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: 2,4-Dihydroxybenzophenone, 99% Product Code: D 1880 CAS No : 131-56-6

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 Classification according to Regulation (EC) No 1272/2008 Eye irritation (Category 2), H319 Reproductive toxicity (Category 2), H361fd Long-term (chronic) aquatic hazard (Category 2), H411 For the full text of the H-Statements mentioned in this Section, see Section 16. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Warning Hazard statement(s) H319 Causes serious eye irritation. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. Toxic to aquatic life with long lasting effects. H411 Precautionary statement(s) Do not handle until all safety precautions have been read and P202 understood. P264 Wash skin thoroughly after handling. Avoid release to the environment. P273 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/ attention. Supplemental Hazard none Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Warning Hazard statement(s) H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. Precautionary statement(s) Do not handle until all safety precautions have been read and P202 understood. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

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 P308 + P313
 IF exposed or concerned: Get medical advice/ attention.

 Supplemental Hazard
 none

 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.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Synonyms	: DHB
Formula	: C13H10O3
Molecular weight	: 214,22 g/mol
CAS-No.	: 131-56-6
EC-No.	: 205-029-4

Component	Classification	Concentration
2,4-Dihydroxybenzophenone		
CAS-No. 131-56-6	Eye Irrit. 2; Repr. 2; Aquatic Chronic 2;	<= 100 %
EC-No. 205-029-4	H319, H361fd, H411	

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. Call in physician. 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 **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 Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. 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

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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 For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed. Dry. Storage class Storage class (TRGS 510): 11: Combustible Solids 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 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 EN374 please 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 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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, 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.

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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 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 light yellow c) Odor odorless d) Melting Melting point/range: 144,5 - 147 °C - lit. point/freezing point e) Initial boiling point 194 °C at 1.33 hPa and boiling range f) Flammability (solid, No data available gas) g) Úpper/lower No data available flammability or explosive limits 125 °C - open cup h) Flash point i) Autoignition ca.449 °C temperature at 1.013,25 hPa j) Decomposition No data available 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 n-octanol/water o) Vapor pressure No data available p) Densitv 1.32 g/cm3 at 20 °C Relative density No data available q) Relative vapor No data available density r) Particle No data available characteristics s) Explosive properties No data available t) Oxidizing properties none 9.2 Other safety information No data available **SECTION 10: Stability and reactivity** 10.1 Reactivity Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. 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 Violent reactions possible with:

Strong oxidizing agents strong alkalis

peroxi compounds

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10.4 Conditions to avoidStrong heating.10.5 Incompatible materialsStrong oxidizing agents10.6 Hazardous decomposition productsIn the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eve 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. **SECTION 12: Ecological information** 12.1 Toxicity Toxicity to fish LC50 - Oryzias latipes - 3,7 mg/l - 96 h (OECD Test Guideline 203) Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia - 7,86 mg/l - 48 h (OECD Test Guideline 202) Toxicity to bacteria IC50 - Tetrahymena pyriformis - 9,14 mg/l - 48 h Remarks: (ECHA) 12.2 Persistence and degradability Biodegradability Result: 0 % - Not readily biodegradable. Remarks: (Lit.) 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: Assessment : 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. 12.7 Other adverse effects No data available **SECTION 13: Disposal considerations** 13.1 Waste treatment methods No data available **SECTION 14: Transport information** 14.1 UN number ADR/RID: 3077 IMDG: 3077 IATA: 3077 14.2 UN proper shipping name ADR/RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,4-

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IMDG IATA	Dihydroxybenzophenone) : Environmentally hazardous s Dihydroxybenzophenone)	RDOUS SUBSTANCE, SOLID, N.O.S. (substance, solid, n.o.s. (2,4-	2,4-		
14.3 Transport haza ADR/RID: 9	ard class(es)	IMDG: 9	IATA: 9		
14.4 Packaging gro	up	IMDG. 9	IATA. 9		
ADR/RID: III	dþ	IMDG: III	IATA: III		
14.5 Environmental	hazards				
ADR/RID: yes		IMDG Marine pollutant: yes	IATA: yes		
14.6 Special precau					
Tunnel restriction co Further information	ode : (-)				
	(ADR 2 2 9 1 10 IMDG code 2	2.10.3) for single packagings and			
combination packagings containing inner packagings with Dangerous Goods > 5L for liquids					
or > 5kg for solids.Packages smaller than or equal to 5 kg / L , not dangerous goods of					
Class 9					
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.					
National legislation	2012/18/FLL of the European				
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of					
	ards involving dangerous				
substances.	har a	Let I be			
: ENVIRONMENTA	L 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 Safe		ng people at work.			
For this product a chemical safety assessment was not carried out					
Section 16: Other		on with technical sheets. It does not real	ace them. The information given		

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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