# Chemical Safety Data Sheet MSDS / SDS

### Platinum dichloride

Revision Date: 2025-09-27 Revision Number: 1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

# **Product identifier** : Platinum dichloride Product name CBnumber : CB9423657 CAS : 10025-65-7 **EINECS Number** : 233-034-1 : PLATINUM(II) CHLORIDE, Platinum dichloride Synonyms Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses : For R&D use only. Not for medicinal, household or other use. Uses advised against : none **Company Identification** : Chemicalbook Company Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing : 010-86108875 Telephone SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements Symbol(GHS) Signal word Danger

#### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 Wear respiratory protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

#### **Hazard statements**

H303 May be harmfulif swallowed

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

H318 Causes serious eye damage

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

# SECTION 3: Composition/information on ingredients

#### **Substance**

MW

Product name : Platinum dichloride

Synonyms : PLATINUM(II) CHLORIDE, Platinum dichloride

CAS : 10025-65-7 EC number : 233-034-1 MF : CI2Pt : 265.98

#### SECTION 4: First aid measures

#### Description of first aid measures

#### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

#### **Extinguishing media**

#### Suitable extinguishing media

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

#### Special hazards arising from the substance or mixture

Hydrogen chloride gas Not combustible.

#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

#### **NFPA 704**

3 0

HEALTH	3	Short exposure could cause serious temporary or moderate residual injury (e.g. <u>liquid hydrogen, sulfuric acid</u> , <u>calcium hypochlorite</u> , hexafluorosilicic acid)
FIRE	0	Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride)
REACT	0	Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, N2)
SPEC. HAZ.		

## SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

#### **Environmental precautions**

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### Reference to other sections

For disposal see section 13.

# SECTION 7: Handling and storage

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

#### Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

#### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# SECTION 8: Exposure controls/personal protection

#### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

#### **Exposure controls**

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection** 

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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 cartridges 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). Control of environmental exposure

Do not let product enter drains.

# SECTION 9: Physical and chemical properties

#### Information on basic physicochemical properties

Appearance	dark brown powder		
Odour	No data available		
Odour Threshold	No data available d) pH 5,0 - 6,0 Melting point/freezing point Initial boiling point and boiling range		
	Melting point/range: 581 °C - dec. No data available Flash point Not applicable Evaporation rate No		
	data available Flammability (solid, gas) Upper/lower flammability or explosive limits No data available		
	No data available Vapour pressure No data available Vapour density No data available Relative		
	density 6,05 g/mL at 25 °C Water solubility insoluble Partition coefficient: n-octanol/water Autoignition		
	temperature Decomposition temperature No data available No data available >400 °C - Viscosity No		
	data available Explosive properties No data available Oxidizing properties No data available		
Melting point/freezing point	Melting point/range: 581 °C - dec.		
Initial boiling point and boiling range	581 °C (dec.)(lit.)		
Flash point	Not applicable		
Evaporation rate	No data available		
Flammability (solid, gas)	No data available		
Upper/lower flammability or explosive	No data available		
limits			
Vapour pressure	No data available		
Vapour density	No data available		
Relative density	6,05 g/mL at 25 °C		
Water solubility	insoluble		
Partition coefficient: n-octanol/water	No data available		
Autoignition temperature	No data available		
Decomposition temperature	>400 °C -		
Viscosity	No data available		
Explosive properties	No data available		
Oxidizing properties	No data available		
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#### Other safety information

No data available

# SECTION 10: Stability and reactivity

#### Reactivity

No data available

#### **Chemical stability**

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

No data available

#### Conditions to avoid

No data available

#### Incompatible materials

Strong oxidizing agents

#### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas Other decomposition products - No data available In the event of fire: see section 5

# **SECTION 11: Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - 3.423 mg/kg

#### Skin corrosion/irritation

#### Serious eye damage/eye irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity

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

#### Reproductive toxicity

**Additional Information** 

# Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard

RTECS: TP2275000

Cough, Shortness of breath, Headache, Nausea, Vomiting, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Dermatitis, Asthma, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **Toxicity**

LD50 orally in Rabbit: 3423 mg/kg

# **SECTION 12: Ecological information**

#### **Toxicity**

#### Persistence and degradability

#### **Bioaccumulative potential**

#### Mobility in soil

#### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Other adverse effects

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

#### **UN** number

ADR/RID: 3260 IMDG: 3260 IATA: 3260

#### **UN proper shipping name**

 $ADR/RID: CORROSIVE \ SOLID, \ ACIDIC, \ INORGANIC, \ N.O.S. \ (Platinum (II) \ chloride) \ IMDG: \ CORROSIVE \ SOLID, \ ACIDIC, \ INORGANIC, \ N.O.S.$ 

(Platinum(II) chloride)

IATA: Corrosive solid, acidic, inorganic, n.o.s. (Platinum(II) chloride)

#### Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

#### **Packaging group**

ADR/RID: III IMDG: III IATA: III

#### **Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### Special precautions for user

No data available

# **SECTION 15: Regulatory information**

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

EC Inventory:Listed.

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

#### SECTION 16: Other information

#### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

#### References

- [1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- [2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- [10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

#### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.