

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 05.10.2004

Printing date 01.07.2013

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name

Trimethylbenzylammoniumhexachloroplatinate (IV)

Stock number:

43474

Index number:

078-005-00-2

1.2 Relevant identified uses of the substance or mixture and uses advised against.

Identified use:

SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
A Johnson Matthey Company
Zeppelinstr. 7b
76185 Karlsruhe / Germany
Tel: +49 (0) 721 84007 280
Fax: +49 (0) 721 84007 300
Email: tech@alfa.com
www.alfa.com

Informing department:

Product safety Tel + +049 (0) 7275 988687-0

1.4 Emergency telephone number:

Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number)

Poison Information Center Mainz

www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

T; Toxic

R25: Toxic if swallowed.



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.



Xi; Irritant

R41: Risk of serious damage to eyes.

Information concerning particular hazards for human and environment:

Not applicable

Other hazards that do not result in classification

No information known.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Hazard statements

The substance is classified and labelled according to the CLP regulation.

GHS05, GHS06, GHS08

Danger

H301 Toxic if swallowed.

H318 Causes serious eye damage.

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

H317 May cause an allergic skin reaction.

P285 In case of inadequate ventilation wear respiratory protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

Not applicable.

PBT:

Not applicable.

vPvB:

SECTION 3: Composition/information on ingredients**3.1 Substances**

CAS# Designation:

Trimethylbenzylammoniumhexachloroplatinate (IV)

Identification number(s):

078-005-00-2

Index number:

SECTION 4: First aid measures**4.1 Description of first aid measures**

General information

Instantly remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After inhalation

Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly.

After skin contact

Seek immediate medical advice.

Rinse opened eye for several minutes under running water. Then consult doctor.

After eye contact

Do not induce vomiting; instantly call for medical help.

After swallowing

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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Trade name <i>Trimethylbenzylammoniumhexachloroplatinate (IV)</i>	
Danger	(Contd. of page 1) Platinum compounds, especially platinum halogenides, are sensitizers. Sensitized persons, on re-exposure to platinum salts will show the clinical features of a Type 1 allergy: asthma and/or rhinitis and/or conjunctivitis and/or urticaria. A contact dermatitis may also occur. The symptoms of the allergic reaction to platinum salts may include any of the following: itchy red eyes, watering of the eyes, sneezing, runny nose, chest tightness, wheezing, breathlessness, cough, eczematous or urticarial (nettle rash type) skin lesions. Exposure to platinum salts in exceedingly small amounts, even below the level of physico-chemical detection, will produce symptoms in sensitized persons. Continued exposure will give symptoms of increasing severity and can eventually lead to chronic asthma. There is a risk of anaphylactic shock occurring in sensitized persons re-encountering platinum salts. Therefore, if sensitization has developed, further exposure to platinum compounds must not be permitted.
4.3 Indication of any immediate medical attention and special treatment needed	No further relevant information available.
SECTION 5: Firefighting measures	
5.1 Extinguishing media	CO ₂ , extinguishing powder or water jet. Fight larger fires with water jet.
Suitable extinguishing agents	
5.2 Special hazards arising from the substance or mixture	If this product is involved in a fire, the following can be released: Nitrogen oxides (NO_x) Hydrogen chloride (HCl) Metal oxide
5.3 Advice for firefighters	
Protective equipment:	Wear self-contained breathing apparatus. Wear full protective suit.
SECTION 6: Accidental release measures	
6.1 Personal precautions, protective equipment and emergency procedures	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
6.2 Environmental precautions:	Do not allow material to be released to the environment without proper governmental permits. Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil.
6.3 Methods and material for containment and cleaning up:	Dispose of contaminated material as waste according to item 13.
Prevention of secondary hazards:	No special measures required.
6.4 Reference to other sections	See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.
SECTION 7: Handling and storage	
7.1 Precautions for safe handling	Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.
Information about protection against explosions and fires:	No information known.
7.2 Conditions for safe storage, including any incompatibilities	
Storage	
Requirements to be met by storerooms and containers:	No special requirements.
Information about storage in one common storage facility:	Store away from oxidizing agents.
Further information about storage conditions:	Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Store in a locked cabinet or with access restricted to technical experts or their assistants.
7.3 Specific end use(s)	No further relevant information available.
SECTION 8: Exposure controls/personal protection	
Additional information about design of technical systems:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
8.1 Control parameters	
Components with critical values that require monitoring at the workplace:	Platinum metal and soluble salts (as Pt)
	mg/m ³
	ACGIH TLV 1 (metal); 0.002 (soluble salts)
	Austria MAK 1 (metal); 0.002 (soluble salts)
	Belgium TWA 1 (metal); 0.002 (soluble salts)
	Denmark TWA 0.002 (soluble salts)
	Finland TWA 1 (metal); 0.002 (soluble salts)
	France VME 1 (metal)
	Germany MAK 0.002 (soluble salts)-Ceiling
	Hungary TWA 0.001; 0.002-STEEL (soluble salts)
	Korea TLV 1 (metal); 0.002 (soluble salts)
	Netherlands MAC-TTG 1 (metal); 0.002 (soluble salts)
	Norway TWA 0.002
	Switzerland MAK-W 0.002
	United Kingdom TWA 5 (metal); 0.002 (soluble salts)
	USA PEL 0.002
Additional information:	No data
8.2 Exposure controls	
Personal protective equipment	
General protective and hygienic measures	The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the eyes. Maintain an ergonomically appropriate working environment. Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Breathing equipment:	
Protection of hands:	

(Contd. on page 3)
DE/E

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Material of gloves Penetration time of glove material Eye protection: Body protection:	Impervious gloves Not determined Tightly sealed safety glasses. Protective work clothing.
(Contd. of page 2)	
SECTION 9: Physical and chemical properties	
9.1 Information on basic physical and chemical properties	
General Information	
Appearance:	
Form:	Powder
Colour:	Yellow
Smell:	Not determined
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	Not determined
Flash point:	Not applicable
Inflammability (solid, gaseous)	Not determined.
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Self-inflammability:	Not determined.
Danger of explosion:	Product is not explosive.
Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined
Steam pressure:	Not determined
Density	Not determined
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Slightly soluble
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
9.2 Other information	No further relevant information available.
SECTION 10: Stability and reactivity	
10.1 Reactivity	No information known.
10.2 Chemical stability	Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions	No dangerous reactions known
10.5 Incompatible materials:	Oxidizing agents
10.6 Hazardous decomposition products:	Hydrogen chloride (HCl) Nitrogen oxides (NOx) Ammonia Metal oxide
SECTION 11: Toxicological information	
11.1 Information on toxicological effects	
Acute toxicity:	No data
LD/LC50 values that are relevant for classification:	Irritant for skin and mucous membranes.
Skin irritation or corrosion:	Irritant effect.
Eye irritation or corrosion:	Causes serious eye damage.
Sensitization:	Platinum salts, especially ionic platinum halogeno complexes, may cause severe allergic reactions. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity:	No effects known.
Carcinogenicity:	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity:	No effects known.
Specific target organ system toxicity - repeated exposure:	No effects known.
Specific target organ system toxicity - single exposure:	No effects known.
Aspiration hazard:	No effects known.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
SECTION 12: Ecological information	
12.1 Toxicity	
Aquatic toxicity:	No further relevant information available.
12.2 Persistence and degradability	No further relevant information available.
12.3 Bioaccumulative potential	No further relevant information available.
12.4 Mobility in soil	No further relevant information available.
Additional ecological information:	
General notes:	Do not allow material to be released to the environment without proper governmental permits. Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Avoid transfer into the environment.
12.5 Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
12.6 Other adverse effects	No further relevant information available.

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(Contd. of page 3)

SECTION 13: Disposal considerations**13.1 Waste treatment methods
Recommendation**

Hand over to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.
Consult state, local or national regulations for proper disposal.

**Uncleaned packagings:
Recommendation:**

Disposal must be made according to official regulations.

SECTION 14: Transport information**UN-Number
ADR, IMDG, IATA**

None

**14.2 UN proper shipping name
ADR, IMDG, IATA**

None

14.3 Transport hazard class(es)**ADR, IMDG, IATA
Class**

None

**Packing group
ADR, IMDG, IATA**

None

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Not applicable.

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC
Code**

Not applicable.

Transport/Additional information:

Not dangerous according to the above specifications.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Australian Inventory of Chemical**

Substance is not listed.

**Standard for the Uniform Scheduling of
Drugs and Poisons**

Substance is not listed.

National regulations**Information about limitation of use:**

For use only by technically qualified individuals.
Employment restrictions concerning young persons must be observed.

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

**Other regulations, limitations and prohibitive
regulations****ELINCS (European List of Notified Chemical**

Substance is not listed.

Substances of very high concern (SVHC)

Substance is not listed.

according to REACH, Article 57

Substance is not listed.

REACH - Pre-registered substances

A Chemical Safety Assessment has not been carried out.

15.2 Chemical safety assessment:**SECTION 16: Other information**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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