

# OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599

Email : [info@ottokemi.com](mailto:info@ottokemi.com), Web : [www.ottokemi.com](http://www.ottokemi.com)

ISO 9001: 2015

## MATERIAL SAFETY DATA SHEET

### 1. Identification

#### 1.1 GHS Product identifier

4',4''(5'')-Di-tert-butylidibenzo-18-crown-6

Code D 9062

### 2. Hazard identification

#### 2.1 Classification of the substance or mixture

Skin irritation, Category 2

Eye irritation, Category 2

Specific target organ toxicity \u2013 single exposure, Category 3

#### 2.2 GHS label elements, including precautionary statements

Pictogram(s)



#### Signal word

Hazard statement(s)

#### Warning

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

#### Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor/\u2013 if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container to ...

#### Storage

#### Disposal

2.3 Other hazards which do not result in classification

none

### 3. Composition/information on ingredients

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
4',4''(5'')-DI-TERT-BUTYLDIBENZO-18-CROWN-6	4',4''(5'')-DI-TERT-BUTYLDIBENZO-18-CROWN-6	29471-17-8	none	100%

### 4. First-aid measures

#### 4.1 Description of necessary first-aid measures

##### General advice

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 and consult a physician.

##### If swallowed

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

#### 4.2 Most important symptoms/effects, acute and delayed

no data available

4.3 Indication of immediate medical attention and special treatment needed, if necessary  
no data available

#### 5. Fire-fighting measures

##### 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### 5.2 Specific hazards arising from the chemical

no data available

##### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 6. Accidental release measures

##### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

##### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

##### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. Handling and storage

##### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

##### 7.2 Conditions for safe storage, including any incompatibilities

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

#### 8. Exposure controls/personal protection

##### 8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

##### 8.2 Appropriate engineering controls

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

##### 8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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.

Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

#### 9. Physical and chemical properties

Physical state

white powder

Colour

no data available

Odour

no data available

Melting point/ freezing point

112-116°C

Boiling point or initial boiling point and boiling range

567.2°C at 760 mmHg

Flammability

no data available

Lower and upper explosion limit / flammability limit

no data available

Flash point

216.5°C

Auto-ignition temperature

no data available

Decomposition temperature

no data available

pH

no data available

Kinematic viscosity

no data available

Solubility

no data available

Partition coefficient n-octanol/water (log value)

no data available

Vapour pressure

2.7E-12 mmHg at 25°C

Density and/or relative density 1.03g/cm<sup>3</sup>  
Relative vapour density no data available  
Particle characteristics no data available

#### 10. Stability and reactivity

10.1 Reactivity  
no data available  
10.2 Chemical stability  
Stable under recommended storage conditions.  
10.3 Possibility of hazardous reactions  
no data available  
10.4 Conditions to avoid  
no data available  
10.5 Incompatible materials  
no data available  
10.6 Hazardous decomposition products  
no data available

#### 11. Toxicological information

Acute toxicity  
Oral: no data available  
Inhalation: no data available  
Dermal: no data available  
Skin corrosion/irritation  
no data available  
Serious eye damage/irritation  
no data available  
Respiratory or skin sensitization  
no data available  
Germ cell mutagenicity  
no data available  
Carcinogenicity  
no data available  
Reproductive toxicity  
no data available  
STOT-single exposure  
no data available  
STOT-repeated exposure  
no data available  
Aspiration hazard  
no data available

#### 12. Ecological information

12.1 Toxicity  
Toxicity to fish: no data available  
Toxicity to daphnia and other aquatic invertebrates: no data available  
Toxicity to algae: no data available  
Toxicity to microorganisms: 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 Other adverse effects  
no data available

#### 13. Disposal considerations

##### 13.1 Disposal methods

###### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

###### Contaminated packaging

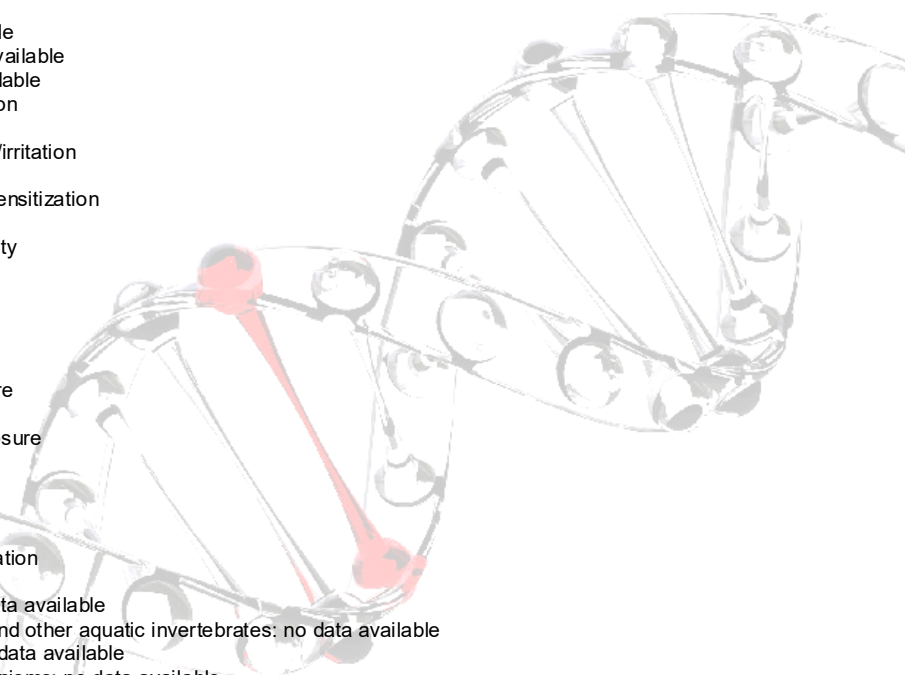
Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

#### 14. Transport information

14.1 UN Number  
ADR/RID: UN2811

IMDG: UN2811

IATA: UN2811



14.2UN Proper Shipping Name  
 ADR/RID: TOXIC SOLID, ORGANIC, N.O.S.  
 IMDG: TOXIC SOLID, ORGANIC, N.O.S.  
 IATA: TOXIC SOLID, ORGANIC, N.O.S.

14.3Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

14.4Packing group, if applicable

ADR/RID: III

IMDG: III

IATA: III

14.5Environmental hazards

ADR/RID: no

IMDG: no

IATA: no

14.6Special precautions for user

no data available

14.7Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

#### 15.Regulatory information

##### 15.1Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
4',4''(5'')-DI-TERT-BUTYLDIBENZO-18-CROWN-6	4',4''(5'')-DI-TERT-BUTYLDIBENZO-18-CROWN-6	29471-17-8	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Not Listed.
EC Inventory			Not Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Not Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Not Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Not Listed.

#### 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.