An ISO 9001: 2015 & GMP Certified Company Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

## **MATERIAL SAFETY DATA SHEET (MSDS)**

**SECTION 1: Product identifiers** 

Product Name: Benzoyl chloride, GR 99%+

Product Code: B 1641 CAS No 98-88-4

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

No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number

Phone no.: + 91 98200 41841 (10:00 am - 06:00 pm)

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Acute toxicity, (Category 4) H302: Harmful if swallowed Acute toxicity, (Category 3) H331: Toxic if inhaled.

Acute toxicity, (Category 4) H312: Harmful in contact with skin.

Skin corrosion, (Sub-category

1B) H314: Causes severe skin burns and eye

Danger

Toxic if inhaled.

protection.

rinsing.

Danger

none

Serious eye damage, (Category H318: Causes serious eye damage.

Skin sensitization, (Category 1)

H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word

**Hazard Statements** H302 + H312

H314 H317 H331

**Precautionary Statements** 

P261 P280

P301 + P312

P303 + P361 + P353

P304 + P340 + P310 P305 + P351 + P338

Supplemental Hazard

Statements

Reduced Labeling (<= 125 ml) Pictogram

Signal Word

Hazard Statements

H331

Toxic if inhaled. H317 May cause an allergic skin reaction.

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Harmful if swallowed or in contact with skin.

Causes severe skin burns and eye damage.

Wear protective gloves/ protective clothing/ eye protection/ face

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel IF ON SKIN (or hair): Take off immediately all contaminated

IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Immediately call a POISON CENTER/ doctor.

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

May cause an allergic skin reaction.

Avoid breathing mist or vapors.

clothing. Rinse skin with water.

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H314 Causes severe skin burns and eye damage.

**Precautionary Statements** 

P261 Avoid breathing mist or vapors.

P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

P304 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

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

rinsing.

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. Lachrymator.

## SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : C7H5CIO

Molecular weight : 140,57 g/mol

CAS-No. : 98-88-4

EC-No. : 202-710-8

Component		Classification	Concentration
benzoyl chl	oride		
CAS-No.	98-88-4	Acute Tox. 4; Acute Tox. 3; Acute Tox. 4; Skin	<= 100 %
EC-No.	202-710-8	Corr. 1B; Eye Dam. 1; Skin Sens. 1; H302, H331,	
	1	H312, H314, H318, H317	

or 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. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

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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

Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

Foam Water

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Hydrogen chloride gas

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

Water hydrolyzes material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas.Remove container from danger zone and cool with water. 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: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

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 with liquid-absorbent material (e.g.

Chemizorb®). Dispose of properly. Clean up affected area.

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. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

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. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Store under inert gas. Moisture sensitive.

Storage class

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Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

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). Tightly fitting safety goggles

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 contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact Material: Viton®

Minimum layer thickness: 0,7 mm Break through time: 480 min

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 contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de). Splash contact Material: Chloroprene

Minimum layer thickness: 0,65 mm Break through time: 30 min

Material tested: KCL 720 Camapren®

required

**Body Protection** 

Acid-resistant protective clothing

Respiratory protection

required when vapours/aerosols 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 ABEK

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 clear,liquid
b) Color colorless
c) Odor pungent

d) Melting point/range: -1 °C

point/freezing point

e) Initial boiling point 198 °C

and boiling range

f) Flammability (solid, No data available

gas)

g) Upper/lower Upper explosion limit: 27 %(V)

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flammability or explosive limits h) Flash point i) Autoignition

temperature j) Decomposition temperature

k) pH

I) Viscosity

m) Water solubility n) Partition coefficient: 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 Relative vapor 4,85 - (Air = 1.0)

density

Lower explosion limit: 2,5 %(V)

72 °C - closed cup

600 °C

at 1.013 hPaAuto-flammability

No data available

2 at 1 g/l(External MSDS)

Viscosity, kinematic: No data available Viscosity, dynamic: No data available

2 g/l

No data available

1 hPa at 32 °C 1,211 g/mL at 25 °C 1,21 at 20 °C 4,85 - (Air = 1.0)

No data available

No data available

none

### **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.

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:

Water

Alkali metals

Alkaline earth metals

alkalines

Amines

sulfoxides

Alcohols

Strong oxidizing agents

Risk of ignition or formation of inflammable gases or vapours with:

Metals

Risk of explosion with:

dimethyl sulfoxide

aluminium chloride

sodium azide

10.4 Conditions to avoid

Exposure to moisture.

Strong heating.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

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#### **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.

#### **SECTION 12: Ecological information**

12.1 Toxicity

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - 34,7 mg/l

- 96 h

(OPPTS 850.1075)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 85

- 110 mg/l - 72 h

(OECD Test Guideline 201)

static test EC10 - Pseudokirchneriella subcapitata (green algae) - 37

- 47 mg/l - 72 h

(OECD Test Guideline 201)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 20 d

Result: 95 % - Readily biodegradable.

(OECD Test Guideline 301D)

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

Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 1736 IMDG: 1736 IATA: 1736

14.2 UN proper shipping name

ADR/RID: BENZOYL CHLORIDE IMDG: BENZOYL CHLORIDE IATA: BENZOYL CHLORIDE

14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

14.4 Packaging group

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ATA: II

ADR/RID: II IMDG: II I

14.5 Environmental hazards ADR/RID: no

IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user Tunnel restriction code : (E)

Further information : No data available

## **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.

Authorisations and/or restrictions on use

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

H2 ACUTE TOXIC 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.

