

SAFETY DATA SHEET

Revision Date 02-Jul-2018

Revision Number 1

1. Identification

Product Name Potassium tetrachloroaurate hydrate Cat No. : B23292 CAS-No 27988-75-6 Synonyms No information available **Recommended Use** Laboratory chemicals. Uses advised against Food, drug, pesticide or biocidal product use Details of the supplier of the safety data sheet

Company

Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech@alfa.com www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

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

Corrosive to metals	Category 1
Acute oral toxicity	Category 4
Skin Corrosion/irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

Label Elements

Signal Word Danger

Hazard Statements

May be corrosive to metals Harmful if swallowed Causes severe skin burns and eye damage May cause respiratory irritation

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Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/sprav Wear protective gloves/protective clothing/eye protection/face protection Use only outdoors or in a well-ventilated area Keep only in original container Response Immediately call a POISON CENTER or doctor/physician Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Skin IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse Eyes IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Ingestion Rinse mouth Do NOT induce vomiting Spills Absorb spillage to prevent material damage Storage Store locked up Store in a well-ventilated place. Keep container tightly closed Store in corrosive resistant polypropylene container with a resistant inliner Store in a dry place Disposal Dispose of contents/container to an approved waste disposal plant Hazards not otherwise classified (HNOC)

Harmful to aquatic life with long lasting effects

3. Composition/Information on Ingredients

Component Potassium tetrachloroaurate(III) hydrate		CAS-No	Weight %	
		27988-75-6	<=100	
	4. F	irst-aid measures		
General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.				
Eye ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.				
Skin Contact		diately with soap and plenty of wat bes. Call a physician immediately.	ter while removing all contaminated	
Inhalation	Move to fresh a	air. If not breathing, give artificial re	espiration. Call a physician or Poison	

	Control Center immediately. 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.
Ingestion	Immediate medical attention is required. Do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Notes to Physician	Treat symptomatically
	5. Fire-fighting measures

Suitable Extinguishing Media	Carbon dioxide (CO 2). Dry powder. Water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. CO 2, dry chemical, dry sand, alcohol-resistant foam.
Unsuitable Extinguishing Media	No information available
Flash Point Method -	No information available No information available
Autoignition Temperature Explosion Limits	No information available
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impa	ct No information available

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes.

Hazardous Combustion Products

Hydrogen chloride Metal oxides Potassium oxides

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA Health 3	Flammability 0	Instability 0	Physical hazards -			
	6. Accidental r	elease measures				
Personal Precautio	bns Use personal protective skin, eves and clothing.	equipment. Evacuate personnel	to safe areas. Avoid contact with			
Environmental Pre	cautions Should not be released in water system. See Section	Should not be released into the environment. Do not allow material to contaminate ground water system. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage. Do not flush into surface water or sanitary sewer system.				
Methods for Conta Up	inment and Clean Sweep up or vacuum up formation.	spillage and collect in suitable of	container for disposal. Avoid dust			
	7. Handling	and storage				
Handling		e equipment. Do not get in eyes lood. Do not breathe dust. Do no	, on skin, or on clothing. Use only ot ingest.			
Storage	Corrosives area. Keep co	ontainers tightly closed in a dry,	cool and well-ventilated place.			

8. Exposure controls / personal protection					
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.				
Engineering Measures	None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location.				
Personal Protective Equipment					
Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.				
Skin and body protection	Long sleeved clothing.				
Respiratory Protection	No protective equipment is needed under normal use conditions.				
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.				

9.1	Physical	and	chemi	cal	properties
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Physical State	Solid
Appearance	No information available
Odor	Odorless
Odor Threshold	No information available
рН	No information available
Melting Point/Range	357 °C / 674.6 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	AuCl4 K. xH2 O
Molecular Weight	377.88(anhy)
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10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products.
Incompatible Materials	Strong bases, Oxidizing agents, Ammonia
Hazardous Decomposition Product	s Hydrogen chloride, Metal oxides, Potassium oxides

Hazardous Polymerization	Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information Toxicologically Synergistic Products Delayed and immediate effects as	No information available s well as chronic effects from short and long-term exposure
Irritation	No information available
Sensitization	No information available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico	
Potassium tetrachloroaurate(III) hydrate	27988-75-6	Not listed	Not listed	Not listed	Not listed	Not listed	
Mutagenic Effects		No information ava	ailable		•		
Reproductive Effects		No information available.					
Developmental Effe	cts	No information available.					
Teratogenicity		No information available.					
STOT - single expos STOT - repeated exp		Respiratory system None known					
Aspiration hazard		No information available					
Symptoms / effects delayed	both acute and	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation					
Endocrine Disrupto	r Information	No information available					
Other Adverse Effects		The toxicological properties have not been fully investigated.					
		12. Ecol	ogical infor	mation			

Ecotoxicity

May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Persistence and Degradability	based on information available. May persist
Bioaccumulation/ Accumulation	No information available.
Mobility	Will likely be mobile in the environment due to its water solubility.
	13. Disposal considerations
Waste Disposal Methods	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and

national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

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DOT	
UN-No	UN3260
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Proper technical name	(Potassium tetrachloroaurate(III) hydrate)
Hazard Class	8
Packing Group	III
TDG	
UN-No	UN3260
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Hazard Class	8
Packing Group	III
UN-No	UN3260
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Hazard Class	8
Packing Group	III
IMDG/IMO	
UN-No	UN3260
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Hazard Class	8
Packing Group	
	15. Regulatory information
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All of the components in the product are on the following Inventory lists: X = listed

International Inventories

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)	Not applicable
SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable

OSHA Occupational Safety and Health Administration Not applicable

CERCLA	Not applicable	
California Proposition 65	This product does not contain any Proposition 65 chemicals	
U.S. State Right-to-Know Regulations	Not applicable	
U.S. Department of Transportation		
Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	N N N	
U.S. Department of Homeland Security This product does not contain any DHS chemicals.		
Other International Regulations		
Mexico - Grade	No information available	
16. Other information		
Prepared By	Health, Safety and Environmental Department Email: tech@alfa.com www.alfa.com	

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS