Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Platinum, standard solution 1000mg/L

Reference number(SDS):58050jis_J_E1-1

Product type:

Reagent

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

Address: 1-6, Ohmano-cho, Koshigaya-shi, Saitama 343-0844, Japan

Division: Quality Assurance Department

Telephone number: +81-48-986-6161

FAX: +81-48-989-2787

e-mail address: shiyaku-t@junsei.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Acute toxicity (Oral): Category 4

Acute toxicity (Inhalation): Category 4

Skin corrosion/irritation: Category 1

Serious eye damage/eye irritation: Category 1

Respiratory sensitization: Category 1

Specific target organ toxicity - single exposure: Category 2(respiratory system)

Specific target organ toxicity - repeated exposure: Category 2(tooth, respiratory system)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Acute): Category 2

(Note) GHS classification without description: Not classified/Classification not possible

Label elements

Signal word: Danger

HAZARD STATEMENT

H302-Harmful if swallowed

H332-Harmful if inhaled

H314-Causes severe skin burns and eye damage

H318-Causes serious eye damage

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

H371-May cause damage to organs after single exposure

H373-May cause damage to organs through prolonged or repeated exposure

H401-Toxic to aquatic life

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Do not breathe dust/mist.

In case of inadequate ventilation wear respiratory protection. (as specified by the

manufacturer/supplier or the competent authority.)
Use only outdoors or in a well-ventilated area.
Wash contaminated parts thoroughly after handling.
Wear protective gloves, protective clothing or face protection.
Wear eye protection/face protection.
Do not eat, drink or smoke when using this product.

Response
Get medical advice/attention if you feel unwell.
Immediately call a POISON CENTER or doctor/physician.
IF exposed or concerned: Call a POISON CENTER or doctor/physician.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage
Store locked up.

Disposal
Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

Ingredient name:Hexachloroplatinic acid(IV)
Content (%):0.2
Chemical formula:Cl6H2Pt
Chemicals No, Japan:1-223
CAS No.:16941-12-1
MW:409.81
ECNO:241-010-7

Ingredient name:Hydrochloric acid
Content (%):5
Chemical formula:ClH
Chemicals No, Japan:1-215
CAS No.:7647-01-0
MW:36.46
ECNO:231-595-7

Ingredient name:Water
Content (%):94.8
Chemical formula:H2O
CAS No.:7732-18-5
MW:18.02
ECNO:231-791-2

Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.
Immediately call a POISON CENTER or doctor/physician.
IF exposed or concerned: Call a POISON CENTER or doctor/physician.
Keep victim warm and quiet.
Call emergency medical service.
Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.
Give artificial respiration if victim is not breathing.
Administer oxygen if breathing is difficult.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.
For minor skin contact, avoid spreading material on unaffected skin.
Remove and isolate contaminated clothing and shoes.

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 SWALLOWED

Rinse mouth. Do NOT induce vomiting.
Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.
The product is non-flammable.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

Specific hazards arising from the substance or mixture

Containers may explode when heated.
Fire may produce irritating, corrosive and/or toxic gases.
Runoff from fire control or dilution water may cause pollution.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.
Wear protective gloves/protective clothing/eye protection/face protection.
Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.
In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
Ventilate area until material pick up is complete.
Wear proper protective equipment.
PUBLIC SAFTY: Ventilate closed spaces before entering.
EVACUATION : Spill: See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under “PUBLIC SAFETY”.

Environmental precautions

Avoid release to headsprings, rivers, lakes, ocean and groundwater.

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.
Use clean non-sparking tools to collect absorbed material.
All equipment used when handling the product must be grounded.

Preventive measures for secondary accident

Collect spillage.
Stop leak if you can do it without risk.
Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/mist.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.
Avoid contact with eyes.

Safety Measures

Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing or face protection.
Wear eye protection/face protection.
Use personal protective equipment as required.
When using do not eat, drink or smoke.

Any incompatibilities

Bases, Metals should not be mixed with the chemicals.

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wash contaminated clothing before reuse.

Storage

Conditions for safe storage

Store in a well-ventilated place. Keep container tightly closed.
Keep cool. Protect from sunlight.
Store locked up.

Container and packaging materials for safe handling data is not available.

Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

8. Exposure controls/personal protection

Control parameters

Control value in MHLW is not available.

Adopted value

(Hexachloroplatinic acid(IV))

JSOH(2000) 0.001mg-Pt/m3

ACGIH(1979) TWA: 0.002mg-Pt/m3 (Asthma; URT irr)

(Hydrochloric acid)

JSOH(2014) (ceiling) 2ppm; 3.0mg/m3

ACGIH(2000) STEL: C 2ppm (URT irr)

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Consult with your glove and/or personnel equipment manufacturer for selection of appropriate compatible materials.

Eye protection

Wear safety glasses with side-shields or chemical safety goggle.

Wear eye/face protection.

Skin and body protection

Wear impervious clothing and boots in case of repeated or prolonged treatment.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Liquid

Color: Yellow

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids): Non-flammable

Lower and upper explosion limit/flammability limit data is not available.

Flash point: Non-flammable

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

Self-Accelerating Decomposition Temperature/SADT data is not available.

pH data is not available.

Dynamic viscosity data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: Miscible

Solubility in solvent data is not available.
n-Octanol/water partition coefficient data is not available.
Vapor pressure data is not available.
Vapor density data is not available.
VOC data is not available.
Evaporation rate data is not available.
Density and/or relative density data is not available.
Relative vapor density (Air=1) data is not available.
Relative density of the Vapor/air - mixture at 20℃ (Air = 1) data is not available.
Critical temperature data is not available.
No Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity

Reactivity data is not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

Conditions to avoid

Contact with incompatible materials.
Heat.

Incompatible materials

Bases, Metals.

Hazardous decomposition products

Metal oxides, Chlorides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]
(Hydrochloric acid) rat LD50=238mg/kg (SIDS, 2009)

Acute toxicity (Inhalation)

[GHS Cat. Japan, base data]
(Hydrochloric acid) mist: rat LC50=0.42mg/L/4hr (SIDS, 2009)

Labor standard law, Japan; Toxic

Hydrochloric acid; Hexachloroplatinic acid(IV)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]
(Hydrochloric acid) rabbit/mouse/rat/human corrosive (SIDS, 2009)

Serious eye damage/irritation

[GHS Cat. Japan, base data]
(Hexachloroplatinic acid(IV))
rabbit (ammonium hexachloroplatinate) eye corrosive (REACH registration dossier, Accessed Dec. 2018)
(Hydrochloric acid)
rabbit corrosive (SIDS, 2002)

Sensitization

MOHL_J Notice

Hexachloroplatinic acid(IV)

Respiratory sensitization
[GHS Cat. Japan, base data]
(Hexachloroplatinic acid(IV)) cat. 1; JSOH journal vol. 50, 2008
(Hydrochloric acid) cat. 1; Occupational/Environmental Allergy Society, Japan
Skin sensitization
[GHS Cat. Japan, base data]
(Hexachloroplatinic acid(IV)) cat. 1; JSOH journal vol. 50, 2008
Mutagenic effects data is not available.
Carcinogenicity
(Hydrochloric acid)
IARC-Gr.3 : Not Classifiable as a Human Carcinogen
ACGIH-A4(2000) : Not Classifiable as a Human Carcinogen
Reproductive toxicity data is not available.
STOT
STOT-single exposure
[cat.1]
[GHS Cat. Japan, base data]
(Hydrochloric acid) respiratory system/system (ACGIH, 2003)
STOT-repeated exposure
[cat.1]
[GHS Cat. Japan, base data]
(Hydrochloric acid) teeth; respiratory system/system (SIDS, 2002)
Aspiration hazard data is not available.
Information on other hazards
Data on the preparation itself is not available.

12. Ecological Information

Ecotoxicity
Aquatic toxicity
H401-Toxic to aquatic life
Hazardous to the aquatic environment (Acute)
[GHS Cat. Japan, base data]
(Hydrochloric acid) Crustacea (Daphnia magna) EC50=0.492mg/L/48hr (SIDS, 2005)
Water solubility
(Hydrochloric acid) 67 g/100 ml (30℃) (ICSC, 2016)
Persistence and degradability
Persistence and degradability data is not available.
Bioaccumulative potential
(Hydrochloric acid) log Pow=0.25 (ICSC, 2016)
Mobility in soil
Mobility in soil data is not available.
Other adverse effects
Ozone depleting chemical data is not available.
Additional data
Data on the preparation itself is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging
Waste treatment methods
Avoid release to the environment (- if this is not the intended use).
Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No., UN CLASS

UN No. or ID No.: 1789
UN Proper Shipping Name : HYDROCHLORIC ACID
Class or division (Transport hazard class) : 8
Packing group : III
ERG GUIDE No.: 157

IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 1789
Proper Shipping Name : HYDROCHLORIC ACID
Class or division : 8
Packing group : III

IATA Dangerous Goods Regulations

UN No.: 1789
Proper Shipping Name : HYDROCHLORIC ACID
Class or division : 8
Hazard labels : Corrosive
Packing group : III

Environmental hazards

MARPOL Annex III - Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

Maritime transport in bulk according to IMO instruments

Noxious Liquid ; Cat. Z
Hydrochloric acid(Z-33)
Non Noxious Liquid ; Cat. OS
Water(OS-18)

15. Regulatory Information

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

Chemicals listed in TSCA Inventory

Hydrochloric acid; Water; Hexachloroplatinic acid(IV)

Other regulatory information

We are not able to check up the regulatory information with regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.
Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.
Regulatory information in this section are limited to intentional ingredient(s), but does not contain information on non-intentional ingredients or impurities which are not informed by supplier(s).

Chemical safety assessment

Advice on safe handling for this product can be found in sections 7 and 8 of this SDS.

16. Other information

GHS classification and labelling

H302-Acute Tox. 4: H302 Harmful if swallowed
H332-Acute Tox. 4: H332 Harmful if inhaled
H314-Skin Corr. 1: H314 Causes severe skin burns and eye damage
H318-Eye Dam. 1: H318 Causes serious eye damage
H334-Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H371-STOT SE 2: H371 May cause damage to organs after single exposure
H373-STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure
H401-Aquatic Acute 2: H401 Toxic to aquatic life

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (7th revised edition, 2017), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN
IMDG Code, 2018 Edition (Incorporating Amendment 39-18)
IATA Dangerous Goods Regulations (61th Edition) 2020
Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012)
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2020 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
JIS Z 7252 : 2019
JIS Z 7253 : 2019
2019 Recommendation on TLVs (JSOH)
Supplier's data/information
Chemicals safety data management system "GHS Assistant" Version 4.10 (https://www.asahi-ghs.com/)
NITE Chemical Risk Information Platform "NITE-CHRIP"
(https://www.nite.go.jp/en/chem/chrip/chrip_search/systemTop)
GHS Classification Guidance for Enterprises 2019 Revised Edition (Ver. 2.0) (Mar. 2020, METI)

Definitions and Abbreviations

SDS (Safety Data Sheet)
LD50 (Lethal Dose, 50%)
LC50 (Lethal Concentration, 50%)
IARC (International Agency for Research on Cancer)
ACGIH (American Conference of Governmental Industrial Hygienists)
EPA (US Environmental Protection Agency)
NTP (US National Toxicology Program)
JSOH (Japan Society for Occupational Health)
EU (European Union)
EC50 (Effective Concentration, 50%)
NOEC (No Observed Effect Concentration)
BOD (Biochemical Oxygen Demand)
COD (Chemical Oxygen Demand)
BCF (Bioconcentration Factor)
anh (anhydride)

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.
The GHS classification data given here is based on current Japan official data (NITE published in 2019).