SAFETY DATA SHEET

Revision date: 7-August-2025

1.Identification

Product identifier

- Trade name	NCP CATALYSTS™
- Product name	Platinum on nanoporous carbon powder
Cat No.:	MMS-NC-0126
Use of the substance/mixture	Industrial, research applications For professional and industrial use only.

Details of the supplier of the safety data sheet

Supplier:	Momentum Materials Solutions Corp. 253147 Bearspaw Road, Calgary, Alberta T3L 2P5 Canada TEL: +1 (368) 997-9893 FAX: +1 (587)206-9760 EMAIL: info@momentummaterials.com https://momentummaterials.ca
Emergency telephone	FOR EMERGENCIES INVOLVING DANGEROUS GOODS Call CANUTEC's 24-Hour Number: 1-888-226-8832 (Canada and US) and/or 1-613-996-6666 (International)

2. Hazard(s) identification

Classification

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Flammable solids (Category 1), H228

For the full text of the H-Statements mentioned in this Section, see Section 16.

Pictogram

Signal Word Danger

Hazard Statements

H228	Flammable solid

Precautionary Statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazards not otherwise classified (HNOC) or not covered by GHS

- None

3. Composition/Information on Ingredients

Mixtures

Synonyms: 50% Pt on nanoporous carbon powder; 50% Pt/NCP
Formula: Pt
Molecular weight: 195.08 g/mol

Component	CAS-No.	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Carbon	7782-42-5	⩾45 - ⩽55	EC-No. 231-955-3
Platinum	7440-06-4	≥45 - ≤55	EC-No. 231-116-1

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First-aid measures

First-aid measures after inhalation	After inhalation: fresh air.
First-aid measures after skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
First-aid measures after eye contact	After eye contact: rinse out with plenty of water. Remove contact lenses
First-aid measures after ingestion	After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures

Suitable extinguishing media	Water Foam Carbon dioxide (CO_2) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Hazardous decomposition products in case of fire	Carbon oxides Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.
Firefighting instructions	In the event of fire, wear self-contained breathing apparatus, gloves, safety goggles.
Further information	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

	For personal protection see section 8.
Environmental precautions	Do not let product enter drains. Risk of explosion.
Methods and material for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

For disposal see section 13.

7. Handling and storage

Precautions for safe handling

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities	Tightly closed. Keep away from heat and sources of ignition. Storage class (TRGS 510): 4.1B: Flammable solid hazardous materials.

8. Exposure controls / personal protection

Exposure Guidelines

Component: nanoporous carbon		
ACGIH TLV	ACGIH TWA	2 mg/m^3
OSHA PEL	(Vacated) TWA (Vacated) TWA (Vacated) TWA TWA TWA	2.5 mg/m^3 10 mg/m^3 5 mg/m^3 15 mg/m^3 5 mg/m^3
NIOSH	IDLH TWA	1250 mg/m^3 2.5 mg/m^3
Mexico OEL (TWA)	TWA TWA	2 mg/m^3 10 mg/m^3
Component: platinum		
Québec. Regulation respecting	TWAEV	1 mg/m3

occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants.		
Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)	TWA	1 mg/m3
Canada. British Columbia OEL	TWA	1 mg/m3
Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants	TWAEV	1 mg/m3
Sensitizer		
USA. ACGIH Threshold Limit Values (TLV)	TWA	3 mg/m3
USA. ACGIH Threshold Limit Values (TLV)	TWA	1 mg/m3

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH - National Institute for Occupational Safety and Health

Exposure controls

Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

Personal protective equipment

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g.

	KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L
Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.
Respiratory protection	Recommended Filter type: Filter type P1 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
Body Protection	Flame retardant antistatic protective clothing.
Other information	Do not let product enter drains. Risk of explosion.

9. Physical and chemical properties

Physical state	Solid
Colour	Black
Odour	None
Odour threshold	No data available

pH	Not applicable
Relative evaporation rate (butyl acetate=1)	Not applicable
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative vapour density at 20 °C	Not applicable
Relative density	Not applicable
Density	No data available
Solubility	No data available
Log Pow	No data available
Viscosity, kinematic	Not applicable
Viscosity, dynamic	Not applicable
Explosive properties	Not classified as explosive.
Oxidizing properties	None
Explosive limits	No data available

10. Stability and reactivity

Reactivity	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions	Risk of explosion with: Hydrogen with Air Peroxides

	Risk of ignition or formation of inflammable gases or vapours with: combustible substances phosphorus Generates dangerous gases or fumes in contact with: hydrogen peroxide Exothermic reaction with: arsenic Fluorine selenium nitrosyl compounds Tellurium Ozonides Aluminum with heat Lithium with heat
Conditions to avoid	No information available
Incompatible materials	No data available
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	Oral: No data available Inhalation: No data available Dermal: No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available

Aspiration hazard	No data available
Additional Information	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

12. Ecological information

Toxicity (Ecology – general)	Mixture No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Endocrine disrupting properties	No data available
Other adverse effects	No data available
Components	
Nanoporous carbon powder	No data available
Platinum	No data available

13. Disposal considerations

Waste treatment methods	Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers.

14. Transport information

TDG

UN number: 1325	Class: 4.1
Packing group: II	Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (platinum)

Labels: 4.1 ERG Code: 133

Marine pollutant: no

IMDG

UN number: 1325 Class: 4.1

Packing group: II EMS-No: F-A, S-G

Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (platinum)

IATA

UN number: 1325 Class: 4.1

Packing group: II

Proper shipping name: Flammable solid, organic, n.o.s. (platinum)

15. Regulatory information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. Other information

Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Momentum Materials Solutions Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See https://momentummaterials.ca/terms-and-conditions/ and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

End of SDS