# SAFETY DATA SHEETS

# According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0

Creation Date: Aug 10, 2017 Revision Date: Aug 10, 2017

## 1.Identification

#### 1.1GHS Product identifier

Product name (4R,6R)-tert-Butyl-6-(2-aminoethyl)-2,2-dimethyl-1,3-dioxane-4-acetate

#### 1.20ther means of identification

Product number -

Other names [(4R,6R)-6-(2-Amino-ethyl)-2,2-dimethyl-[1,3]dioxan-4-yl]-acetic

acid tert-butyl ester

## 1.3Recommended use of the chemical and restrictions on use

Identified uses For industry use only.
Uses advised against no data available

### 2. Hazard identification

### 2.1Classification of the substance or mixture

Not classified.

## 2.2GHS label elements, including precautionary statements

Pictogram(s) No symbol. Signal word No signal word.

Hazard statement(s) none

Precautionary statement(s)

Prevention none
Response none
Storage none
Disposal none

## 2.30ther hazards which do not result in classification

none

## 3. Composition/information on ingredients

#### 3.1Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentra tion
(4R,6R)-tert-Butyl-6-(2-aminoethyl)-2,2-dimeth	(4R,6R)-tert-Butyl-6-(2-aminoethyl)-2,2 -dimethyl-1,3-dioxane-4-acetate	125995-13-3	none	100%

#### 4.First-aid measures

## 4.1Description 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.

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

no data available

# 4.3Indication of immediate medical attention and special treatment needed, if necessary

no data available

## 5. Fire-fighting measures

## 5.1Extinguishing media

## Suitable extinguishing media

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

# 5.2Specific 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

# 6.1Personal 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.

## 6.2Environmental precautions

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

## 6.3Methods 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

## 7.1Precautions 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

## 8.1Control parameters

Occupational Exposure limit values

no data available

**Biological limit values** 

no data available

## 8.2Appropriate engineering controls

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

# 8.3Individual 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 Light yellowish oily liquid

Colour no data available
Odour no data available

Melting point/ freezing point 366°C(lit.) Boiling point or initial boiling 525°C(lit.)

point and boiling range

Flammability no data available Lower and upper explosion no data available

limit / flammability limit

Flash point 182°C(lit.)

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 no data available

n-octanol/water (log value)

Vapour pressure 8.94E-05mmHg at 25°C

Density and/or relative 0.992 g/cm3

density

Relative vapour density no data available Particle characteristics no data available

## 10. Stability and reactivity

## 10.1Reactivity

no data available

## 10.2Chemical stability

Stable under recommended storage conditions.

## 10.3Possibility of hazardous reactions

no data available

#### 10.4Conditions to avoid

no data available

## 10.5Incompatible materials

no data available

## 10.6Hazardous 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

## 12.1Toxicity

- 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

## 12.2Persistence and degradability

no data available

## 12.3Bioaccumulative potential

no data available

## 12.4Mobility in soil

no data available

#### 12.50ther adverse effects

no data available

## 13.Disposal considerations

## 13.1Disposal 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

#### 14.1UN Number

ADR/RID: UN3261 IMDG: UN3261 IATA: UN3261

## 14.2UN Proper Shipping Name

ADR/RID: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. IMDG: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. IATA: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

## 14.3Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

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

Chemical name	Common names and synonyms	CAS number	EC number
(4R,6R)-tert-Butyl-6-(2-aminoethyl)-2,2-dimethyl-	(4R,6R)-tert-Butyl-6-(2-aminoethyl)-2,2-dime	105005 10 0	none
,3-dioxane-4-acetate	thyl-1,3-dioxane-4-acetate	125995-13-3	
European Inventory of Existing Commercial Chemical Substances (EINECS)			
EC Inventory			Not Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Not Listed.
China Catalog of Hazardous chemicals 2015			
New Zealand Inventory of Chemicals (NZIoC)			
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			
Vietnam National Chemical Inventory			
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			

## product in question

### 16.Other information

Information on revision

Creation Date Aug 10, 2017 Revision Date Aug 10, 2017

#### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

- IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA European Chemicals Agency, website: https://echa.europa.eu/