Printing date 18.07.2021

CHEMICALS, INC.

Revision: 18.07.2021

960050-59-3 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: Strem Chemicals, Inc. 7 Multiken Way NEWBURYPORT, MA 01950 USA info@ strem.com Further information obtainable from: Technical Department 1.4 Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600 SECTION 2: Hazards identification 2.1 Classification of the substance or mixture Classification of the substance or mixture Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 \$\vee Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H319 Causes serious eye irritation. Eye Irrit. 3 H316 to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation. Hazard pictograms Signal word Warning Hazard statements H315 Causes serious eye irritation. H315 Causes serious eye irritation. H315 Causes serious eye irritation. H315 Causes serious eye irritation. H315 Causes serious eye irritation. H310 Causes serious eye		: Identification of the substance/mixture and of the company/undertaking
Item number: 07-1712 CAS Number: 900050-53 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: Strem Chemicals, Inc. 7 Multiken Way NEWBURYPORT, MA 01950 USA 11/ Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: + 1 (978) 499-1600 SECTION 2: Hazards identification 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Section according to Regulation (EC) No 1272/2008 Sin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H319 Causes serious eye irritation. 2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation. Hazard statements H315 Causes skin irritation. H32 Causes serious eye irritation. H319 Causes erritation. H319 Causes of or or of or children. P101 If medical advice is needed, have product container or label at hand. P102 Keep oud or each of children. P103 Read label before use. P104 P10 KEYES; Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	1.1 Product ide	ntifier
CAS Number: 960050-59-3 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: Strem Chemicals, Inc. 7 Multiken Way NEWBURYPORT, MA 01950 USA 1070 Strem.com Further information obtainable from: Technical Department 1.4 Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: + 1 (978) 499-1600 SECTION 2: Hazards identification 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Sin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H319 Causes serious eye irritation. 2.1 Labeling according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation. Hazard statements H315 Causes skin irritation. Hazard statements H319 Causes skin irritation. H319 Causes skin irritation. H320 Causes skin irritation. H321 H andle under inert gas. H333 Keep cool. H334 Keep cool. H335 Keep cool. H335 Keep cool.	Trade name: <u>(8</u>	a, 9S)-(+)-9-Amino-cinchonan-6'-ol, min. 90%
1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: Strem Chemicals, Inc. 7 Multiken Way NEWBURYPORT, MA 01950 USA info@strem.com Further information obtainable from: Technical Department 1.4 Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600 SECTION 2: Hazards identification 2.1 Classification according to Regulation (EC) No 1272/2008 Image: Classification according to Regulation (EC) No 1272/2008 Image: Classification gendencing to Regulation (EC) No 1272/2008 Image: Classified and labelled according to the CLP regulation. Label elements Label ig according to Regulation (EC) No 1272/2008 Image: Classified and labelled according to the CLP regulation. Hazard pictograms Image: Classes serious eye irritation. H315 Causes skin irritation. H316 Causes serious eye irritation. H317 Causes skin irritation. H318 Causes skin irritation. H319 Causes serious eye ir	<i>CAS Number:</i> 960050-59-3 1.2 Relevant id	entified uses of the substance or mixture and uses advised against
Turther information obtainable from: Technical Department 1.4 Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600 SECTION 2: Hazards identification SECTION 2: Hazards identification SECTION 2: Hazards identification Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 OF Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H315 Causes serious eye irritation. Eye Irrit. 2 H319 Causes serious eye irritation. Exact distatements H319 Causes skin irritation. Frecuentionary statements H319 Causes kerious eye irritation.	1.3 Details of th Manufacturer/A Strem Chemical 7 Mulliken Way NEWBURYPOH USA	he supplier of the safety data sheet Supplier: Is, Inc. RT, MA 01950
2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008	<i>Further inform</i> 1.4 <i>Emergency</i> <i>EMERGENCY</i> :	ation obtainable from: Technical Department telephone number: CHEMTREC: + 1 (800) 424-9300
2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008	SECTION 2	: Hazards identification
Hazard pictograms Vision GHS07 Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. Precautionary statements P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P231 Handle under inert gas. P235 Keep cool. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	GHS	07
Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. Precautionary statements P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P231 Handle under inert gas. P235 Keep cool. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accord	 215 Causes skin irritation. 219 Causes serious eye irritation. 218 cents 219 rding to Regulation (EC) No 1272/2008
Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. Precautionary statements P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P231 Handle under inert gas. P235 Keep cool. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accord The substance i	 P15 Causes skin irritation. P19 Causes serious eye irritation. Pents Prding to Regulation (EC) No 1272/2008 Provide the state of the classified and labelled according to the CLP regulation.
H319 Causes serious eye irritation. Precautionary statements P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P231 Handle under inert gas. P235 Keep cool. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance i Hazard pictogre	 P15 Causes skin irritation. P19 Causes serious eye irritation. Pents Prding to Regulation (EC) No 1272/2008 Provide the state of the classified and labelled according to the CLP regulation.
Precautionary statements P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P231 Handle under inert gas. P235 Keep cool. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accord The substance i Hazard pictogr GHS07 Signal word Wa Hazard stateme	215 Causes skin irritation. 219 Causes serious eye irritation. 2nts rding to Regulation (EC) No 1272/2008 s classified and labelled according to the CLP regulation. ams arning cnting
P101If medical advice is needed, have product container or label at hand.P102Keep out of reach of children.P103Read label before use.P231Handle under inert gas.P235Keep cool.P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance i Hazard pictogr GHS07 Signal word Wa Hazard stateme H315 Causes sk	215 Causes skin irritation. 219 Causes serious eye irritation. 2nts rding to Regulation (EC) No 1272/2008 s classified and labelled according to the CLP regulation. ams anning ents kin irritation.
 P103 Read label before use. P231 Handle under inert gas. P235 Keep cool. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing. 	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance i Hazard pictogr GHS07 Signal word Wa Hazard stateme H315 Causes sh H319 Causes se	P15 Causes skin irritation. P19 Causes serious eye irritation. Pents Prding to Regulation (EC) No 1272/2008 Is classified and labelled according to the CLP regulation. ams Particular series Particular series Kin irritation. Perious eye irritation.
P231Handle under inert gas.P235Keep cool.P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance i Hazard pictogr GHS07 Signal word Wa Hazard stateme H315 Causes sh H319 Causes se	P15 Causes skin irritation. P19 Causes serious eye irritation. Parts Praing to Regulation (EC) No 1272/2008 Is classified and labelled according to the CLP regulation. Parts Parts Parts Rin irritation. Perious eye irritation. Perious eye irritation. Perious eye irritation.
P235 Keep cool. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance in Hazard pictogra GHS07 Signal word Wa Hazard stateme H315 Causes sk H319 Causes se Precautionary s P101 P102	P15 Causes skin irritation. P17 Causes serious eye irritation. Parts Parting to Regulation (EC) No 1272/2008 Is classified and labelled according to the CLP regulation. Parts Parts Kin irritation. Parts Kin irritation. Partos Extended Extended Extended If medical advice is needed, have product container or label at hand. Keep out of reach of children.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance i Hazard pictogr GHS07 Signal word Wa Hazard stateme H315 Causes sk H319 Causes se Precautionary s P101 P102 P103	P15 Causes skin irritation. P19 Causes serious eye irritation. Parts Parting Parts Kin irritation. Serious eye irritation. Statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.
present and easy to do. Continue rinsing.	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance in Hazard pictogra GHS07 Signal word Wa Hazard stateme H315 Causes se Precautionary s P101 P102 P103 P231	 215 Causes skin irritation. 219 Causes serious eye irritation. 2nts 2nding to Regulation (EC) No 1272/2008 2 classified and labelled according to the CLP regulation. 2 ams 2 ams 2 aming 2 ams 2 aming 2 ams 2 aming <l< td=""></l<>
	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance in Hazard pictogra GHS07 Signal word Wa Hazard stateme H315 Causes se Precautionary s P101 P102 P103 P231 P235	 215 Causes skin irritation. 219 Causes serious eye irritation. 2nts 2nding to Regulation (EC) No 1272/2008 2 classified and labelled according to the CLP regulation. ams ams ams aming 2nts xin irritation. rituation. statements If medical advice is needed, have product container or label at hand. <i>Keep out of reach of children.</i> <i>Read label before use.</i> Handle under inert gas. Keep cool.
	Skin Irrit. 2 H3 Eye Irrit. 2 H3 2.2 Label eleme Labelling accor The substance in Hazard pictogra GHS07 Signal word Wa Hazard stateme H315 Causes se Precautionary s P101 P102 P103 P231 P235	 215 Causes skin irritation. 219 Causes serious eye irritation. 2nts 2nding to Regulation (EC) No 1272/2008 2 classified and labelled according to the CLP regulation. ams ams

-50 ∠) ____GB -

Printing date 18.07.2021

Revision: 18.07.2021

Trade name: (8a, 9S)-(+)-9-Amino-cinchonan-6'-ol, min. 90%

- P422Store contents under inert gas.P501Dispose of contents/container in accordance with local/regional/national/international
- regulations.
- · 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
- 960050-59-3 (8&<u>945;, 9S)-(+)-9-Amino-cinchonan-6'-ol, min. 90%</u>

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. If symptoms persist, 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: No special measures required.
- · 6.3 Methods and material for containment and cleaning up:
- Dispose contaminated material as waste according to item 13.
- · 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 Open and handle receptacle with care.
- · Handling: Handle under inert gas.

(Contd. on page 3)



GB



Revision: 18.07.2021

(Contd. of page 2)

Trade name: (8a, 9S)-(+)-9-Amino-cinchonan-6'-ol, min. 90%

· Information about fire - and explosion protection: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

Keep cool.

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:
- Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

• Recommended storage temperature: Store at temperatures not exceeding -18 °C. Keep cool.

• 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 eyes and skin.
- **Respiratory protection:** Not required.
- · 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 \cdot *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:



Tightly sealed goggles

· 9.1 Information on basic physical and chemical properties

- General Information
- · Appearance:

Form:

Powder

CHEMICALS, INC.

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 18.07.2021

Revision: 18.07.2021

Trade name: (8	a, 9S)-(+)-9-Amino	-cinchonan-6'-ol, min. 90%
----------------	--------------------	----------------------------

		(Contd. of page
Colour:	Whitish	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/freezing point:	Undetermined.	
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 %	
VÕC (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.

 \cdot 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.

(Contd. on page 5)

GE

Printing date 18.07.2021

Revision: 18.07.2021

Trade name: (8a, 9S)-(+)-9-Amino-cinchonan-6'-ol, min. 90%

(Contd. of page 4)

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.*
- · Serious eye damage/irritation
- Causes serious eye irritation.
- 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: Not known to be hazardous to water.
- · 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.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA

not regulated

· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA

not regulated

(Contd. on page 6)

CHEMICALS, INC.

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 18.07.2021

Revision: 18.07.2021

Trade name: (8a, 9S)-(+)-9-Amino-cinchonan-6'-ol, min. 90%

		(Contd. of page 5)
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	not regulated	
· 14.4 Packing group · ADR, IMDG, IATA	not regulated	
 14.5 Environmental hazards: Marine pollutant: 	No	
· 14.6 Special precautions for user	Not applicable.	
• 14.7 Transport in bulk according to Ann Marpol and the IBC Code	ex II of 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.
- · 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 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2