spectrum®



SAFETY DATA SHEET

Preparation Date: 8/18/2017	Revision Date: Not Applicable	Revision Number: Not Applicable		
	1. IDENTIFICATION			
Product identifier				
Product code:	SP-204			
Product Name:	5% Platinum on Alumina Powder, Reduced, Dry	v, 70 microns		
Other means of identification				
Synonyms:	No information available			
CAS #:	Mixture			
RTECS #	Not available			
CI#:	Not available			
Recommended use of the chem	nical and restrictions on use			
Recommended use:	No information available.			
Uses advised against	No information available			
Supplier:	Spectrum Chemical Mfg. Corp			
.	14422 South San Pedro St.			
	Gardena, CA 90248			
	(310) 516-8000.			
Order Online At:	https://www.spectrumchemical.com			
Emergency telephone number	Chemtrec 1-800-424-9300			
Contact Person:	Martin LaBenz (West Coast)			
Contact Person:	Ibad Tirmiz (East Coast)			
	2. HAZARDS IDENTIFICATION			
	Z. HAZARDS IDENTIFICATION			

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

Label elements

Warning

Hazard statements Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Hazards not otherwise classified (HNOC) Not Applicable

Other hazards Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Wear protective gloves Wear eye/face protection

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Aluminum Oxide	1344-28-1	95
Platinum Metal, powder	7440-06-4	5

4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance in have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.	f you
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.	
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention.	
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, giv oxygen. Obtain medical attention.	e
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.	
Most important symptoms and effe	ects, both acute and delayed	
Symptoms	Causes serious eye irritation. Causes skin irritation. Irritating to respiratory system.	
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Indication of any immediate medical attention and special treatment needed

Notes to Physician:

Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES		
Extinguishing Media Suitable Extinguishing Media:	The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.	
Unsuitable Extinguishing Media:	No information available.	
Specific hazards arising from the chemical		
Hazardous Combustion Products:	No information available.	
Specific hazards:	No information available.	
Special Protective Actions for Firefighters		
Specific Methods:	No information available.	
Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal
protective equipment. Avoid contact with skin, eyes and clothing.Environmental precautionsPrevent further leakage or spillage if safe to do so. Do not let product enter drains.Methods and material for containment
Methods for containmentStop leak if you can do it without risk. Cover with plastic sheet to prevent
spreading.Methods for cleaning upUse appropriate tools to put the spilled solid in a suitable waste disposal container.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Product code: SP-204

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not ingest. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents Strong acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Aluminum Oxide	1344-28-1	15 mg/m³ TWA	None	None	None
Platinum Metal, powder	7440-06-4	0.002 mg/m ³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	Not determined

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Aluminum Oxide	1344-28-1	= 10 mg/m³ TWA	None	1.0 mg/m ³ TWA (respirable) (aluminum insoluble compounds)	10 mg/m ³ TWAEV AI total dust
Platinum Metal, powder	7440-06-4	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m ³ TWA	1 mg/m ³ TWAEV

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Aluminum Oxide	1344-28-1	10 mg/m³ TWA	= 10 mg/m ³ TWA
Platinum Metal, powder	7440-06-4	1 mg/m³ TWA	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles

Skin and body protection:	Long sleeved clothing
	Chemical resistant apron

Product code: SP-204

Gloves

Respiratory protection:Effective dust mask. Use a dust respirator under conditions where exposure to
the substance is apparent (e.g. generation of high concentration of dust (dust
clouds), inadequate ventilation, development of respiratory tract irritation), and
engineering controls are not feasible. Be sure to use an approved/certified
respirator or equivalent.Hygiene measures:Avoid contact with skin, eyes and clothing. When using, do not eat, drink or
smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid

Odor: Odorless.

Molecular/Formula weight: No information available

Flash Point Tested according to: Not available

Upper Explosion Limit (%): No information available

Boiling point/range(°C/°F): No information available

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available Appearance: Powder.

Taste No information available.

Flammability: Non-flammable

Autoignition Temperature (°C/°F): No information available

Melting point/range(°C/°F): 2045 °C/3713 °F

Bulk density: No information available

pH: No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: Insoluble in water Color: Gray.

Formula: No information available

Flashpoint (°C/°F): No information available.

Lower Explosion Limit (%): No information available

Decomposition temperature(°C/°F): No information available

Density (g/cm3): 3.97

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscosity: No information available

10. STABILITY AND REACTIVITY

Reactivity

Chlorine trifluoride reacts violently with Aluminum oxide producing a flame. Ethylene Oxide may polymerize violently when in contact with Aluminum oxide. Reacts with hot chlorinated rubber

Chemical stability		
Stability:	Stable under recommended storage conditions.	
Possibility of Hazardous Reacti	ons: Hazardous polymerization does not occur	
Conditions to avoid:	Incompatible materials.	
Incompatible Materials:	Strong oxidizing agents	
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Strong acids

Hazardous decomposition products:

No information available.

Other Information Corrosivity:

No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Inhalation. Ingestion.

Acute Toxicity

Component Information

Aluminum Oxide			
CAS-No. 1344-28-1			
LD50/oral/rat = > 5000 mg/kg Oral LD50			
	LD50/oral/mouse = No information available		
LD50/dermal/rabbit = No information available	ailable		
LD50/dermal/rat = No information availa			
LC50/inhalation/rat = No information ava	ailable		
LC50/inhalation/mouse = No infomation			
Other LD50 or LC50information = No ir	nformation available		
Platinum Metal, powder			
CAS-No. 7440-06-4			
LD50/oral/rat = No information available			
LD50/oral/mouse = No information available			
LD50/dermal/rabbit = No information av			
LD50/dermal/rat = No information availa			
LC50/inhalation/rat = No information ava			
LC50/inhalation/mouse = No infomation			
Other LD50 or LC50information = LD50	0[Mouse] - Route: Intrapertoneal; Dose: 17 mg/kg		
Product Information			
LD50/oral/rat = VALUE- Acute Tox Oral = No information a	vailable		
LD50/oral/mouse = Value - Acute Tox Oral = No information available			
LD50/dermal/rabbit VALUE-Acute Tox Dermal = No information available			
LD50/dermal/rat VALUE -Acute Tox Dermal = No information available			
LC50/inhalation/rat			
	oduct name: 5% Platinum on 6 / mina Powder, Reduced, Dry, 70 microns	/ 12	

VALUE-Vapor = No information available VALUE-Gas = No information available VALUE-Dust/Mist = 5.57 mg/l

LC50/Inhalation/mouse

VALUE-Vapor = No information available VALUE - Gas = No information available VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	Causes skin irritation.
Eye Contact:	Causes serious eye irritation.
Inhalation	Irritating to respiratory system.
Ingestion	Health injuries are not known or expected under normal use. May cause digestive (gastointestinal) tract irritation.
Aspiration hazard	No information available.
Delayed and immediate effects	as well as chronic effects from short and long-term exposure

- Chronic Toxicity No information available.
- Sensitization: No information available.
- Mutagenic Effects: No information available

Carcinogenic effects:

Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Aluminum Oxide	1344-28-1	Not listed	A4 - Not Classifiable as a Human Carcinogen (listed as Aluminum insoluble compounds)	Not listed	Not listed	Not listed	Not listed
Platinum Metal, powder	7440-06-4	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity	No data is available		
Reproductive Effects:	No information available		
Developmental Effects:	No information available		
Teratogenic Effects:	No information available		

Specific Target Organ Toxicity

Product code: SP-204

Respiratory system. No information available. No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity	
Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available.
Mobility:	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Aluminum Oxide	1344-28-1	None	None	None	None
Platinum Metal, powder	7440-06-4	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide	No information available
Number	
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available
TDG (Canada)	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available

Product code: SP-204

Product name: 5% Platinum on Alumina Powder, Reduced, Dry, 70 microns

Marine Pollutant Description:

ADR

UN-No: Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk:

IMO / IMDG

UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant

RID

UN-No:	Not Re
Proper Shipping Name:	No info
Hazard Class:	No info
Subsidiary Risk:	No info
Packing Group:	No info

ICAO

UN-No:	Ν
Proper Shipping Name:	Ν
Hazard Class:	Ν
Subsidiary Risk:	Ν
Packing Group:	١

ΙΑΤΑ

UN-No:
Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
ERG Code:
Special Provisions

No Information available No information available

Not Regulated No information available No information available No information available No information available

Not Regulated No information available No information available No information available No information available No information available

Not Regulated No information available No information available No information available No information available

Not Regulated No information available No information available No information available No information available

Not Regulated No information available No information available No information available No information available No information available

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Aluminum Oxide	1344-28-1	Present	Present	Present	Present (1)-23	Present	Present	Present
			KE-01012					215-691-6
Platinum Metal,	7440-06-4	Present	Present	Present	Not present	Present	Present	Present
powder			KE-28808					231-116-1

U.S. Regulations

Aluminum Oxide Massachusetts RTK: Present New Jersey RTK Hazardous Substance List: 2891 New Jersey (EHS) List: 2891 500 lb TPQ

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New Jersey - Discharge Prevention - List of Hazardous Substances: Present Pennsylvania RTK: Environmental hazard Pennsylvania RTK - Environmental Hazard List Present Pennsylvania RTK - Special Hazardous Substances Present Minnesota - Hazardous Substance List: Present California Directors List of Hazardous Substances: Present Platinum Metal, powder Massachusetts RTK: Present New Jersey RTK Hazardous Substance List: 1547 Pennsylvania RTK: Present Minnesota - Hazardous Substance List: Present California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

<u>Chemicals Known to the State of California to Cause Cancer:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity		Female
				Reproductive	Reproductive
				Toxicity	Toxicity:
Aluminum Oxide	1344-28-1	Not Listed	Not Listed	Not Listed	Not Listed
Platinum Metal, powder	7440-06-4	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Aluminum Oxide	1344-28-1	None	None	None		1.0 % de minimis concentration
Platinum Metal, powder	7440-06-4	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Aluminum Oxide	1344-28-1	Not Applicable	Not Applicable
Platinum Metal, powder	7440-06-4	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification The WHMIS 2015 classification of this product has not been validated or reviewed yet. Information:

Component Platinum Metal, powder 7440-06-4 (5)

WHMIS 2015 Hazard Classification Combustible Dust - Category 1: May form combustible dust concentrations in air (factors such as combustibility and explosiveness of dusts including composition and shape and size of particles could cause substance to belong to 'Combustible dust' hazard class)

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

Product code: SP-204

Components

Aluminum Oxide

WHMIS 1988 Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -	
Aluminum Oxide	1 %	
Platinum Metal, powder	1 %	

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Aluminum Oxide	1344-28-1	Present	Not Listed
Platinum Metal, powder	7440-06-4	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances	
Aluminum Oxide	1344-28-1	Not listed	
Platinum Metal, powder	7440-06-4	Not listed	
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject	
		to Mandatory Reporting	
Aluminum Oxide	1344-28-1	Not listed	
Platinum Metal, powder	7440-06-4	Not listed	

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Aluminum Oxide	1344-28-1	
Platinum Metal, powder	7440-06-4	

EU - CLP (1272/2008)

<u>**R-phrase(s)**</u> Not determined

S -phrase(s)

not determined

Components	CAS-No.	 Concentration Limits:	Safety Phrases
Aluminum Oxide	1344-28-1	No information	
Platinum Metal, powder	7440-06-4	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: not determined

16. OTHER INFORMATION

Preparation Date: Revision Date: Prepared by: 8/18/2017 Not Applicable Sonia Owen

Product code: SP-204

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet