

MATERIAL SAFETY DATA SHEET — 16 Sections

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Iron Platinum bimetallic nanoparticles in hexane		[WHMIS Classification] Not assigned	
Product Use Magnetic device research			
Manufacturer's Name Richard Farrell, Chemistry		Supplier's Name UCLA	
Street Address 607 Charles E. Young Drive, Westwood		Street Address 607 Charles E. Young Drive, Westwood	
City Los Angeles		Province CA	City Los Angeles
Postal Code 90095		Emergency Telephone 310-910-2510	Emergency Telephone 310-910-2510
Date MSDS Prepared February 4 th , 2010		MSDS Prepared By Richard Farrell	Phone Number 310-794-6618

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients (<i>specific</i>)	%	CAS Number	LD ₅₀ of Ingredient (<i>specify species and route</i>)	LC ₅₀ of Ingredient (<i>specify species</i>)
Iron-Platinum alloy	3%	Not available	< 10 mg kg-1	
Hexane	95%	110-54-3	118 mg kg-1	
Oleic acid	1%	112-80-1	28700 mg kg-1	
Olelyamine	1%	112-90-3	888 mg kg-1	

SECTION 3 — HAZARDS IDENTIFICATION

Route of Entry	<input checked="" type="checkbox"/> Skin Contact	<input checked="" type="checkbox"/> Skin Absorption	<input checked="" type="checkbox"/> Eye Contact	<input checked="" type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Ingestion
[Emergency Overview] The health hazards of this product have not been fully tested and should be used with caution. Not all potential health effects are listed here.					
[WHMIS Symbols]					
Potential Health Effects: Inhalation: Possible irritation to respiratory tract and symptoms of nausea. Headaches, drowsiness, dizziness, disorientation, sleep disturbances, loss of coordination, dilated pupils, kidney damage and liver damage. Skin Contact: Possible irritation Eye Contact: Possible irritation Ingestion: Possible stomach pain and symptoms of nausea. Headache, drowsiness, dizziness, disorientation, sleep disturbances, loss of coordination, dilated pupils. Damage to kidney or liver.					

SECTION 4 — FIRST AID MEASURES

Skin Contact: Wash the skin thoroughly with soap and water and seek medical advice.
Eye Contact: If eye contact occurs, rinse eye thoroughly and seek medical advice
Inhalation: If inhaled, supply fresh air or respirator and seek medical advice
Ingestion: If swallowed, seek medical attention immediately (If Victim is CONSCIOUS have the victim drink water or milk, DO NOT INDUCE VOMITING)

SAMPLE FORMAT PROVIDED BY THE WORKERS' COMPENSATION BOARD OF BRITISH COLUMBIA

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid. Possible settling could occur based on storage methods.	Odor and Appearance Color: Green to dark red Odor: Not disclosed	Odour Threshold (ppm) Not disclosed
Specific Gravity Not disclosed	Vapour Density (air = 1) Not disclosed	Vapour Pressure (mmHg) Not disclosed
Evaporation Rate Not disclosed	Boiling Point (° C) Not disclosed	Freezing Point (° C) Not disclosed
pH Not disclosed	Coefficient of Water/Oil Distribution Not disclosed	[Solubility in Water] Not soluble

SECTION 10 — STABILITY AND REACTIVITY

Chemical Stability <input type="checkbox"/> Yes <input type="checkbox"/> No	If no, under which conditions? Not determined
Incompatibility with Other Substances <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, which ones? Not fully determined. Reactive or incompatible with oxidizing materials and acids
Conditions to avoid:	Not fully determined. Avoid heat/ flames
Thermal decomposition:	Not determined. May produce toxins.
Reactivity, and under what conditions?:	
Hazardous Decomposition Products	

SECTION 11 — TOXICOLOGICAL INFORMATION

Effects of Acute Exposure: Not disclosed	
Effects of chronic exposure: Not disclosed	
Irritancy of Product: Not disclosed	
Skin sensitization: Not disclosed	Respiratory sensitization: Not disclosed
Carcinogenicity-IARC: Not disclosed	Carcinogenicity - ACGIH : No information is available
Reproductive toxicity: Not disclosed	Teratogenicity: Not disclosed
Embrototoxicity: Not disclosed	Mutagenicity: Not disclosed
Name of synergistic products/effects	

Blank form provided courtesy of www.ehso.com/msdscrate.php

Please continue on reverse side

SECTION 12 — ECOLOGICAL INFORMATION

[Aquatic Toxicity]
No data available. See section 6 for environmental precautions

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste Disposal

Dispose of in accordance with local, state, or national regulations.

SECTION 14 — TRANSPORT INFORMATION

Special Shipping Information
Exceptions: 49 CFR 173.4 for small quantities of hazardous materials less than 30 ml (Hexane)
Packing Group: II

Identification Number: UN1208 PIN

TDG [DOT] Class 3

[IMO] [ICAO]

SECTION 15 — REGULATORY INFORMATION

[WHMIS Classification] [OSHA]

[SERA] [TSCA]

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

SECTION 16 — OTHER INFORMATION

Disclaimer: For R&D only. Not intended for food, drug, household, agricultural or cosmetic use.

The above information is believed to be correct. UCLA shall not be held liable for any damage resulting from handling or contact with the above product.