1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers
Product name: \((R)-(+)\)-(6,6\-Dimethoxybiphenyl-2,2\-diyl)bis(diphenylphosphine)\)
Product Number: 29510
Brand: SL-A101-1
CAS-No.: 133545-16-1

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

2.2 Label elements
Caution - substance not yet tested completely.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Synonyms: \((R)-(+)\)-MeO-BIPHEP, \((R)-(+)\)-2,2\-Bis(diphenylphosphino)-6,6\-dimethoxy-1,1\-biphenyl SL-A101-1
Formula: C38H32O2P2
Molecular Weight: 582.61 g/mol

4. FIRST AID MEASURES

4.1 Description of first aid measures
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
no data available

4.3 Indication of any immediate medical attention and special treatment needed
no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Oxides of phosphorus

5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information
no data available
6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing vapors, mist or gas.
6.2 Environmental precautions
Do not let product enter drains.
6.3 Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE
7.1 Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
7.3 Specific end uses
no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control parameters
Components with workplace control parameters
8.2 Exposure controls
Appropriate engineering controls
General industrial hygiene practice.

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).

Skin 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.

Body Protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

| a) Appearance | Form: powder |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | no data available |
| e) Melting point/freezing point | 213 - 216 °C |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | no data available |
| h) Evaporation rate | no data available |
i) Flammability (solid, gas) no data available
j) Upper/lower flammability or explosive limits no data available
k) Vapour pressure no data available
l) Vapour density no data available
m) Relative density no data available
n) Water solubility no data available
o) Partition coefficient: n-octanol/water no data available
p) Autoignition temperature no data available
q) Decomposition temperature no data available
r) Viscosity no data available
s) Explosive properties no data available
t) Oxidizing properties no data available

9.2 Other safety information no data available

10. STABILITY AND REACTIVITY
10.1 Reactivity no data available
10.2 Chemical stability no data available
10.3 Possibility of hazardous reactions no data available
10.4 Conditions to avoid no data available
10.5 Incompatible materials
   Strong oxidizing agents
10.6 Hazardous decomposition products
    Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
   Acute toxicity no data available
   Skin corrosion/irritation no data available
   Serious eye damage/eye irritation no data available
   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 probable, possible or confirmed human carcinogen by IARC.
   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. May cause respiratory tract irritation.
      Ingestion May be harmful if swallowed.
ECOLOGICAL INFORMATION
12.1 Toxicity
   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 Results of PBT and vPvB assessment
   no data available
12.6 Other adverse effects
   no data available

DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods
   Product
      Offer surplus and non-recyclable solutions to a licensed disposal company.
   Contaminated packaging
      Dispose of as unused product.

TRANSPORT INFORMATION
14.1 UN number
   ADR/RID: -  IMDG: -  IATA: -
14.2 UN proper shipping name
   ADR/RID: Not dangerous goods
   IMDG: Not dangerous goods
   IATA: Not dangerous goods
14.3 Transport hazard class(es)
   ADR/RID: -  IMDG: -  IATA: -
14.4 Packaging group
   ADR/RID: -  IMDG: -  IATA: -
14.5 Environmental hazards
   ADR/RID: no  IMDG Marine pollutant: no  IATA: no
14.6 Special precautions for user
   no data available

REGULATORY INFORMATION
15. This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
   no data available
15.2 Chemical Safety Assessment
   no data available

OTHER INFORMATION
16. Further information
   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 this document is based on the resent 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. guidechem shall not be
   held liable for any damage resulting from handling or from contact with the above product.
   See reverse side of invoice or packing slip for additional terms and conditions of sale.