

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 23.03.2006

Printing date 01.07.2013

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name

Stock number:

CAS Number:

1.2 Relevant identified uses of the substance or mixture and uses advised against.

Identified use:

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

O(1),O(3)-Bis(carbethoxymethyl)-O(2),O(4)-dimethyl-p-t-butylcalix(4)arene

A19688

149775-71-3

SU24 Scientific research and development

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Informing department:

1.4 Emergency telephone number:

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

The substance is not classified as hazardous to health or the environment according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Not applicable

Information concerning particular hazards

Not applicable

for human and environment:

Other hazards that do not result in

classification

No information known.

2.2 Label elements

Labelling according to Regulation (EC) No

1272/2008

Not applicable

Hazard pictograms

Not applicable

Signal word

Not applicable

Hazard statements

Not applicable

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

SECTION 3: Composition/information on ingredients**3.1 Substances**

CAS# Designation:

149775-71-3 O(1),O(3)-Bis(carbethoxymethyl)-O(2),O(4)-dimethyl-p-t-butylcalix(4)arene

SECTION 4: First aid measures**4.1 Description of first aid measures**

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Carbon monoxide and carbon dioxide

5.3 Advice for firefighters

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

6.2 Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

6.3 Methods and material for containment and cleaning up:

Collect mechanically.

No special measures required.

Prevention of secondary hazards:

See Section 7 for information on safe handling

6.4 Reference to other sections

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Keep containers tightly sealed.

Store in cool, dry place in tightly closed containers.

Information about protection against explosions and fires:

No information known.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

No special requirements.

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Information about storage in one common storage facility:
Further information about storage conditions:

Store away from oxidizing agents.

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
No further relevant information available.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

Not required.

Additional information:

No data

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Maintain an ergonomically appropriate working environment.

Use breathing protection with high concentrations.

Check protective gloves prior to each use for their proper condition.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Impervious gloves

Not determined

Safety glasses

Protective work clothing.

Breathing equipment:

Protection of hands:

Material of gloves

Penetration time of glove material

Eye protection:

Body protection:

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:

Crystalline powder

Smell:

Not determined

Odour threshold:

Not determined.

pH-value:

Not applicable.

Change in condition

Melting point/Melting range:

162-164 °C

Boiling point/Boiling range:

Not determined

Sublimation temperature / start:

Not determined

Flash point:

Not applicable

Inflammability (solid, gaseous)

Not determined.

Ignition temperature:

Not determined

Decomposition temperature:

Not determined

Self-inflammability:

Not determined.

Danger of explosion:

Product is not explosive.

Critical values for explosion:

Lower:

Not determined

Upper:

Not determined

Steam pressure:

Not applicable.

Density

Not determined

Relative density

Not determined.

Vapour density

Not applicable.

Evaporation rate

Not applicable.

Solubility in / Miscibility with

Water:

Not determined

Partition coefficient (n-octanol/water):

Not determined.

Viscosity:

Not applicable.

dynamic:

Not applicable.

kinematic:

Not applicable.

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information known.

10.2 Chemical stability

Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known

10.5 Incompatible materials:

Oxidizing agents

10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

No effects known.

LD/LC50 values that are relevant for classification:

No data

Skin irritation or corrosion:

May cause irritation

Eye irritation or corrosion:

May cause irritation

Sensitization:

No sensitizing effect known.

Germ cell mutagenicity:

No effects known.

Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

No effects known.

Reproductive toxicity:

No effects known.

Specific target organ system toxicity -

No effects known.

repeated exposure:

No effects known.

Specific target organ system toxicity - single

No effects known.

exposure:

No effects known.

Aspiration hazard:

No effects known.

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Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

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SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:**

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Additional ecological information:**General notes:**

Do not allow material to be released to the environment without proper governmental permits.

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Avoid transfer into the environment.

12.5 Results of PBT and vPvB assessment**PBT:**

Not applicable.

vPvB:

Not applicable.

12.6 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Recommendation**

Hand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations.

Consult state, local or national regulations for proper disposal.

Uncleaned packagings:**Recommendation:**

Disposal must be made according to official regulations.

SECTION 14: Transport information**UN-Number****ADR, IMDG, IATA**

None

14.2 UN proper shipping name**ADR, IMDG, IATA**

None

14.3 Transport hazard class(es)**ADR, IMDG, IATA****Class**

None

Packing group**ADR, IMDG, IATA**

None

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC**Code**

Not applicable.

Transport/Additional information:

Not dangerous according to the above specifications.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Australian Inventory of Chemical****Substances**

Substance is not listed.

Standard for the Uniform Scheduling of**Drugs and Poisons**

Substance is not listed.

National regulations**Information about limitation of use:**

For use only by technically qualified individuals.

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Other regulations, limitations and prohibitive regulations**ELINCS (European List of Notified Chemical****Substances)**

Substance is not listed.

Substances of very high concern (SVHC)**according to REACH, Article 57**

Substance is not listed.

REACH - Pre-registered substances

Substance is not listed.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of

Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

DE/E