reduction of Risk from<br>handling of hazardous<br>substances preparation (SR<br>814.81) | Switzerland - Ordinance on<br>Incentive Taxes on Volatile<br>Organic Compounds (OVOC) | Switzerland - Ordinance of the<br>Rotterdam Convention on the<br>Prior Informed Consent<br>Procedure |
|------------------|--|---|--|
| Chromium         | Prohibited and Restricted  |   |  |
| 7440-47-3 ( 17 ) | Substances   |   |  |
| Nickel           | Prohibited and Restricted  |   |  |
| 7440-02-0 ( 13 ) | Substances   |   |  |

#### 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

### **SECTION 16: OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer

H372 - Causes damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

#### Legend

**CAS** - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

Key literature references and sources for data

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Substances List **ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

Revision Date 20-Feb-2024

Stainless Steel flake, -150 mesh, 1.2 micron thick, Type 316-L

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards
Health Hazards
Calculation method
Environmental hazards
Cn basis of test data
Calculation method

#### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Prepared By Health, Safety and Environmental Department

Revision Date 20-Feb-2024

**Revision Summary** New emergency telephone response service provider.

## This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

**Disclaimer** 

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## **End of Safety Data Sheet**