

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

Revision Date 24-Mar-2024 Revision Number 2

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

#### 1.1. Product identifier

Product Description: <u>Cadmium ingot</u>

 Cat No.:
 U00010

 Index No
 048-002-00-0

 CAS No
 7440-43-9

 EC No
 231-152-8

 Molecular Formula
 Cd

#### 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**

Acute Inhalation Toxicity - Dusts and Mists Category 2 (H330)

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Germ Cell MutagenicityCategory 2 (H341)CarcinogenicityCategory 1B (H350)Reproductive ToxicityCategory 2 (H361fd)Specific target organ toxicity - (repeated exposure)Category 1 (H372)

**Environmental hazards** 

Acute aquatic toxicity
Chronic aquatic toxicity
Category 1 (H400)
Category 1 (H410)

Full text of Hazard Statements: see section 16

#### 2.2. Label elements



### Signal Word

**Danger** 

#### **Hazard Statements**

H330 - Fatal if inhaled

H341 - Suspected of causing genetic defects

H350 - May cause cancer

H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects

May form combustible dust concentrations in air

### **Precautionary Statements**

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P310 - Immediately call a POISON CENTER or doctor/physician

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

### **Additional EU labelling**

Restricted to professional users

### 2.3. Other hazards

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not require assessment

May form explosible dust-air mixture if dispersed Toxicity to Soil Dwelling Organisms

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

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

#### 3.1. Substances

| Component | CAS No | EC No | Weight % | CLP Classification - According to     |
|-----------|--------|-------|----------|---------------------------------------|
|           |        |       |          | GB-CLP Regulations UK SI 2019/720 and |
|           |        |       |          | UK SI 2020/1567                       |

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|         |           | T T               |     |                          |
|---------|-----------|-------------------|-----|--------------------------|
| Cadmium | 7440-43-9 | EEC No. 231-152-8 | 100 | Acute Tox. 2 (H330)      |
|         |           |                   |     | Muta. 2 (H341)           |
|         |           |                   |     | Carc. 1B (H350)          |
|         |           |                   |     | Repr. 2 (H361fd)         |
|         |           |                   |     | STOT RE 1 (H372)         |
|         |           |                   |     | Aquatic Acute 1 (H400)   |
|         |           |                   |     | Aguatic Chronic 1 (H410) |

| Component | Specific concentration limits (SCL's) | M-Factor | Component notes |
|-----------|---------------------------------------|----------|-----------------|
| Cadmium   | -                                     | 10       | -               |

Full text of Hazard Statements: see section 16

### **SECTION 4: FIRST AID MEASURES**

### 4.1. Description of first aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In

the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required.

Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

None reasonably foreseeable. Kidney disorders: May cause harm to the unborn child: Blood disorders

### 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**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

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

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No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors. Fine dust dispersed in air may ignite. Dust can form an explosive mixture with air. Pyrophoric properties of solids and liquids. Do not allow run-off from fire-fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

Toxic fumes.

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

### **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. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

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

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

#### 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. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

#### **Hygiene Measures**

When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere.

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

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### 7.3. Specific end use(s)

Use in laboratories

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

#### 8.1. Control parameters

#### **Exposure limits**

List source(s): **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 **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

| Component | The United Kingdom                   | European Union                    | Ireland                                  |
|-----------|--------------------------------------|-----------------------------------|--|
| Cadmium   | STEL: 0.075 mg/m <sup>3</sup> 15 min | TWA: 0.001 mg/m <sup>3</sup> (8h) | TWA: 0.001 mg/m <sup>3</sup> 8 hr.       |
|           | TWA: 0.025 mg/m <sup>3</sup> 8 hr    |                                   | inhalable fraction                       |
|           | Carc. metal                          |                                   | TWA: 0.004 mg/m <sup>3</sup> 8 hr. limit |
|           |                                      |                                   | value 0.004 mg/m³ until 11               |
|           |                                      |                                   | July 2027 inhalable fraction             |
|           |                                      |                                   | STEL: 0.003 mg/m <sup>3</sup> 15 min     |
|           |                                      |                                   | STEL: 0.012 mg/m <sup>3</sup> 15 min     |

#### **Biological limit values**

List source(s):

### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component                    | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Cadmium<br>7440-43-9 ( 100 ) |                                  |                                     | DNEL = 4μg/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  |                    |
| Cadmium           | PNEC = $0.19\mu g/L$ | PNEC = 1.8mg/kg |                    | PNEC = 20µg/L     | PNEC = 0.9mg/kg    |
| 7440-43-9 ( 100 ) |                      | sediment dw     |                    |                   | soil dw            |

| Component         | Marine water    | Marine water sediment | Marine water intermittent | Food chain       | Air |
|-------------------|-----------------|-----------------------|---------------------------|------------------|-----|
| Cadmium           | PNEC = 1.14µg/L | PNEC = 0.64mg/kg      |                           | PNEC = 0.16mg/kg |     |
| 7440-43-9 ( 100 ) |                 | sediment dw           |                           | food             |     |

### 8.2. Exposure controls

### **Engineering Measures**

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

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Personal protective equipment

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

Hand Protection Protective gloves

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

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

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:** Particulates filter conforming to EN 143

Small scale/Laboratory use 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.

**Recommended half mask:-** Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained. Do not

allow material to contaminate ground water system. Prevent product from entering drains.

@ 760 mmHg

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

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

Physical State Solid

AppearanceSilverOdorOdorless

Odor ThresholdNo data availableMelting Point/Range321 °C / 609.8 °FSoftening PointNo data availableBoiling Point/Range765 °C / 1409 °F

Flammability (liquid) Not applicable Solid

Flammability (solid,gas)

No information available

Explosion Limits No data available

Flash Point No information available Method - No information available

Autoignition Temperature No data available No data available No data available

pH No information available

Viscosity Not applicable Solid

Water Solubility Insoluble

Solubility in other solvents No information available

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Partition Coefficient (n-octanol/water)

Vapor Pressure No information available

Density / Specific Gravity 8.64 @ 25°C
Bulk Density No data available
Vapor Density Not applicable

Particle characteristics No data available

9.2. Other information

Molecular Formula Cd Molecular Weight 112.40

Evaporation Rate Not applicable - Solid

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

10.1. Reactivity Yes

10.2. Chemical stability

Stable under recommended storage conditions. Moisture sensitive. Air sensitive.

Solid

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat. Avoid dust formation. Exposure to air or moisture over

prolonged periods.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Sulfur oxides.

10.6. Hazardous decomposition products

Toxic fumes.

### SECTION 11: TOXICOLOGICAL INFORMATION

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

#### **Product Information**

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met

Dermal No data available Inhalation Category 2

| Component | LD50 Oral                 | LD50 Dermal | LC50 Inhalation  |
|-----------|---------------------------|-------------|--|
| Cadmium   | LD50 = 2330 mg/kg ( Rat ) | -           | $LC50 = 25 \text{ mg/m}^3 \text{ (Rat) } 30 \text{ min}$ |
|           |                           |             |  |

(b) skin corrosion/irritation; No data available

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

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(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; Category 2

Possible risk of irreversible effects

(f) carcinogenicity; Category 1B

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

| Component | EU           | UK | Germany | IARC    |
|-----------|--------------|----|---------|---------|
| Cadmium   | Carc Cat. 1B |    | Cat. 1  | Group 1 |

(g) reproductive toxicity; Category 2

**Reproductive Effects** Possible risk of impaired fertility. May cause harm to the unborn child.

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; Category 1

Target Organs Blood, Respiratory system, Kidney, Prostate.

(j) aspiration hazard; Not applicable

Solid

Symptoms / effects,both acute and Kidney disorders. May cause harm to the unborn child. Blood disorders. delayed

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. Very

toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

| Component | Freshwater Fish                | Water Flea                      | Freshwater Algae |
|-----------|--------------------------------|---------------------------------|------------------|
| Cadmium   | LC50: 0.0004 - 0.003 mg/L, 96h | EC50: = 0.0244 mg/L, 48h Static |                  |
|           | (Pimephales promelas)          | (Daphnia magna)                 |                  |
|           | LC50: = 0.016 mg/L, 96h        |                                 |                  |
|           | (Oryzias latipes)              |                                 |                  |
|           | LC50: = 21.1 mg/L, 96h         |                                 |                  |
|           | flow-through (Lepomis          |                                 |                  |
|           | macrochirus)                   |                                 |                  |
|           | LC50: = 0.24 mg/L, 96h static  |                                 |                  |
|           | (Cyprinus carpio)              |                                 |                  |
|           | LC50: = 4.26 mg/L, 96h         |                                 |                  |
|           | semi-static (Cyprinus carpio)  |                                 |                  |
|           | LC50: = 0.002 mg/L, 96h        |                                 |                  |
|           | (Cyprinus carpio)              |                                 |                  |
|           | LC50: = 0.006 mg/L, 96h static |                                 |                  |

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| (Oncorhynchus mykiss)<br>LC50: = 0.003 mg/L, 96h<br>flow-through (Oncorhynchus<br>mykiss) |  |  |
|---|--|--|
|---|--|--|

| Component | Microtox | M-Factor |
|-----------|----------|----------|
| Cadmium   |          | 10       |

12.2. Persistence and degradability

Persistence Insoluble in water.

**Degradability** Not relevant for inorganic substances.

Degradation in sewage treatment plant

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

water treatment plants.

12.3. Bioaccumulative potential May have some potential to bioaccumulate

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

solubility.

12.5. Results of PBT and vPvB

assessment

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not

require 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 Ozone Depletion Potential This product does not contain any known or suspected substance This product does not contain any known or suspected substance

### **SECTION 13: DISPOSAL CONSIDERATIONS**

### 13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Should not be released into the environment. Waste is classified as hazardous. Dispose of in accordance with the European Directives 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. Do not let this

chemical enter the environment.

### **SECTION 14: TRANSPORT INFORMATION**

IMDG/IMO Not regulated

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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

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

Dangerous for the environment 14.5. Environmental hazards

Product is a marine pollutant according to the criteria set by IMDG/IMO

No special precautions required. 14.6. Special precautions for user

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). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No    | EINECS    | ELINCS | NLP                           | IECSC | TCSI | KECL     | ENCS  | ISHL  |
|-----------|-----------|-----------|--------|-------------------------------|-------|------|----------|-------|-------|
| Cadmium   | 7440-43-9 | 231-152-8 | -      | -                             | Х     | Χ    | KE-04397 | X     | -     |
|           |           |           |        |                               |       |      |          |       |       |
| Component | CAS No    | TSCA      |        | ventory<br>ation -<br>nactive | DSL   | NDSL | AICS     | NZIoC | PICCS |
| Cadmium   | 7440-43-9 | Х         | ACT    | IVE                           | Х     | -    | Х        | Х     | Х     |

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 Regulation (EC<br>1907/2006) article 59 -<br>Candidate List of<br>Substances of Very High<br>Concern (SVHC)   |
|-----------|-----------|---|------------------------------------|---|
| Cadmium   | 7440-43-9 | -   | (see link for restriction details) | SVHC Candidate list -<br>231-152-8 - Carcinogenic,<br>Article 57a;Specific target<br>organ toxicity after<br>repeated exposure, Article<br>57(f) - human health |

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| for a Palaton month of an |
|---------------------------|
| (see link for restriction |
| details)                  |
| Use restricted. See item  |
| 28.                       |
| (see link for restriction |
| details)                  |
| Use restricted. See item  |
| 75.                       |
| (see link for restriction |
| details)                  |

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

#### **REACH links**

https://echa.europa.eu/authorisation-list

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

https://echa.europa.eu/candidate-list-table

### 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                            |  |
| Cadmium   | 7440-43-9 | 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

| Component                    | ANNEX I - PART 1 List of chemicals subject to export notification procedure (referred to in Article 8)                                 | ANNEX I - PART 2 List of chemicals qualifying for PIC notification (referred to in Article 11) | ANNEX I - PART 3<br>List of chemicals subject to the<br>PIC procedure<br>(referred to in Articles 13 and<br>14) |
|------------------------------|--|--|---|
| Cadmium<br>7440-43-9 ( 100 ) | i(1) — industrial chemical for professional use sr — severe restriction  i(2) — industrial chemical for public sr — severe restriction | i — industrial chemical<br>sr — severe restriction   | -   |

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012R0649&qid=1604065742303.

## 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

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work

Take note of Dir 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations

### **National Regulations**

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

**WGK Classification** See table for values

| Component Germany - Water Classification (AwSV) |      | Germany - TA-Luft Class                                   |  |
|---|------|---|--|
| Cadmium   | WGK3 | Krebserzeugende Stoffe - Class I : 0.05 mg/m <sup>3</sup> |  |

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|  | (Massenkonzentration) |
|--|-----------------------|

| Component | France - INRS (Tables of occupational diseases)               |
|-----------|---|
| Cadmium   | Tableaux des maladies professionnelles (TMP) - RG 61,RG 61bis |

| 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 |
|------------------------------|--|---|--|
| Cadmium<br>7440-43-9 ( 100 ) | Prohibited and Restricted Substances   |   | Annex I - industrial chemical  |

### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

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

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

H330 - Fatal if inhaled

H341 - Suspected of causing genetic defects

H350 - May cause cancer

H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

### Legend

CAS - Chemical Abstracts Service

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

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

Inventory

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

AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

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

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

Substances List

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

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

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

MARPOL - International Convention for the Prevention of Pollution from

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

Key literature references and sources for data

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

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

### **Training Advice**

Cadmium ingot Revision Date 24-Mar-2024

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.

Chemical incident response training.

Prepared By Health, Safety and Environmental Department

Revision Date 24-Mar-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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

### **End of Safety Data Sheet**