SAFETY DATA SHEET on Tellurium

Nippon Rare Metal, Inc. No.2-15-1 Nakayama, Midori-ku, Yokohama 226-0019 Japan Tel:+81-45-931-4841, Fax:+81-45-932-8401, E-mail:info@nrm-inc.co.jp SDS No. MH10-11-004 Creation Date: 2015/6/17 Revised Date: 2019/9/4 Review Date: 2024/3/5

1.	Chemical Product		
	SDS Name	:	Tellurium
	SDS No.	:	MH10-11-004
2.	Composition, Informat	tion on in	gredients
	CAS#	:	13494-80-9
	EINECS#	:	236-813-4
	Chemical formula:	:	Tellurium
3.	Hazardous Identificati	on	
	Appearance	:	Solid
	Potential Health Effect	s	
	Eye	:	May cause eye irritation
	Skin	:	May cause skin irritation. Contact with the skin may cause skin
			lesions which are characterized by cracking of the skin and the
			development of slow-healing ulcers
	Ingestion	:	Poison by ingestion. May cause headache. May cause nausea and vomiting. May cause garlic smell on the breath and body.
	Inhalation	:	Inhalation of high concentrations may cause central nervous system
			effects characterized by nausea, headache, dizziness, unconsciousness
			and coma. May cause respiratory tract irritation. Inhalation may be
			fatal as a result of spasm, inflammation, edema of the larynx and
	Character		bronchi, chemical pneumonitis and pulmonary edema.
	Chronic	:	Adverse reproductive effects have been reported in animals. Exposure to large doses may cause central nervous system depression.
	GHS:		8
			QA
			\mathbf{V}

Signal Word: Danger

4.	First Aid measures			
	Eye	:	Immediately flush eyes with plenty of water for at least 15 minutes,	
			occasionally lifting the upper and lower eyelids. Get medical aid.	
	Skin	:	Get medical aid. Immediately flush skin with plenty of water for at	
			least 15 minutes while removing contaminated clothing and shoes.	
			Wash clothing before reuse.	
	Ingestion :		Do not induce vomiting. If victim is conscious and alert, give 2-4	
			cupfuls of milk or water. Never give anything by mouth to an	
			unconscious person. Get medical aid immediately. Wash mouth	
			out with water.	
	Inhalation	:	Remove from exposure and move to fresh air immediately.	
			If breathing is difficult, give oxygen. Get medical aid. Do NOT use	
			mouth-to-mouth resuscitation. If breathing has ceased apply	

Notes to Physician	:	artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Treat symptomatically and supportively.
5. Fire fighting measures		
General information	:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes. Runoff from fire control or dilution water may cause pollution.
Extinguish media	:	Do NOT get water inside containers. Do NOT use straight streams of water. For small fires, use dry chemical, carbon dioxide, or water spray. Cool containers with flooding quantities of water until well after fire is out. For large fires, use water spray, fog or regular foam.
Flash Point, Autoignition	n Temper	ature, Explosion Limits, Lower, Upper: Not available.

Flash Point, Autoignition Temperature, Explosion Limits, Lower, Upp NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

6.	Accidental Release Mea General Information Spills/Leaks	asures : :	Use proper personal protective equipment as indicated section 8. Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Do not get water inside containers.
7.	Handling and Storage		
	Handling	:	Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Follow all MSDS and label precautions even after container is emptied because they may contain product residues. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Use only in a chemical fume hood.
	Storage	:	Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

8. Exposure controls, personal protection

Engineering controls :	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.		
Occupational exposure limits:	ACGIH : 0.1mg/m3 TWA NIOSH : 0.1mg/m3 TWA 25mg/m3 IDLH OSHA –Final PELs 0.1mg/m3 TWA		
Personal protective equipment:	Eyes- 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- Wear appropriate protective clothing to prevent skin exposure.		

Clothing- Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. Physical and Chemical Properties

Physical state	:	Powder
Appearance	:	Grey-White
Odor	:	Odorless
рН	:	Not available
Vapor Pressure	:	1mmHg@520degC
Vapor Density	:	Not available.
Evaporation Rate	:	Not available.
Viscosity	:	Not available.
Specific Gravity/Dens	sity :	6.11-6.27
Boiling point	:	989.8 degC
Freezing/Melting poin	nt :	449.5 degC
Decomposition Temp	erature :	Not available.
Flash point	:	Not available
Solubility	:	Insoluble
Molecular formula	:	Те
Molecular weight	:	127.60

10. Stability and Reactivity **Chemical Stability**

Stał	Stable at room temperature in closed containers under normal					
stor	storage and handling conditions. Slowy tarnishes in air.					
-				•		

Conditions to Avoid : Incompatible materials, ignition sources, dust generation, excess heat. Incompatibilities with Other Materials: Zinc, strong acids, strong bases, oxidizing agents, active metals, halogens.

Hazardous Decomposition Products: Excess heat. Hazardous Polymerization: Will not occur.

:

11. Toxicological Information

RTECS#	:	No information available	
CAS#	:	13494-80-9 WY2625000	
LD50 LC50	:	Not available	

Carcinogenicity	:	CAS# 13494-80-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Epidemiology	:	Experimental reproductive effects have been reported.
Teratogenicity	:	No information available.
Reproductive Effects :		Reproductive effects have occurred in experimental animals.
Mutagenicity	:	No information available.
Neurotoxicity	:	No information available.

12. Ecological Information : No information available

13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series, U-Series: None listed.

14. Transport in	nformation
------------------	------------

US DOT		
Shipping name	:	Tellurium
Hazard Class	:	4.1
UN number	:	3179
Packing group	:	III

15. Regulatory Information

US FEDERAL

TSCA

CAS# 13494-80-9 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule. Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313. Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA. OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA. STATE

CAS# 13494-80-9 can be found on the following state right to know lists: New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives Hazard Symbols: T Risk Phrases: R 25 Toxic if swallowed. Safety Phrases: S 22 Do not breathe dust. S 24/25 Avoid contact with skin and eyes. WGK (Water Danger/Protection) CAS# 13494-80-9: No information available. Canada - DSL/NDSL CAS# 13494-80-9 is listed on Canada's DSL List. Canada - WHMIS WHMIS: Not available. This product has been classified in accordance with the bazard

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 13494-80-9 is listed on the Canadian Ingredient Disclosure List.

16. Additional Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost damages, howsoever arising, even if the company has been advised of the possibility of such damages.