

**according to WHS Regulations**

Printing date 27.07.2021

Revision: 27.07.2021

Hazardous according to criteria of Australian Safety and Compensation Council.

## 1 Identification

- **Product identifier**
- **Trade name:** PERKALLOY STD
- **Article number:** N5190616
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

PerkinElmer, Inc.  
710 Bridgeport Avenue  
Shelton, Connecticut 06484 USA  
CustomerCareUS@perkinelmer.com  
203-925-4600

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Supplier/Local:  
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PerkinElmer Australia  
Lvl 2, Bldg 5, Brandon Office Park  
530-540 Springvale Road  
Glen Waverley  
Melbourne  
VIC 3150  
Australia  
1-800-033-391  
ausales@perkinelmer.com

- **Emergency telephone number:**  
CHEMTREC (within US) 800-424-9300  
CHEMTREC (from outside US) +1 703-527-3887 (call collect)  
CHEMTREC (within AU) +(61)-290372994

## 2 Hazard(s) Identification

- **Classification of the substance or mixture**



skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



health hazard

Carc. 2 H351 Suspected of causing cancer. Route of exposure: Inhalation.

STOT RE 1 H372 Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.

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*Skin Sens. 1 H317 May cause an allergic skin reaction.*

**Label elements**

- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms** GHS06, GHS08
- **Signal word** Danger

**Hazard-determining components of labelling:**

iron  
nickel

**Hazard statements**

- H301 Toxic if swallowed.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer. Route of exposure: Inhalation.
- H372 Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.

**Precautionary statements**

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P321 Specific treatment (see on this label).
- P330 Rinse mouth.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**3 Composition and Information on Ingredients**

**Chemical characterisation: Mixtures**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

7439-89-6	iron	Acute Tox. 2, H300	50.0%
7440-02-0	nickel	Carc. 2, H351; STOT RE 1, H372 Skin Sens. 1, H317	50.0%

**Additional information:** For the wording of the listed hazard phrases refer to section 16.

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#### **4 First Aid Measures**

- **Description of first aid measures**
- **General information:**  
*Immediately remove any clothing soiled by the product.*  
*Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.*  
*In case of irregular breathing or respiratory arrest provide artificial respiration.*
- **After inhalation:**  
*Supply fresh air and to be sure call for a doctor.*  
*In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:**  
*If skin irritation continues, consult a doctor.*  
*Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
- **After swallowing:** *If symptoms persist consult doctor.*
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**  
*No further relevant information available.*

#### **5 Fire Fighting Measures**

- **Extinguishing media**
- **Suitable extinguishing agents:** *Use fire extinguishing methods suitable to surrounding conditions.*
- **Special hazards arising from the substance or mixture**  
*During heating or in case of fire poisonous gases are produced.*
- **Advice for firefighters**
- **Protective equipment:** *Mouth respiratory protective device.*

#### **6 Accidental Release Measures**

- **Personal precautions, protective equipment and emergency procedures** *Mount respiratory protective device.*
- **Environmental precautions:** *Inform respective authorities in case of seepage into water course or sewage system.*
- **Methods and material for containment and cleaning up:**  
*Dispose contaminated material as waste according to item 13.*  
*Ensure adequate ventilation.*
- **Reference to other sections**  
*No dangerous substances are released.*  
*See Section 7 for information on safe handling.*  
*See Section 8 for information on personal protection equipment.*  
*See Section 13 for disposal information.*

#### **7 Handling and Storage**

- **Handling:**
- **Precautions for safe handling**  
*Thorough dedusting.*

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Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.

**· Information about fire - and explosion protection:**

The product is not flammable.  
Keep respiratory protective device available.

**· Conditions for safe storage, including any incompatibilities**

**· Storage:**

**· Requirements to be met by storerooms and receptacles:** No special requirements.

**· Information about storage in one common storage facility:** Not required.

**· Further information about storage conditions:** Keep container tightly sealed.

**· Specific end use(s)** No further relevant information available.

**8 Exposure controls and personal protection**

**· Additional information about design of technical facilities:** No further data; see item 7.

**· Control parameters**

**· Ingredients with limit values that require monitoring at the workplace:**

**7440-02-0 nickel**

WES	Long-term value: 1 mg/m <sup>3</sup>
	Metal: Sen

**· Additional information:** The lists valid during the making were used as basis.

**· Exposure controls**

**· Personal protective equipment:**

**· General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.

**· Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**· Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**· Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**· Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

## 9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid material

Colour: Light grey

· Odour: Odourless

· Odour threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/freezing point: 1539 °C

Initial boiling point and boiling range: 2730 °C

· Flash point: Not applicable.

· Flammability (solid, gas): Not determined.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.  
Not determined.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapour pressure: Not applicable.

· Density at 20 °C: 8.91 g/cm<sup>3</sup>

· Relative density: Not determined.

· Vapour density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with water:

Fully miscible.

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

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· **Solvent content:**

**Solids content:** 100.0 %

· **Other information** No further relevant information available.

## 10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological Information

· **Information on toxicological effects**

· **Acute toxicity**

· **LD/LC50 values relevant for classification:**

7439-89-6 iron

Oral	LD50	30 mg/kg (rat)
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· **Primary irritant effect:**

· **Skin corrosion/irritation** No irritant effect.

· **Serious eye damage/irritation** No irritating effect.

· **Respiratory or skin sensitisation** Sensitisation possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Toxic

Irritant

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Carc. 2

## 12 Ecological Information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system.

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*Danger to drinking water if even small quantities leak into the ground.*

**· Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

**· Waste treatment methods**

**· Recommendation**

*Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

**· Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

**· UN-Number**

· **ADG, IMDG, IATA**

UN3288

**· UN proper shipping name**

· **ADG**

3288 TOXIC SOLID, INORGANIC, N.O.S. (iron)

· **IMDG, IATA**

TOXIC SOLID, INORGANIC, N.O.S. (iron)

**· Transport hazard class(es)**

· **ADG**



· **Class**

6.1 (T5) Toxic substances.

· **Label**

6.1

**· IMDG, IATA**



· **Class**

6.1 Toxic substances.

· **Label**

6.1

**· Packing group**

· **ADG, IMDG, IATA**

III

**· Environmental hazards:**

· **Marine pollutant:**

No

· **Special precautions for user**

Warning: Toxic substances.

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· <b>Hazard identification number (Kemler code):</b>	60
· <b>EMS Number:</b>	F-A,S-A
· <b>Stowage Category</b>	A
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>UN "Model Regulation":</b>	UN 3288 TOXIC SOLID, INORGANIC, N.O.S. (IRON), 6.1, III

**15 Regulatory information**

· <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>			
7439-89-6	iron	 Acute Tox. 2, H300	50.0%
7440-02-0	nickel	 Carc. 2, H351;  STOT RE 1, H372  Skin Sens. 1, H317	50.0%

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Seveso category H2** ACUTE TOXIC

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 16 Other information

### Disclaimer

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

### · Relevant phrases

H300 Fatal if swallowed.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

### · Department issuing SDS: Environmental, Health and Safety

### · Contact:

Within the USA: 1-(800)-762-4000

Outside the USA: 1-(203)-712-8488

### · Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1