

Creation Date 18-Oct-2010

Revision Date 18-Oct-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description: (1R,2R)-N,N-Bis(2-(diphenylphosphino)benzyl)cyclohexane-1,2-diamine
Cat No. 435110000; 435112500

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
 CHEMTREC Phone Number, Europe: 001-703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s) Xi - Irritant

R -phrase(s)

Risk Combination Phrases R36/37/38 - Irritating to eyes, respiratory system and skin

Label Elements

(1R,2R)-N,N-Bis(2-(diphenylphosphino)benzyl)cyclohexane-1,2-diamine

Revision Date 18-Oct-2010

2. HAZARDS IDENTIFICATION



Signal Word

Warning

Hazard Statements

H319 - Causes serious eye irritation
H315 - Causes skin irritation
H335 - May cause respiratory irritation

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
(1R,2R)-N,N-Bis(2-(diphenylphosphino)benzyl)cyclohexane-1,2-diamine 174758-63-5		95	174758-63-5	Xi;R36/37/38	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	-

For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention

(1R,2R)-N,N-Bis(2-(diphenylphosphino)benzyl)cyclohexane-1,2-diamine

Revision Date 18-Oct-2010

Skin Contact	Wash off immediately with plenty of water for at least 15 minutes Obtain medical attention
Ingestion	Do not induce vomiting Obtain medical attention
Inhalation	Move to fresh air If breathing is difficult, give oxygen Obtain medical attention
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

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

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear Thermal decomposition can lead to release of irritating gases and vapors

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

Environmental precautions

Should not be released into the environment.

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment Ensure adequate ventilation Do not get in eyes, on skin, or on clothing Avoid ingestion and inhalation Avoid dust formation Handle under an inert atmosphere Wash hands before breaks and immediately after handling the product

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place Store under an inert atmosphere

Specific End Uses

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

(1R,2R)-N,N-Bis(2-(diphenylphosphino)benzyl)cyclohexane-1,2-diamine
Revision Date 18-Oct-2010

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters
Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls
Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location Ensure adequate ventilation, especially in confined areas

Personal protective equipment
Eye Protection

Safety glasses with side-shields

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Solid

Appearance

Yellow

odor

Stench

pH

No information available.

Boiling Point/Range

No information available.

Melting Point/Range

>300°C / >572°F

Flash Point

No information available.

Autoignition Temperature

No information available.

Molecular Formula

662.79

Molecular Weight

C44 H44 N2 P2

10. STABILITY AND REACTIVITY

Reactivity
Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions .

None under normal processing..

Conditions to Avoid

Incompatible products, Excess heat, Avoid dust formation, Exposure to air.

(1R,2R)-N,N-Bis(2-(diphenylphosphino)benzyl)cyclohexane-1,2-diamine

Revision Date 18-Oct-2010

Incompatible Materials

Oxidizing agents.

Hazardous Decomposition ProductsCarbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Oxides of phosphorus.**11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity****Product Information** No acute toxicity information is available for this product**Component Information****Chronic Toxicity****Carcinogenicity** There are no known carcinogenic chemicals in this product

Sensitization	No information available.
Mutagenic Effects	No information available
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	Skin Respiratory system Eyes
Endocrine Disruptor Information	None known

12. ECOLOGICAL INFORMATION**Toxicity****Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants**Persistence and degradability**

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment**Other adverse effects**

No information available

(1R,2R)-N,N-Bis(2-(diphenylphosphino)benzyl)cyclohexane-1,2-diamine

Revision Date 18-Oct-2010

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION**IMDG/IMO**

Not regulated

ADR

Not regulated

IATA

Not regulated

15. REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories****Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory Lists**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**CHINA** - China Inventory of Existing Chemical Substances**AICS** - Inventory of Chemical Substances**KECL** - Existing and Evaluated Chemical Substances**Chemical Safety Assessment****16. OTHER INFORMATION****Text of R phrases mentioned in Section 2-3**

R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date

18-Oct-2010

(1R,2R)-N,N-Bis(2-(diphenylphosphino)benzyl)cyclohexane-1,2-diamine

Revision Date 18-Oct-2010

16. OTHER INFORMATION

Revision Summary

Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet