SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Name: Platinum Iridium Marker Bands

Product Number: All applicable American Elements product codes, e.g. PT-IR25-01-MKB , PT-IR20-01-MKB , PT-IR10-01-MKB

CAS #: 37186-87-1

Relevant identified uses of the substance: Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
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Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
The substance is not classified as hazardous to health or the environment according to the CLP regulation.
Classification according to Directive 67/548/EEC or Directive 1999/45/EC
N/A
Information concerning particular hazards for human and environment:
No data available
Hazards not otherwise classified
No data available
Label elements
Labelling according to Regulation (EC) No 1272/2008
N/A
Hazard pictograms
N/A
Signal word
N/A
Hazard statements
N/A
WHMIS classification

Not controlled
Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
Health (acute effects) = 0
Flammability = 0
Physical Hazard = 0
Other hazards
Results of PBT and vPvB assessment
PBT:
N/A
vPvB:
N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
CAS No. / Substance Name:
Platinum, Iridium Foil
Identification number(s):
EC number:
2311161

SECTION 4. FIRST AID MEASURES

Description of first aid measures
General information
No special measures required.
If inhaled:
Seek medical treatment in case of complaints.
In case of skin contact:
Generally the product does not irritate the skin.
In case of eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
If swallowed:
If symptoms persist consult doctor.
Information for doctor
Most important symptoms and effects, both acute and delayed
No data available
Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing agents
Product is not flammable. Use fire-fighting measures that suit the surrounding fire.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Advice for firefighters

Protective equipment:
No special measures required.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Not required.
Environmental precautions:
Do not allow material to be released to the environment without official permits.
Do not allow product to enter drains, sewage systems, or other water courses.
Do not allow material to penetrate the ground or soil.
Methods and materials for containment and cleanup:
Pick up mechanically.
Prevention of secondary hazards:
No special measures required.
Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Handling
Precautions for safe handling
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Information about protection against explosions and fires:
No special measures required.
Conditions for safe storage, including any incompatibilities
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.
Store in cool, dry conditions in well-sealed containers.
Specific end use(s)
No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:
No further data; see section 7.
Control parameters
Components with limit values that require monitoring at the workplace:
Platinum metal and soluble salts (as Pt)
mg/m3
ACGIH TLV 1 (metal); 0.002 (soluble salts)
Austria MAK 1 (metal); 0.002 (soluble salts)
Belgium TWA 1 (metal); 0.002 (soluble salts)

Denmark TWA 0.002 (soluble salts)
Finland TWA 1 (metal); 0.002 (soluble salts)
France VME 1 (metal)
Germany MAK 0.002 (soluble salts)-Ceiling
Hungary TWA 0.001; 0.002-STEL (soluble salts)
Korea TLV 1 (metal); 0.002 (soluble salts)
Netherlands MAC-TTG 1 (metal); 0.002 (soluble salts)
Norway TWA 0.002
Switzerland MAK-W 0.002
United Kingdom TWA 5 (metal); 0.002 (soluble salts)
USA PEL 0.002
Additional information:
No data
Exposure controls
Personal protective equipment
Follow typical protective and hygienic practices for handling chemicals.
Maintain an ergonomically appropriate working environment.
Breathing equipment:
Not required.
Protection of hands:
Not required.
Eye protection:
Safety glasses
Body protection:
Protective work clothing

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Appearance:
Form: Solid in various forms
Color: Silver grey
Odor: Odorless
Odor threshold: No data available.
pH: N/A
Melting point/Melting range: 1780-1800 °C (3236-3272 °F)
Boiling point/Boiling range: No data available
Sublimation temperature / start: No data available
Flash point: N/A
Flammability (solid, gas)
Product is not flammable.
Fine powder: flammable
Ignition temperature: No data available
Decomposition temperature: No data available
Autoignition: No data available.
Danger of explosion: Product does not present an explosion hazard.
Explosion limits:
Lower: No data available
Upper: No data available
Vapor pressure: N/A

Density at 20 °C (68 °F): 21.56 g/cm^3 (179.918 lbs/gal)
Relative density
No data available.

Vapor density
N/A
Evaporation rate
N/A
Solubility in Water (H_2O): Insoluble
Partition coefficient (n-octanol/water): No data available.
Viscosity:
Dynamic: N/A
Kinematic: N/A
Other information
No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity
No data available
Chemical stability
Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided:
Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions
No dangerous reactions known
Conditions to avoid
No data available
Incompatible materials:
Oxidizing agents
Hazardous decomposition products:
None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity:
No effects known.
LD/LC50 values that are relevant for classification:
No data
Skin irritation or corrosion:
Powder: irritant effect
Eye irritation or corrosion:
Powder: irritant effect
Sensitization:
Platinum salts, especially ionic platinum halogeno complexes, may cause severe allergic reactions.
Germ cell mutagenicity:
No effects known.
Carcinogenicity:
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance.
Reproductive toxicity:
No effects known.

Specific target organ system toxicity - repeated exposure:
No effects known.
Specific target organ system toxicity - single exposure:
No effects known.
Aspiration hazard:
No effects known.
Other information (about experimental toxicology):
Tumorigenic effects have been observed on tests with laboratory animals.
Subacute to chronic toxicity:
Exposure to iridium compounds may cause irritation to the eyes or respiratory tract. To
xicity of iridium is not known. It is predicted to have toxicity similar to osmium
and platinum, two members of the same group.
Exposure to platinum containing dusts or fumes may cause irritation, sensitization reactions
and asthma. Effects include sneezing, coughing, tightness in the chest, dyspnea and wheezing.
Cyanosis is possible. Chronic exposure may result in pulmonary fibrosis.
Subacute to chronic toxicity:
No effects known.
Additional toxicological information:
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity:
No data available
Persistence and degradability
No data available
Bioaccumulative potential
No data available
Mobility in soil
No data available
Additional ecological information:
Do not allow material to be released to the environment without official permits.
Avoid transfer into the environment.
Results of PBT and vPvB assessment
PBT:
N/A
vPvB:
N/A
Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation
Consult official regulations to ensure proper disposal.
Uncleaned packagings:
Recommendation:
Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

Not a hazardous material for transportation.
UN-Number
DOT, IMDG, IATA
None
UN proper shipping name
DOT, IMDG, IATA
None
Transport hazard class(es)
DOT, ADR, IMDG, IATA
Class
None
Packing group
DOT, IMDG, IATA
None
Environmental hazards:
N/A
Special precautions for user
N/A
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
N/A
Transport/Additional information:
Not dangerous according to the above specifications.
DOT
Marine Pollutant (DOT):
No

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations
SARA Section 313 (specific toxic chemical listings)
Substance is not listed.
California Proposition 65
Prop 65 - Chemicals known to cause cancer
Substance is not listed.
Prop 65 - Developmental toxicity
Substance is not listed.
Prop 65 - Developmental toxicity, female
Substance is not listed.
Prop 65 - Developmental toxicity, male
Substance is not listed.
Information about limitation of use:
For use only by technically qualified individuals.
Other regulations, limitations and prohibitive regulations
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.
Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use)
Substance is not listed.
REACH - Pre-registered substances
Substance is not listed.
Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

SECTION 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.