



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

1. PRODUCT AND COMPANY INFORMATION

Product Name	:	2,4-Dihydroxybenzophenone
Product Number	:	MAXGARD® 400
Brand	:	MAXGARD®
REACH Status	:	Pre-registered 2008-09-17
Identified Uses	:	UV stabilizer; Laboratory chemicals; Manufacture of substances; For additional exposure scenarios provided by downstream users, see Section 16.
Company	:	Lycus Ltd., LLC 181 Cooper Drive El Dorado, AR 71730-6601 USA
Telephone	:	+1 870-881-5000
Fax	:	+1 870-862-9628
Emergency Phone Number	:	+1 800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards Irritant.

GHS Label elements, including precautionary statements

Pictogram



Signal Word Warning

Hazard statement(s)

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statement(s)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification

Health Hazard	1	Blue
Flammability	2	Red
Physical Hazards	0	Orange
Personal Protection	H	Safety Glasses, Gloves, Synthetic Apron, Vapor Respirator

NFPA 704 Rating



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

Health Hazard 1 Blue
Fire 2 Red
Reactivity Hazard 0 Yellow

Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Skin Harmful if absorbed through skin. Causes skin irritation.
Eyes Causes eye irritation.
Ingestion Harmful if swallowed.

EU/International Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Eye irritation (Category 2A)

According to European Directive 67/548/EEC as amended.

Irritating to eyes, respiratory system and skin.

EU/International Label elements

Hazard symbol(s)

Xi Irritant

R-phrases(s)

R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrases(s)

S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 Wear suitable gloves and eye/face protection.

Other Hazards None

3. COMPOSITION/INFORMATION OF INGREDIENTS

Formula : C13H10O3
Molecular Weight : 214.22 g/mol
Synonyms : Benzophenone-1, UV-12, DHB, 4-benzyl resorcinol

CAS-No.	EC-No.	Index-No.	EU/International Classification	Concentration
2,4-Dihydroxybenzophenone				
131-56-6	205-029-4	-	Eye Irrit. 2; H315, H319, H335, Xi, R36/37/38	99%

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



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

4. FIRST AID MEASURES

General advice

Move out of dangerous area. Remove contaminated clothing. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes with eyelids held open. Consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions). No known specific antidote.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam or dry chemical. Carbon dioxide is not recommended because it is an asphyxiant.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. – Carbon oxides

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and turn-out gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.



7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventative fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

Personal protective equipment

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Ensure respirators conform to 29 CFR 1910.134.

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye protection

Eye and face protection conforming to 29 CFR 1910.133 or EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection

Complete suit protecting against chemicals. Impervious clothing, the type of protective clothing must be selected according to the concentration and amount of dangerous substance at the specific workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

Appearance

Form	powder
Color	off-white

Safety data

Odor	characteristic
pH	no data available
Melting point	144 – 146 °C
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	insoluble
Solubility (qualitative)	soluble; solvent(s): organic solvents
Density	1.27 g/cm ³ (25 °C)

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions

Conditions to avoid

No conditions known that should be avoided

Materials to avoid

Strong oxidizing agents, Strong bases

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. – Carbon oxides
Other decomposition products – no data available

Corrosion to metals

No corrosive effect on metal

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral	LD50/rat: 8,600 mg/kg – lit.
Remarks	Behavioral: Somnolence (general depressed activity). Behavioral: Food intake (animal). Diarrhoea. IVN-mus: LD50=85 mg/kg
Dermal	no data available
Inhalation	no data available

Skin corrosion/irritation

Skin irritation	no data available
-----------------	-------------------

Serious eye damage/eye irritation



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

Eye irritation rabbit: moderate eye irritation – 24 h

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity – single exposure

No data available

Specific target organ toxicity – repeated exposure

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS DJ0700000

12. ECOLOGICAL INFORMATION

Eco toxicity

No data available

Persistence and degradability

No data available



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

Bio accumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable materials to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

RCRA requirements

None

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

TDG (Canada)

Not dangerous goods

ICAO/IATA

Not dangerous goods

ADR/RID

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

Irritant.

TSCA Inventory

CAS No. 131-56-6 is listed/approved

SARA 302 Components

SARA 302: No chemicals in this material are subject to the requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312

Acute Health Hazard

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

2,4-Dihydroxybenzophenone

CAS No. Revision Date

131-56-6 2009-07-17

New Jersey Right to Know Components

2,4-Dihydroxybenzophenone

CAS No. Revision Date

131-56-6 2009-07-17

California Prop. 65 Components

This product does not contain any chemical known to the State of California to cause cancer, birth defects, or any other reproductive harm.

DSL Status

CAS No. 131-56-6 is on the Canadian DSL list

WHMIS Classification

D2B

Toxic Material Causing Other Toxic Effects

Moderate eye irritant

WGK (Water Danger/Protection)

CAS No. 131-56-6 no data available

Regulation (EC) No. 1907/2006

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

In accordance with good practices of personal cleanliness and hygiene handle with due care and avoid unnecessary contact with this product.

This information is being supplied to you under OSHA "Right to Know / Right to Understand" Regulation 29 CFR 1910.1200 and is offered in good faith as typical values and not as a product specification. The information contained herein is based on the data available to us and is believed to be true and accurate.



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the material, or the results obtained from the use thereof, is made. Lycus Ltd. assumes no responsibility for damage or injury from the use of the product described herein.

Lycus Ltd. certifies this product:

- Does not contain any ingredient of animal origin.
- Does not contain the beverage alcohol and beverage alcohol has not been used in the manufacturing process.

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
Eye Irrit. 2.	Eye irritation
Xi	Irritant
R36/37/38	Irritating to eyes, respiratory system and skin

Sectors of use (SU)

Main user groups:

SU21	Consumer uses: Private households (=general public=consumers)
SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites

Sectors of end-use:

SU10	Formulation [mixing] of preparations and/or repackaging
------	---

Chemical Product Category (PC):

PC39	Cosmetics, personal care products
PC28	Perfumes, fragrances

Process categories (PROC):

PROC3	Use in closed batch process (synthesis or formulation)
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities)
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC15	Use as a laboratory reagent

Additional for the factories:

PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
--------	--

Environmental Release Categories (ERC):

(According to Chapter R16: Environmental exposure Estimation, Version 2, May 2010)

ERC2	Formulation of preparations
------	-----------------------------



MAXGARD® 400

SAFETY DATA SHEET

Replaced Version 2015-12-07
Revision Date 2017-05-08

ERC8A

Wide dispersive indoor use of processing aids in open systems

Further information

Copyright 2017 Lycus Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lycus Ltd., shall not be held liable for any damage resulting from handling or from contact with the above product.

Data prepared:	May 8, 2003
Date of revision	September 4, 2012
Date of revision	December 1, 2013
Date of revision	October 6, 2014
Date of revision	December 7, 2015
Date of revision	May 8, 2017