

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 18-Jul-2023

Revision Number 1

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

1.1. Product identifier	
Product Code(s)	VHG-POSH-250
Product Name	Osmium Standard: Os @ 1000 µg/mL in 20% HCl
Form	Not applicable
Unique Formula Identifier (UFI)	PTMM-6053-2002-F83H
Pure substance/mixture	Mixture
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Recommended use	Laboratory use
Uses advised against	No information available
1.3. Details of the supplier of the sa	fety data sheet
<u>Supplier</u>	
LGC Limited Queens Road Teddington Middlesex TW11 0LY UNITED KINGDOM :+44 (0) 20 8943 7000 Fax :+44 (0) 20 8943 2767 eMail : gb@lgcstandards.com	
Web : www.lgcstandards.com	
For further information, please contact	<u> </u>
E-mail address	sds-request@lgcgroup.com
1.4. Emergency telephone number	-
Emergency Telephone	For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire Exposure, or Accident Call CHEMTREC: USA & Canada 1-800-424-9300 Rest of the world +1 703-741-5970



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Emergency Telephone - §45 - (EC)1272/2008			
Europe	112		
Austria	No information available		
Bulgaria			
Croatia			
Cyprus			
Czech Republic			
Denmark			
France			
Hungary			
Ireland			
Italy			
Lithuania			
Luxembourg			
Netherlands			
Norway			
Portugal			
Romania			
Slovakia			
Slovenia			
Spain			
Sweden			
Switzerland			

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Corrosive to metals

Category 1 - (H290)

2.2. Label elements



Hazard statements



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H290 - May be corrosive to metals

Precautionary Statements - EU (§28, 1272/2008)

P234 - Keep only in original packaging

P390 - Absorb spillage to prevent material damage

P201 - Obtain special instructions before use

P234 - Keep only in original container

P406 - Store in corrosive resistant stainless steel container with a resistant inner liner

2.3. Other hazards

Causes mild skin irritation.

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

	, , , , , , , , , , , , , , , , , , , ,	
Chemical name	EU - REACH (1907/2006) - Article 59(1)	EU - REACH (1907/2006) - Endocrine
	- Candidate List of Substances of Very	Disruptor Assessment List of
	High Concern (SVHC) for Authorisation	Substances
Hydrochloric acid	-	-

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical nature

aqueous solution.

Chemical name	Weight-%	REACH registration number		Classification according to Regulation (EC) No. 1272/2008 [CLP]		M-Factor	M-Factor (long-term)
Hydrochloric acid 7647-01-0	5 - <10	-	(017-002-00 -2) 231-595-7	Skin Corr. 1B (H314)	Eye Irrit. 2 :: 10%<=C<25% Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 10%<=C<25% STOT SE 3 :: C>=10%		



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Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
		mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
Hydrochloric acid 7647-01-0	238	5010	No data available	No data available	563.3022

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.		
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.		
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.		
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.		
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.		
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).		
4.2. Most important symptoms and	effects, both acute and delayed		
Symptoms	Prolonged contact may cause redness and irritation.		
4.3. Indication of any immediate medical attention and special treatment needed			
Note to doctors	Treat symptomatically.		



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SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.		
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.		
5.2. Special hazards arising from the substance or mixture			
Specific hazards arising from the chemical	No information available.		
5.3. Advice for firefighters			
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.		

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.			
Other information	Refer to protective measures listed in Sections 7 and 8.			
For emergency responders	Use personal protection recommended in Section 8.			
6.2. Environmental precautions				
Environmental precautions	Prevent further leakage or spillage if safe to do so.			
6.3. Methods and material for containment and cleaning up				
Methods for containment	Prevent further leakage or spillage if safe to do so.			
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.			
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.			



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6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Storage Conditions	Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.
7.3. Specific end use(s)	

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Hydrochloric acid	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm	STEL: 10 ppm	TWA: 5 ppm
7647-01-0	TWA: 8 mg/m ³	TWA: 8 mg/m ³	TWA: 8 mg/m ³	STEL: 15.0 mg/m ³	TWA: 8 mg/m ³
	STEL: 10 ppm	STEL 10 ppm	STEL: 10 ppm	TWA: 5 ppm	STEL: 10 ppm
	STEL: 15 mg/m ³	STEL 15 mg/m ³	STEL: 15 mg/m ³	TWA: 8.0 mg/m ³	STEL: 15 mg/m ³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Hydrochloric acid	STEL: 10 ppm	TWA: 8 mg/m ³	STEL: 5 ppm	TWA: 5 ppm	STEL: 5 ppm
7647-01-0	STEL: 15 mg/m ³	Ceiling: 15 mg/m ³	STEL: 8 mg/m ³	TWA: 8 mg/m ³	STEL: 7.6 mg/m ³



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[]				0751	4.0		
	TWA: 5 ppm				10 ppm		
	TWA: 8 mg/m ³				15 mg/m ³		
Chemical name	France	Germany	Germany MAK	Gr	eece	Hungary	
Hydrochloric acid	STEL: 5 ppm	TWA: 2 ppm	TWA: 2 ppm	TWA	: 5 ppm	TWA: 8 mg/m ³	
7647-01-0	STEL: 7.6 mg/m ³	TWA: 3 mg/m ³	TWA: 3.0 mg/m ³	TWA:	7 mg/m³	TWA: 5 ppm	
			Peak: 4 ppm	STEL	.: 5 ppm	STEL: 165 mg/m ³	
			Peak: 6 mg/m ³	STEL:	7 mg/m ³	STEL: 10 ppm	
Chemical name	Ireland	Italy	Italy REL	Lä	atvia	Lithuania	
Hydrochloric acid	TWA: 8 mg/m ³	TWA: 5 ppm	Ceiling: 2 ppm	TWA	: 5 ppm	TWA: 5 ppm	
7647-01-0	TWA: 5 ppm	TWA: 8 mg/m ³	Ceiling: 2.9 mg/m ³	TWA:	8 mg/m ³	TWA: 8 mg/m ³	
	STEL: 10 ppm	STEL: 10 ppm		STEL	10 ppm	STEL: 10 ppm	
	STEL: 15 mg/m ³	STEL: 15 mg/m ³		STEL:	15 mg/m³	STEL: 15 mg/m ³	
Chemical name	Luxembourg	Malta	Netherlands	No	orway	Poland	
Hydrochloric acid	STEL: 10 ppm	STEL: 10 ppm	TWA: 5 ppm	Ceilin	g: 5 ppm	STEL: 10 mg/m ³	
7647-01-0	STEL: 15 mg/m ³	STEL: 15 mg/m ³	TWA: 8 mg/m ³	Ceiling	: 7 mg/m ³	TWA: 5 mg/m ³	
	TWA: 5 ppm	TWA: 5 ppm	STEL: 10 ppm	-			
	TWA: 8 mg/m ³	TWA: 8 mg/m ³	STEL: 15 mg/m ³				
Chemical name	Portugal	Romania	Slovakia	Slo	venia	Spain	
Hydrochloric acid	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm	TWA	: 5 ppm	TWA: 5 ppm	
7647-01-0	TWA: 8 mg/m ³	TWA: 8 mg/m ³	TWA: 8.0 mg/m ³	TWA:	8 mg/m ³	TWA: 7.6 mg/m ³	
	STEL: 10 ppm	STEL: 10 ppm	Ceiling: 15 mg/m ³	STEL	: 10 ppm	STEL: 10 ppm	
	STEL: 15 mg/m ³	STEL: 15 mg/m ³		STEL:	15 mg/m³	STEL: 15 mg/m ³	
	Ceiling: 2 ppm						
Chemical name	Sweden		Switzerland		Uni	ted Kingdom	
Hydrochloric acid NGV: 2		/: 2 ppm	TWA: 2 ppm		T	TWA: 1 ppm	
7647-01-0		: 3 mg/m ³	TWA: 3 mg/m ³		TWA: 2 mg/m ³		
	Bindande	e KGV: 4 ppm	STEL: 4 ppm		S	TEL: 5 ppm	
Bindande KGV: 6 mg/m ³		KGV: 6 mg/m ³	STEL: 6 mg/m ³ STEL:		EL: 8 mg/m ³		

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available. Predicted No Effect Concentration (PNEC)

8.2. Exposure controls

Personal protective equipment

Eye/face protection

Avoid contact with eyes. Wear safety glasses with side shields (or goggles).



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Hand protection	Wear protective Neoprene [™] gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear suitable gloves.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.
Environmental exposure controls	Do not allow into any sewer, on the ground or into any body of water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

5.1. Information on basic physical a	ind chemical properties	
Physical state	Liquid	
Appearance	Liquid	
Colour	colourless	
Odour	Odourless.	
Odour threshold	No information available	
Property_	Values	Remarks • Method
Melting point / freezing point	No data available	None known
Initial boiling point and boiling rang	eNo data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
рН	No data available	None known
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known



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Partition coefficient Vapour pressure Relative density Bulk density Liquid Density Relative vapour density Particle characteristics Particle Size Particle Size Particle Size Distribution No data available No information available No information available None known None known None known

None known

9.2. Other information

9.2.1. Information with regards to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available. Reactivity 10.2. Chemical stability Stability Stable under normal conditions. **Explosion data** Sensitivity to mechanical impact None. Sensitivity to static discharge None. 10.3. Possibility of hazardous reactions Possibility of hazardous reactions None under normal processing. 10.4. Conditions to avoid Conditions to avoid Exposure to air or moisture over prolonged periods. 10.5. Incompatible materials Incompatible materials Oxidising agent. Hazardous decomposition products None known based on information supplied.



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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available. Causes mild skin irritation.
Ingestion	Specific test data for the substance or mixture is not available.
Symptoms related to the physical,	chemical and toxicological characteristics
Symptoms	Prolonged contact may cause redness and irritation.
Numerical measures of toxicity	
Acute toxicity The following values are calculated based on chapter 3.1 of the GHS document ATEmix (oral) 99,999.00 mg/kg ATEmix (dermal) 99,999.00 mg/kg	
ATEmix (inhalation-gas) ATEmix (inhalation-dust/mist) ATEmix (inhalation-vapour)	99,999.00 ppm

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat)1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

Classification based on data available for ingredients. Causes mild skin irritation.



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Serious eye damage/eye irritation	No information available.	
Respiratory or skin sensitisation	No information available.	
Germ cell mutagenicity	No information available.	
Carcinogenicity	No information available.	
Reproductive toxicity	No information available.	
STOT - single exposure	No information available.	
STOT - repeated exposure	No information available.	
Aspiration hazard	No information available.	
11.2. Information on other hazards		
11.2.1. Endocrine disrupting properties		
Endocrine disrupting properties	No information available.	
11.2.2. Other information		
Other adverse effects No information available.		
SECTION 12: Ecological information		
<u>12.1. Toxicity</u>		
Ecotoxicity	The environmental impact of this product has not been fully investigated.	
Unknown aquatic toxicity	Contains 0 % of components with unknown hazards to the aquatic environment.	

12.2. Persistence and degradability



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Persistence and degradability	No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Hydrochloric acid	The substance is not PBT / vPvB PBT assessment does
	not apply

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1	UN number or ID number	UN1789
14.2	UN proper shipping name	Hydrochloric acid mixture
14.3	Transport hazard class(es)	8



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 14.4 Packing group Description 14.5 Environmental hazards 14.6 Special procession for upon 	II UN1789, Hydrochloric acid mixture, 8, II Not applicable	
14.6 Special precautions for user Special Provisions ERG Code	A3, A803 8L	
IMDG14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing groupDescription14.5Marine pollutant14.6Special precautions for userSpecial ProvisionsEmS-No.14.7Maritime transport in bulkaccording to IMO instruments	UN1789 Hydrochloric acid mixture 8 II UN1789, Hydrochloric acid mixture, 8, II NP None F-A, S-B No information available No information available	
RID14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing groupDescription14.5Environmental hazards14.6Special precautions for userSpecial ProvisionsClassification code	UN1789 Hydrochloric acid mixture 8 II UN1789, Hydrochloric acid mixture, 8, II Not applicable 520 C1	
ADR 14.1 UN number or ID number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group Description 14.5 Environmental hazards 14.6 Special precautions for user Special Provisions Classification code Tunnel restriction code	UN1789 Hydrochloric acid mixture 8 II UN1789, Hydrochloric acid mixture, 8, II, (E) Not applicable 520 C1 (E)	

SECTION 15: Regulatory information



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

National regulations

Germany

Water hazard class (WGK)

slightly hazardous to water (WGK 1)

Poland

SDS created according to the following Polish regulation: Act of February 25, 2011 on chemical substances and their mixtures (Journal of Laws of 2018, item 143, as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency (EC) as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, as amended. Regulation of the Minister of Health of 10 August 2012 on the criteria and method of classifying chemical substances and their mixtures (Journal of Laws of 2012, item 1018). Regulation of the Minister of Health of 20 April 2012 on labeling packaging of hazardous substances and mixtures and some mixtures (Journal of Laws of 2012, item 445). Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 on the maximum allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286). Announcement of the Minister of Economy, Labor and Social Policy of August 28, 2003 on the publication of the unified text of the Ordinance of the Minister of Labor and Social Policy on general health and safety at work regulations (Journal of Laws of 2003, No. 169, item 1650) . Regulation of the Minister of Health of 30 December 2004 on occupational safety and health related to the presence of chemical agents in the workplace (Journal of Laws of 2005, No. 11, item 86). Act of December 14, 2012 on waste (Journal of Laws of 2013, item 21) Regulation of the Minister of Health of December 30, 2004 on occupational health and safety related to the presence of chemical agents in the workplace (Journal U. of 2005, No. 11, item 86). Waste Act of December 14, 2012 (Journal of Laws of 2013, item 21). Act of 13 June 2013 on the management of packaging and packaging waste, Journal of Laws 2013, item 888). Government statement of September 24, 2002 - European Agreement on the International Carriage of Dangerous Goods by Road (ADR) (Journal of Laws No. 194, item 1629 and Journal of Laws of 2003, No. 207, item 2013 and 2014).

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors



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Not applicable

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Hydrochloric acid - 7647-01-0	75.	

Persistent Organic Pollutants

Not applicable

Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Hydrochloric acid - 7647-01-0	25	250

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Hydrochloric acid - 7647-01-0	Product-type 2: Disinfectants and algaecides not intended
	for direct application to humans or animals

TSCA	Complies
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
Legend:	
TSCA United States Toxic Sub	stances Control Act Section 8(b) Inventory

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances



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15.2. Chemical safety assessment

Chemical Safety Report

A Chemical Safety Assessment is not required for this substance

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H290 - May be corrosive to metals

- H314 Causes severe skin burns and eye damage
- H335 May cause respiratory irritation

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWĂ	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method
Corrosive to metals	On basis of test data



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

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Revision Number 1

VHG-POSH-250 - Osmium Standard: Os @ 1000 µg/mL in 20% HCI

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme Organisation for Economic Co-operation and Development Screening Information Data Set World Health Organization

Revision date

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

18-Jul-2023

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End of Safety Data Sheet