An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Mercuric nitrate, 99% Product Code: M 1695 CAS No : 7783-34-8

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email info@ottokemi.com

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Acute toxicity, (Category 2) Acute toxicity, (Category 2) Acute toxicity, (Category 1) Specific target organ toxicity repeated exposure, (Category 2) Short-term (acute) aquatic hazard, (Category 1) Long-term (chronic) aquatic hazard, (Category 1) 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Hazard Statements H300 + H310 + H330 H373

H410

Precautionary Statements P262 P264 P273 P280 P302 + P352 + P310

P304 + P340 + P310

Supplemental Hazard Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard Statements H300 + H310 + H330 Precautionary Statements P262 P264 P280 H300: Fatal if swallowed. H330: Fatal if inhaled. H310: Fatal in contact with skin. H373: May cause damage to organs through prolonged or repeated exposure. H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Danger

Fatal if swallowed, in contact with skin or if inhaled. May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Do not get in eyes, on skin, or on clothing. Wash skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/ protective clothing. IF ON SKIN: Wash with plenty of water. Immediately call a POISON CENTER/ doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. none

Danger

Fatal if swallowed, in contact with skin or if inhaled.

Do not get in eyes, on skin, or on clothing. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : info@ottokemi.com Web : www.ottokemi.com

none

POISON CENTER/ doctor.

IF ON SKIN: Wash with plenty of water. Immediately call a

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P302 + P352 + P310

P304 + P340 + P310

Supplemental Hazard Statements

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Synonyms	: Mercuric nitrate
Formula	: HgN2O6 · H2O
Molecular weight	: 342,62 g/mol
CAS-No.	: 7783-34-8
EC-No.	: 233-152-3 🥟

Component	Classification	Concentration
Mercury dinitrate monohydrate		
CAS-No. 7783-34-8 EC-No. 233-152-3	Acute Tox. 2; Acute Tox. 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H300, H330, H310, H373, H400, H410 Concentration limits: >= 0,1 %: STOT RE 2, H373; M-Factor - Aquatic Acute: 10 M- Factor - Aquatic Chronic: 10	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal

(20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Nitrogen oxides (NOx) Mercury/mercury oxides. Not combustible. Ambient fire may liberate hazardous vapours. 5.3 Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. 5.4 Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. **SECTION 6: Accidental release measures** 6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8. 6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area.

Avoid generation of dusts.

6.4 Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Advice on safe handling Work under hood. Do not inhale substance/mixture Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. hygroscopic Light sensitive. Storage class Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parametersIngredients with workplace control parameters8.2 Exposure controlsPersonal protective equipmentEye/face protection

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : info@ottokemi.com Web : www.ottokemi.com

Use equipment for eye protection tested and approved und		
government standards such as NIOSH (US) or EN 166(EU)). Safety glasses	
Skin protection		
This recommendation applies only to the product stated in t		
supplied by us and for the designated use. When dissolving	a in or mixing with other	
substances and under conditions deviating from those state	ed in EN 16523-1 please	
contact the supplier of CE-approved gloves (e.g. KCL Gmb	H, D-36124 Eichenzell,	
Internet: www.kcl.de).		
Full contact		
Material: Nitrile rubber		
Minimum layer thickness: 0,11 mm		
Break through time: 480 min		
Material tested:KCL 741 Dermatril® L		
This recommendation applies only to the product stated in t	he safety data sheet.	
supplied by us and for the designated use. When dissolving	in or mixing with other	
substances and under conditions deviating from those state		
contact the supplier of CE-approved gloves (e.g. KCL Gmb		
Internet: www.kcl.de).		
Splash contact		
Material: Nitrile rubber		
Minimum layer thickness: 0,11 mm		
Break through time: 480 min		
Material tested:KCL 741 Dermatril® L		
Body Protection		
protective clothing		
Respiratory protection		
required when dusts are generated.		
Our recommendations on filtering respiratory protection are	based on the following	
standards: DIN EN 143, DIN 14387 and other accompanyir		
the used respiratory protection system.		
Recommended Filter type: Filter type P3	Mine C & Dares	
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory		
protective devices are carried out according to the instruction		
These measures have to be properly documented.		
Control of environmental exposure		
Do not let product enter drains.		
SECTION 9: Physical and chemical properties		
9.1 Information on basic physical and chemical properties		
a) Physical state	crystalline	
b) Color	white	
c) Odor	No data available	
d) Melting	Melting point/range: 79 °C - lit.	
point/freezing point		
e) Initial boiling point	No data available	
and boiling range		
f) Flammability (solid,	No data available	
gas)		
g) Úpper/lower	No data available	
flammability or		
explosive limits		
h) Flash point	Not applicable	
i) Autoignition	No data available	
temperature		
j) Decomposition	ca. 120 °C	
temperature		
k) pH	No data available	
I) Viscosity	Viscosity, kinematic: No data available	
•	Viscosity, dynamic: No data available	
m) Water solubility	No data available	
n) Partition coefficient:	No data available	

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : info@ottokemi.com Web : www.ottokemi.com

n-octanol/water o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information No data available	at 20 °C - OECD Test Guideline 104low 4,300 g/cm3 No data available No data available No data available No data available none
SECTION 10: Stability and reactivity 10.1 Reactivity No data available 10.2 Chemical stability The product is chemically stable under standard ambient of 10.3 Possibility of hazardous reactions Risk of explosion with: Acetylene ethanol Ammonia Cyanides phosphorus sulfur conc. sulfuric acid Exothermic reaction with: Aldehydes aromatic hydrocarbons Ketones unsaturated hydrocarbons organic nitro compounds Violent reactions possible with: strong reducing agents nonmetallic hydrogen compounds 10.4 Conditions to avoid Avoid moisture: no information available 10.5 Incompatible materials No data available 10.6 Hazardous decomposition products In the event of fire: see section 5	onditions (room temperature)
SECTION 11: Toxicological information	

11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : info@ottokemi.com Web : www.ottokemi.com

...

12.1 Toxicity No data available 12.2 Persistence a			
product is not read	esult: - According to the results of tea ily biodegradable. hods for determining biodegradabilit		
applicable to inorg 12.3 Bioaccumulat	anic substances.		
No data available 12.4 Mobility in soi	I		
No data available 12.5 Results of PE	T and vPvB assessment		
	xture contains no components consi nd toxic (PBT), or very persistent and		
levels of 0.1% or h	igher.		
12.6 Endocrine dis Product:	rupting properties		
Assessment	: The substance/mixture does not of considered to have endocrine dism according to REACH Article 57(f) of Delegated regulation (EU) 2017/2 ⁻⁷ Regulation (EU) 2018/605 at levels	upting properties or Commission 100 or Commission	A-L
12.7 Other adverse			and the second s
No data available			C I
13.1 Waste treatm No data available	ent methods		
14.1 UN number	isport information		
ADR/RID: 1625 14.2 UN proper sh	ipping name	IMDG: 1625	IATA: 1625
ADR/RID	: MERCURIC NITRATE		
	: MERCURIC NITRATE : Mercuric nitrate		
14.3 Transport haz ADR/RID: 6.1		IMDG: 6.1	IATA: 6.1
14.4 Packaging gr ADR/RID: II	quq	IMDG: II	IATA: U.I
14.5 Environmenta ADR/RID: yes	Il hazards	IMDG Marine pollutant: yes	IATA: no
14.6 Special preca		imbe marine politikanit. yes	
Further information	n No data available		
SECTION 15: Reg	ulatory information		
substance or mixtu	i and environmental regulations/legis ire y data sheet complies with the requi		
1907/2006.	/or restrictions on use		
	ons on the manufacture, ket and use of certain		
1 0	nces, mixtures and articles		
: Mercury dinitrate			
National legislation	n ve 2012/18/EU of the		
	ent and of the Council		

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

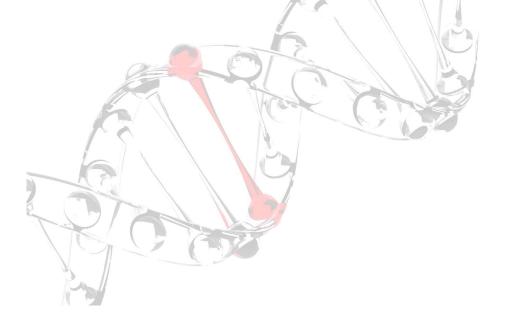
Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

on the control of major-accident hazards involving dangerous substances. H1 ACUTE TOXIC E1 ENVIRONMENTAL HAZARDS H1 ACUTE TOXIC E1 ENVIRONMENTAL HAZARDS Other regulations Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work. 15.2 Chemical Safety Assessment For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product