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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Gallium(III) 2,4-pentanedionate, 99.99% Product Code: G 1700 CAS No : 14405-43-7

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 <u>info@ottokemi.com</u>

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 H302: Harmful if swallowed. Acute toxicity, (Category 4) Acute toxicity, (Category 4) H332: Harmful if inhaled. Acute toxicity, (Category 4) H312: Harmful in contact with skin. Skin irritation, (Category 2) Eye irritation, (Category 2) H315: Causes skin irritation. H319: Causes serious eye irritation. H351: Suspected of causing cancer. Carcinogenicity. (Category 2) Specific target organ toxicity H335: May cause respiratory irritation. single exposure, (Category 3), Respiratory system 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Warning Hazard Statements H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Suspected of causing cancer. H351 Precautionary Statements Wear protective gloves/ protective clothing/ eye protection/ face P280 protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P302 + P352 + P312 IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable For breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsina. P308 + P313 IF exposed or concerned: Get medical advice/ attention. Supplemental Hazard none Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Warning Hazard Statements

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H351		Suspected of causing cancer.
Precautionary State	ents	
P280		Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P313		IF exposed or concerned: Get medical advice/ attention.
Supplemental Hazard		none
Statements		
2.3 Other hazards		
This substance/mix	ture contains no components considered	to be either persistent,
	d toxic (PBT), or very persistent and very	v bioaccumulative (vPvB) at
levels of 0.1% or hi	•	
Ecological informat		
	ture does not contain components consid	
	s according to REACH Article 57(f) or Co	
	Commission Regulation (EU) 2018/605 a	t levels of 0.1% or higher.
Toxicological inform		
	ture does not contain components consid	
	s according to REACH Article 57(f) or Co	
(EU) 2017/2100 or	Commission Regulation (EU) 2018/605 a	t levels of 0.1% or higher.
	oosition/information on ingredients	
3.1 Substances		
Synonyms	: Gallium(III) 2,4-pentanedionate	
	Ga(acac)3	
Formula	: C15H21GaO6	
Molecular weight	: 367,05 g/mol	
CAS-No.	: 14405-43-7	
EC-No.	: 238-377-0	

Component	Classification	Concentration
tris(Pentane-2,4-dionato-O,O')gallium		Jac Sal
CAS-No. 14405-43-7	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2;	<= 100 %
EC-No. 238-377-0	Carc. 2; STOT SE 3; H302, H332, H312,	
	H315, H319, H351, H335	

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

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. Consult a physician. In case of eye contact

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

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

No data available

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SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Carbon oxides gallium oxides Combustible. Development of hazardous combustion gases or vapours possible in the event of fire. 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 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 inhalation of dusts. 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 dry. 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. Storage class Magnet from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Ingredients with workplace control parameters
8.2 Exposure controls
Personal protective equipment
Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses
Skin protection
This recommendation applies only to the product stated in the 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 stated in EN 16523-1 please

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contact the supplier of CE-approved gloves (e.g. KCL GmbH, 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 Splash contact Material tested:KCL 741 Dermatril® L Body Protection 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 accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P3 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be property documented. Control of environmental exposure Do not let product enter drains. SECTION 9: Physical and chemical properties a) Physical state b) Color c) Odor d) Meting g) Upper/lower finamability (solid, gas) g) Upper/lower finamability (solid, gas) g) Upper/lower finamability or explosive limits h) Flash point i) Autoignition temperature k) pH i) Viscosity m) Water solubility m) Water solubility Meter	
d) Melting point/freezing point e) Initial boiling point and boiling range f) Flammability (solid, gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature j) Decomposition temperature k) pH No data available No data available No data available No data available No data available No data available No data available	
Viscosity, dynamic: No data available	

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No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid no information available
10.5 Incompatible materials
Strong oxidizing agents
10.6 Hazardous decomposition products
In the event of fire: see section 5

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 other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment 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. 12.6 Endocrine disrupting properties Product: : The substance/mixture does not contain components Assessment 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. 12.7 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods No data available

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SECTION 14: Transport information

14.1 UN number							
ADR/RID: -		IMDG: -	IATA: -				
14.2 UN proper shipping name							
ADR/RID	: Not dangerous goods						
IMDG	: Not dangerous goods						
IATA	: Not dangerous goods						
14.3 Transport ha	azard class(es)						
ADR/RID: -		IMDG: -	IATA: -				
14.4 Packaging g	roup						
ADR/RID: -		IMDG: -	IATA: -				
14.5 Environmen	tal hazards						
ADR/RID: no		IMDG Marine pollutant: no	IATA: no				
14.6 Special prec	autions for user						
No data available							
Further information	n						
Not classified as dangerous in the meaning of transport regulations.							
SECTION 15: Regulatory information							
15.1 Safety, health and environmental regulations/legislation specific for the							
substance or mixture							
This material safety data sheet complies with the requirements of Regulation (EC) No.							
1907/2006.							
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							
			-12				

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.

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