Printing date 16.07.2021

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 • CAS Number: 666856-94-6 • 1.2 Relevant ide	
• 1.3 Details of th • Manufacturer/S Strem Chemical 7 Mulliken Way NEWBURYPOR USA info@strem.con	s, Inc. 2T, MA 01950
• 1.4 Emergency EMERGENCY:	ation obtainable from: Technical Department telephone number: CHEMTREC: + 1 (800) 424-9300 opening times: +1 (978) 499-1600
	on of the substance or mixture 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 17 15 Causes skin irritation. nts ding to Regulation (EC) No 1272/2008 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 17 15 Causes skin irritation. nts ding to Regulation (EC) No 1272/2008 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 Hazard pictogra GHS07 Signal word Wa Hazard stateme H315 Causes sk 	ccording to Regulation (EC) No 1272/2008 17 15 Causes skin irritation. nts ding to Regulation (EC) No 1272/2008 is classified and labelled according to the CLP regulation. ums urning nts in irritation.
 Classification a Classification a GHS0 Skin Irrit. 2 H3 2.2 Label eleme Labelling accor The substance is Hazard pictograd GHS07 Signal word Wa Hazard stateme H315 Causes sk Precautionary s P101 	coording to Regulation (EC) No 1272/2008 17 15 Causes skin irritation. 15 Causes skin irritation. 15 Causes skin irritation. 15 Causes skin irritation. 16 CLP regulation. 17 CLP regulation. 17 CLP regulation. 18 CLP regulation. 19 CLP regulation. 19 CLP regulation. 10 CLP regulation. 11 CLP regulation. 12 CLP regulation. 13 CLP regulation. 14 CLP regulation. 15 Clease state st
 Classification a Classification a GHS0 Skin Irrit. 2 H3 2.2 Label eleme Labelling accor The substance is Hazard pictograd GHS07 Signal word Wa Hazard stateme H315 Causes sk Precautionary s 	coording to Regulation (EC) No 1272/2008 17 15 Causes skin irritation. 15 Causes skin irritation. 16 Causes skin irritation. 17 Causes skin irritation. 17 Causes skin irritation. 18 Causes skin irritation. 19 Causes skin irritation. 19 Causes skin irritation. 19 Causes skin irritation. 19 Causes skin irritation. 10 Causes skin irritation. 10 Causes skin irritation. 10 Causes skin irritation.
 Classification a Classification a GHS0 Skin Irrit. 2 H3 2.2 Label eleme Labelling according the substance is Hazard pictograd GHS07 Signal word Wa Hazard stateme H315 Causes sk Precautionary sp101 P102 	coording to Regulation (EC) No 1272/2008 17 15 Causes skin irritation. 15 Causes skin irritation. 15 Causes skin irritation. 15 ding to Regulation (EC) No 1272/2008 15 caussified and labelled according to the CLP regulation. 15 ms 16 ms 17 ming 17 ming 18 min irritation. 19 min irritation. 10 min irritation. 10 medical advice is needed, have product container or label at hand. 10 min irritation. 11 medical advice is needed, have product container or label at hand. 11 medical advice is needed, have product container or label at hand. 19 medical advice is needed, have product container or label at hand. 10 min irritation.
 Classification a GHS0 Skin Irrit. 2 H3 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H315 Causes sk Precautionary s P101 P102 P103 P231 P280 	coording to Regulation (EC) No 1272/2008 7 15 Causes skin irritation. 15 Causes skin irritation. 15 ding to Regulation (EC) No 1272/2008 15 classified and labelled according to the CLP regulation. 15 mis 16 mis 17 ms 17 ms 17 medical advice is needed, have product container or label at hand. 17 Keep out of reach of children. 18 Read label before use. 19 Handle under inert gas. 10 Wear protective gloves/protective clothing/eye protection/face protection.
 Classification a Classification a GHS0 Skin Irrit. 2 H3 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H315 Causes sk Precautionary s P101 P102 P103 P231 P280 P261 	coording to Regulation (EC) No 1272/2008 7 15 Causes skin irritation. nts ding to Regulation (EC) No 1272/2008 s classified and labelled according to the CLP regulation. tms training nts in irritation. tatements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Handle under inert gas. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,
 Classification a Classification a GHS0 Skin Irrit. 2 H3 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H315 Causes sk Precautionary s P101 P102 P103 P231 P280 P261 	coording to Regulation (EC) No 1272/2008 17 15 Causes skin irritation. 15 Causes skin irritation. 15 Causes skin irritation. 16 ding to Regulation (EC) No 1272/2008 17 classified and labelled according to the CLP regulation. 18 classified and labelled according to the CLP regulation. 19 regulation. 19 regulation. 19 regulation. 19 regulation. 10 regulation. 10 regulation. 10 regulation. 10 regulation. 10 regulation. 11 regulation. 12 regulation. 13 regulation. 14 regulation. 15 regulation. 16 regulation. 17 regulation. 17 regulation. 18 regulation. 19 regulation. 19 regulation. 10 regula

(Contd. on page 2) GB

Printing date 16.07.2021

Revision: 16.07.2021

Trade name: Bis[2-(di-i-propylphosphino)-4-methylphenyl]amine, min. 98%

(Contd. of page 1)

- · 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.

(Contd. on page 3)

GB

Printing date 16.07.2021

Revision: 16.07.2021

Trade name: Bis[2-(di-i-propylphosphino)-4-methylphenyl]amine, min. 98%

(Contd. of page 2)

- · 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

 9.1 Information on basic physical a General Information 	nd chemical properties	
· Appearance:		
Form:	Powder	
Colour:	White	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
· Change in condition Melting point/freezing point:	Undetermined.	
		(Contd. on page 4)

Printing date 16.07.2021

CHEMICALS, INC

Revision: 16.07.2021

Trade name: Bis[2-(di-i-propylphosphino)-4-methylphenyl]amine, min. 98%

	(Contd. of pa
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.

(Contd. on page 5)

Printing date 16.07.2021

Revision: 16.07.2021

Trade name: Bis[2-(di-i-propylphosphino)-4-methylphenyl]amine, min. 98%

- (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	

Printing date 16.07.2021

Revision: 16.07.2021

(Contd. of page 5)

Trade name: Bis[2-(di-i-propylphosphino)-4-methylphenyl]amine, min. 98%

- · 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