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CHEMICALS, INC.

Revision: 16.07.2021

| SECTION 1:  | Identification of the substance/mixture and of the company/undertaking   |
|---|--|
| · 1.1 Product ide   | ntifier  |
| · Trade name: B   | is[2-(di-i-propylphosphino)-4-methylphenyl]amine, min. 98%   |
| • Item number: 1<br>• CAS Number:<br>666856-94-6<br>• 1.2 Relevant ide  |  |
| • 1.3 Details of th<br>• Manufacturer/S<br>Strem Chemical<br>7 Mulliken Way<br>NEWBURYPOR<br>USA<br>info@strem.con  | s, Inc.<br>2T, MA 01950  |
| • <b>1.4 Emergency</b><br>EMERGENCY:  | ation obtainable from: Technical Department<br>telephone number:<br>CHEMTREC: + 1 (800) 424-9300<br>opening times: +1 (978) 499-1600   |
|   | on of the substance or mixture<br>ccording to Regulation (EC) No 1272/2008   |
|   | ccording to Regulation (EC) No 1272/2008   |
| • Classification a  | ccording to Regulation (EC) No 1272/2008   |
| Classification a     GHSG     Skin Irrit. 2 H3     2.2 Label eleme     Labelling accor  | ccording to Regulation (EC) No 1272/2008<br>17<br>15 Causes skin irritation.<br>nts<br>ding to Regulation (EC) No 1272/2008<br>s classified and labelled according to the CLP regulation.  |
| Classification a     GHS0     Skin Irrit. 2 H3     2.2 Label eleme     Labelling accor     The substance is   | ccording to Regulation (EC) No 1272/2008<br>17<br>15 Causes skin irritation.<br>nts<br>ding to Regulation (EC) No 1272/2008<br>s classified and labelled according to the CLP regulation.  |
| <ul> <li>Classification a</li> <li>GHS0</li> <li>Skin Irrit. 2 H3</li> <li>2.2 Label eleme</li> <li>Labelling accor<br/>The substance is</li> <li>Hazard pictogra</li> <li>GHS07</li> <li>Signal word Wa</li> <li>Hazard stateme<br/>H315 Causes sk</li> </ul>  | ccording to Regulation (EC) No 1272/2008<br>17<br>15 Causes skin irritation.<br>nts<br>ding to Regulation (EC) No 1272/2008<br>is classified and labelled according to the CLP regulation.<br>ums<br>urning<br>nts<br>in irritation.   |
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| <ul> <li>Classification a</li> <li>Classification a</li> <li>GHS0</li> <li>Skin Irrit. 2 H3</li> <li>2.2 Label eleme</li> <li>Labelling accor</li> <li>The substance is</li> <li>Hazard pictograd</li> <li>GHS07</li> <li>Signal word Wa</li> <li>Hazard stateme</li> <li>H315 Causes sk</li> <li>Precautionary s</li> </ul>  | coording to Regulation (EC) No 1272/2008<br>17<br>15 Causes skin irritation.<br>15 Causes skin irritation.<br>16 Causes skin irritation.<br>17 Causes skin irritation.<br>17 Causes skin irritation.<br>18 Causes skin irritation.<br>19 Causes skin irritation.<br>19 Causes skin irritation.<br>19 Causes skin irritation.<br>19 Causes skin irritation.<br>10 Causes skin irritation.<br>10 Causes skin irritation.<br>10 Causes skin irritation.   |
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| <ul> <li>Classification a</li> <li>GHS0</li> <li>Skin Irrit. 2 H3</li> <li>2.2 Label eleme</li> <li>Labelling accor<br/>The substance is</li> <li>Hazard pictogra</li> <li>GHS07</li> <li>Signal word Wa</li> <li>Hazard stateme<br/>H315 Causes sk</li> <li>Precautionary s<br/>P101<br/>P102<br/>P103<br/>P231<br/>P280</li> </ul>  | coording to Regulation (EC) No 1272/2008<br>7<br>15 Causes skin irritation.<br>15 Causes skin irritation.<br>15 ding to Regulation (EC) No 1272/2008<br>15 classified and labelled according to the CLP regulation.<br>15 mis<br>16 mis<br>17 ms<br>17 ms<br>17 medical advice is needed, have product container or label at hand.<br>17 Keep out of reach of children.<br>18 Read label before use.<br>19 Handle under inert gas.<br>10 Wear protective gloves/protective clothing/eye protection/face protection.  |
| <ul> <li>Classification a</li> <li>Classification a</li> <li>GHS0</li> <li>Skin Irrit. 2 H3</li> <li>2.2 Label eleme</li> <li>Labelling accor</li> <li>The substance is</li> <li>Hazard pictogra</li> <li>GHS07</li> <li>Signal word Wa</li> <li>Hazard stateme</li> <li>H315 Causes sk</li> <li>Precautionary s</li> <li>P101</li> <li>P102</li> <li>P103</li> <li>P231</li> <li>P280</li> <li>P261</li> </ul> | coording to Regulation (EC) No 1272/2008<br>7<br>15 Causes skin irritation.<br>nts<br>ding to Regulation (EC) No 1272/2008<br>s classified and labelled according to the CLP regulation.<br>tms<br>training<br>nts<br>in irritation.<br>tatements<br>If medical advice is needed, have product container or label at hand.<br>Keep out of reach of children.<br>Read label before use.<br>Handle under inert gas.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>Avoid breathing dust/fume/gas/mist/vapours/spray.<br>338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,  |
| <ul> <li>Classification a</li> <li>Classification a</li> <li>GHS0</li> <li>Skin Irrit. 2 H3</li> <li>2.2 Label eleme</li> <li>Labelling accor</li> <li>The substance is</li> <li>Hazard pictogra</li> <li>GHS07</li> <li>Signal word Wa</li> <li>Hazard stateme</li> <li>H315 Causes sk</li> <li>Precautionary s</li> <li>P101</li> <li>P102</li> <li>P103</li> <li>P231</li> <li>P280</li> <li>P261</li> </ul> | coording to Regulation (EC) No 1272/2008<br>17<br>15 Causes skin irritation.<br>15 Causes skin irritation.<br>15 Causes skin irritation.<br>16 ding to Regulation (EC) No 1272/2008<br>17 classified and labelled according to the CLP regulation.<br>18 classified and labelled according to the CLP regulation.<br>19 regulation.<br>19 regulation.<br>19 regulation.<br>19 regulation.<br>10 regulation.<br>10 regulation.<br>10 regulation.<br>10 regulation.<br>10 regulation.<br>11 regulation.<br>12 regulation.<br>13 regulation.<br>14 regulation.<br>15 regulation.<br>16 regulation.<br>17 regulation.<br>17 regulation.<br>18 regulation.<br>19 regulation.<br>19 regulation.<br>10 regula |

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- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## **SECTION 3: Composition/information on ingredients**

- · 3.1 Chemical characterisation: Substances
- · CAS No. Description
- 666856-94-6 Bis[2-(di-i-propylphosphino)-4-methylphenyl]amine, min. 98%

### **SECTION 4: First aid measures**

- 4.1 Description of first aid measures
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- · 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: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

### **SECTION 6: Accidental release measures**

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Ensure adequate ventilation.
- · 6.4 Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.
- *Handling: Handle under inert gas.*
- · Information about fire and explosion protection: No special measures required.

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- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage: Store contents under inert gas.
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- · 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work.
- Avoid contact with the skin.
- Avoid contact with the eyes and skin.
- *Respiratory protection:*

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• Material of gloves

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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Safety glasses

| <ul> <li>9.1 Information on basic physical a</li> <li>General Information</li> </ul> | nd chemical properties |                    |
|--|------------------------|--------------------|
| · Appearance:  |                        |                    |
| Form:  | Powder                 |                    |
| Colour:  | White                  |                    |
| · Odour:   | Odourless              |                    |
| · Odour threshold:   | Not determined.        |                    |
| · pH-value:  | Not applicable.        |                    |
| · Change in condition<br>Melting point/freezing point:                               | Undetermined.          |                    |
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|---|---|
| Initial boiling point and boiling range | e: Undetermined.                              |
| Flash point:                            | Not applicable.                               |
| Flammability (solid, gas):              | Not determined.                               |
| Ignition temperature:                   |   |
| Decomposition temperature:              | Not determined.                               |
| Auto-ignition temperature:              | Not determined.                               |
| Explosive properties:                   | Product does not present an explosion hazard. |
| Explosion limits:                       |   |
| Lower:                                  | Not determined.                               |
| Upper:                                  | Not determined.                               |
| Vapour pressure:                        | Not applicable.                               |
| Density:                                | Not determined.                               |
| Relative density                        | Not determined.                               |
| Vapour density                          | Not applicable.                               |
| Evaporation rate                        | Not applicable.                               |
| Solubility in / Miscibility with        |   |
| water:                                  | Insoluble.                                    |
| Partition coefficient: n-octanol/water: | Not determined.                               |
| Viscosity:                              |   |
| Dynamic:                                | Not applicable.                               |
| Kinematic:                              | Not applicable.                               |
| Solvent content:                        |   |
| Organic solvents:                       | 0.0 %   |
| VOC (EC)                                | 0.00 %  |
| Solids content:                         | 100.0 %                                       |
| 9.2 Other information                   | No further relevant information available.    |

# SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

• 10.3 Possibility of hazardous reactions No dangerous reactions known.

· 10.4 Conditions to avoid No further relevant information available.

• 10.5 Incompatible materials: No further relevant information available.

• 10.6 Hazardous decomposition products: No dangerous decomposition products known.

# **SECTION 11: Toxicological information**

· 11.1 Information on toxicological effects

• Acute toxicity Based on available data, the classification criteria are not met.

• Primary irritant effect:

· Skin corrosion/irritation

Causes skin irritation.

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- (Contd. of page 4)
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
   Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- *Carcinogenicity* Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

### **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:

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

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

- · 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

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

| - 14.1 UN-Number                  |               |  |
|-----------------------------------|---------------|--|
| ADR, ADN, IMDG, IATA              | not regulated |  |
| · 14.2 UN proper shipping name    |               |  |
| · ADR, ADN, IMDG, IATA            | not regulated |  |
| · 14.3 Transport hazard class(es) |               |  |
| · ADR, ADN, IMDG, IATA            |               |  |
| · Class                           | not regulated |  |
| · 14.4 Packing group              |               |  |
| · ADR, IMDĞ, IATA                 | not regulated |  |
| · 14.5 Environmental hazards:     |               |  |
| · Marine pollutant:               | No            |  |

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- · 14.6 Special precautions for user
  - ser Not applicable.
- 14.7 Transport in bulk according to Annex II of
- Marpol and the IBC Code Not applicable.
- · UN "Model Regulation":

not regulated

# **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · National regulations:
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department.
- · Contact: Technical Director

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 Harmonised System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Skin Irrit. 2: Skin corrosion/irritation – Category 2