1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**Platinum**
Chemical Formula	Pt
Molecular Weight	195.08 g/mol
CAS No.	7440-06-4
EINECS No.	231-116-1
Supplier Address*	ISOFLEX USA PO Box 29475 San Francisco CA 94129 United States
Telephone	+1 415-440-4433
Fax	+1 415-563-4433
Emergency Phone Number (both supplier and manufacturer)	Infotrac/ +1 800-535-5053 *May include subsidiaries or affiliate companies/divisions
Email	iusa@isoflex.com
Website	www.isoflex.com
Preparation Information	ISOFLEX USA Product Safety +1 415-440-4433

2. HAZARDOUS INGREDIENTS

Emergency Overview

Highly flammable

Keep away from heat/sparks/open flames/hot surfaces – NO SMOKING.

Ground/bond container and receiving equipment

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

NFPA Ratings: (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health Hazard = 2 **Flammability = 3** **Reactivity = 3**

HMIS Ratings: (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health Hazard = 2 **Flammability = 3** **Physical Hazard = 3**

HEALTH HAZARD	2
FLAMMABILITY	3
PHYSICAL HAZARD	3

Potential Health Effects

Inhalation	May be harmful if inhaled; may cause respiratory tract irritation
Skin	May be harmful if absorbed through skin; may cause skin irritation
Eyes	May cause eye irritation
Ingestion	May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:	Platinum
CAS No.:	7440-06-4
Chemical Formula:	Pt
Molecular Weight:	195,08 g/mol

4. FIRST AID MEASURES

General Advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
Inhalation Exposure	If breathed in, move person into fresh air. If person is not breathing, give artificial respiration Consult a physician.
Dermal Exposure	Wash off with soap and plenty of water. Consult a physician.
Eye Exposure	Flush eyes with water as a precaution.
Oral Exposure	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Firefighting

Protective Equipment	Wear self-contained breathing apparatus for firefighting if necessary.
Further Information	Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid dust formation. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods for Cleaning Up	Contain spillage, and then collect with an electrically-protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDING AND STORAGE

Handling	Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – NO SMOKING. Take measures to prevent the buildup of electrostatic charge.
Storage	Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Component	*CAS No.*	*Value*	*Control parameters*	*Basis*
Platinum	7440-06-4	TWA	1 mg/m^3	USA - ACGIH Threshold Limit Values (TLV)
Remarks: Upper respiratory tract irritation / asthma				
		TWA	1 mg/m^3	USA - OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	1 mg/m^3	USA - NIOSH Recommended Exposure Limits
		TWA	0.0020 mg/m^3	USA - Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants

Personal Protective Equipment

Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridge as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand Protection	The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.
Eye Protection	Safety glasses
Body Protection	Choose body protection according to the amount and concentration of the dangerous substance at the workplace.
General Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	Powder

Safety Data

pH:	N/A	Ignition Temperature:	N/A
Melting Point:	1.772 °C	Boiling Point:	3.827 °C
Lower Explosion Limit:	N/A	Upper Explosion Limit:	N/A
Density:	21.45 g/cm^3	Water Solubility:	N/A
Flash Point:	N/A		

10. STABILITY AND REACTIVITY

Storage Stability	Stable under recommended storage conditions
Conditions to Avoid	Heat, flames and sparks
Materials to Avoid	Strong oxidizing agents, alcohols

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	No data available
Irritation and Corrosion	No data available
Sensitization	No data available

Chronic Exposure

Carcinogenicity - Rat - Implant
Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Carcinogenicity - Mouse - Implant
Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.

Additional Information: RTECS: TP2160000

12. ECOLOGICAL INFORMATION

Elimination Information (Persistence and Degradability)	No data available
Ecotoxicity Effects	No data available

In solid form this material poses no special environmental problems. Metal powder or dust may have significant impact on air and water quality. Emissions, spills and releases to the environment should be controlled immediately.

13. DISPOSAL CONSIDERATIONS

Product	Burn in a chemical incinerator equipped with an afterburner and scrubber, but exert extra care in igniting, as this material is highly flammable. Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated Packaging	Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/RID

Proper Shipping Name	METAL POWDER, FLAMMABLE, N.O.S. (Platinum)
UN No.	3089
Class	4.1
Packing Group	II

IMDG

Proper Shipping Name	METAL POWDER, FLAMMABLE, N.O.S.
UN No.	3089
Class	4.1
Packing Group	II
EMS No.	F-G, S-G
Marine Pollutant	No

IATA

Proper Shipping Name	Metal powder, flammable, n.o.s.
UN No.	3089
Class	4.1
Packing Group	II

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15. REGULATORY INFORMATION

Labeling According to EC Directives

Hazard Symbols	**F** - Highly flammable
R-phrase(s)	**R11** - Highly flammable
S-phrase(s)	**S16** - Keep away from sources of ignition – NO SMOKING **S33** - Take precautionary measures against static discharges **S 7/9** - Keep container tightly closed and in a well-ventilated place
REACH Number	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	Fire Hazard, Chronic Health Hazard
Massachusetts Right to Know Components	Platinum / CAS No. 7440-06-4 / Revision Date 1993-04-24
Pennsylvania Right to Know Components	Platinum / CAS No. 7440-06-4 / Revision Date 1993-04-24
New Jersey Right to Know Components	Platinum / CAS No. 7440-06-4 / Revision Date 1993-04-24
California Prop. 65 Components	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

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16. OTHER INFORMATION

Prepared By	ISOFLEX USA PO Box 29475 San Francisco CA 94129 United States
Issuing Date	January 12, 2014
Revision Date	August 1, 2021
Revision Number	2
Revision Note	Required review and update

ISOFLEX USA's Commonly Used Abbreviations and Acronyms*

ACGIH	American Conference of Governmental Industrial Hygienists
ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
AICS	Australian Inventory of Chemical Substances
ALARA	As Low As Is Reasonably Achievable
AMU	Atomic Mass Unit
ANSI	American National Standards Institute
BLS	Basic Life Support
BOD5	Biochemical Oxygen Demand
CAM	Continuous Air Monitor
CAS	Chemical Abstracts Service (division of the American Chemical Society)
CEN	European Committee for Standardization
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CLP	Classification, Labelling and Packaging (European Union)
COD	Chemical Oxygen Demand
CPR	Controlled Products Regulations (Canada)
CWA	Clean Water Act (USA)
DAC	Derived Air Concentration (USA)
DOE	United States Department of Energy (USA)
DOT	United States Department of Transportation (USA)
DSL	Domestic Substances List (Canada)
EC50	Half Maximal Effective Concentration
ECL	Korean Existing Chemicals List
EINECS	European Inventory of Existing Commercial Chemical Substances
EHS	Environmentally Hazardous Substance
ELINCS	European List of Notified Chemical Substances
EMS	Emergency Response Procedures for Ships Carrying Dangerous Goods
EPA	Environmental Protection Agency (USA)
EPCRA	Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986
GHS	Globally Harmonized System
HMIS	Hazardous Materials Identification System (USA)
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Containers
ICAO	International Civil Aviation Organization
IDLH	Immediately Dangerous to Life or Health
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
IMDG	International Maritime Code for Dangerous Goods
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent
LDLO	Lethal Dose Low

LOEC	Lowest-Observed-Effective Concentration
MARPOL	International Convention for the Prevention of Pollution from Ships
MSHA	Mine Safety and Health Administration (USA)
NCRP	National Council on Radiation Protection & Measurements (USA)
NDSL	Non-Domestic Substances List (Canada)
NFPA	National Fire Protection Association (USA)
NIOSH	National Institute for Occupational Safety and Health (USA)
NOEC	No Observed Effect Concentration
N.O.S.	Not Otherwise Specified
NRC	Nuclear Regulatory Commission (USA)
NTP	National Toxicology Program (USA)
OSHA	Occupational Safety and Health Administration (USA)
PBT	Persistent Bioaccumulative and Toxic Chemical
PEL	Permissible Exposure Limit
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PIH	Poisonous by Inhalation Hazard
RCRA	Resource Conservation and Recovery Act (USA)
RCT	Radiation Control Technician
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Europe)
RID	Regulations Concerning the International Transport of Dangerous Goods by Rail
RQ	Reportable Quantity
RTECS	Registry of Toxic Effects of Chemical Substances
SARA	Superfund Amendments and Reauthorization Act (USA)
SNUR	Significant New Use Rule (TSCA)
TDG	Transportation of Dangerous Goods (Canada)
TIH	Toxic by Inhalation Hazard
TLV	Threshold Limit Value
TPQ	Threshold Planning Quantity
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
UN	United Nations (Number)
VOC	Volatile Organic Compound
vPvB	Very Persistent Very Bioaccumulative Chemical
WGK	Wassergefährdungsklassen (Germany: Water Hazard Classes)
WHMIS	Workplace Hazardous Materials Information System

*One or more of the above-listed items may not appear in this document.

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