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Version number 1

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: (-)-Cyanopindolol, [1251]-iodo-,

· Product number: NEX189000MC, NEX189100UC

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

No further relevant information available.

· Product category PC21 Laboratory chemicals

· Application of the substance / the mixture Laboratory chemicals

· 1.3 Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Revvity, Inc 549 Albany Street Boston, MA 02118

• *Further information obtainable from:* US Technical Support 800-762-4000

• *1.4 Emergency telephone number:* If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· 2.1.1 Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

Muta. 2 H341 Suspected of causing genetic defects.

STOT SE 2 H371 May cause damage to the central nervous system and the visual organs.

STOT SE 3 H336 May cause drowsiness or dizziness.

• 2.1.3 Additional information: For the wording of the relevant risk phrases refer to section 16.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

• Hazard pictograms



· Signal word Danger

• *Hazard-determining components of labelling:* propan-1-ol methanol phenol

• Hazard statements H225 Highly flammable liquid and vapour. H332 Harmful if inhaled. H315 Causes skin irritation.

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H318 Causes serious eye damage.	
H341 Suspected of causing genetic defects.	
H371 May cause damage to the central nervous system and the visual organs.	
H336 May cause drowsiness or dizziness.	
· Precautionary statements	
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water	
[or shower].	
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if	
present and easy to do. Continue rinsing.	
P310 Immediately call a POISON CENTER/doctor.	
P321 Specific treatment (see on this label).	
P362+P364 Take off contaminated clothing and wash it before reuse.	
<i>P501</i> Dispose of contents/container in accordance with local/regional/national/international	
regulations.	
· 2.3 Other hazards	Į

· Results of PBT and vPvB assessment

• *PBT:* Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

• Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:	
CAS: 71-23-8 EINECS: 200-746-9 Index number: 603-003-00-0 STOT SE 3, H336 propan-1-ol © Eye Dam. 1, H318; Acute Tox. 4, H302; STOT SE 3, H336	50-75%
CAS: 67-56-1 methanol EINECS: 200-659-6 Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Index number: 603-001-00-X STOT SE 1, H370 Specific concentration limits: STOT SE 1; H370: $C \ge 10$ % STOT SE 2; H371: 3 % $\le C < 10$ %	2.5-10%
CAS: 108-95-2 phenol EINECS: 203-632-7 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Index number: 604-001-00-2 Muta. 2, H341; STOT RE 2, H373; Skin Corr. 1B, H314 Specific concentration limits: Skin Corr. 1B; H314: $C \ge 3$ % Skin Irrit. 2; H315: 1 % ≤ C < 3 %	1-2.5%

SECTION 4: First aid measures

• 4.1 Description of first aid measures

• General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

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- *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:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- \cdot 5.2 Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.
- Dispose contaminated material as waste according to section 13.

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. Prevent formation of aerosols.
- Information about fire and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: Store in a cool location.
- · 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.

• Storage class: 3

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· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

67-56-1 methanol (2.5-10%)

IOELV Long-term value: 260 mg/m³, 200 ppm Skin

108-95-2 phenol (1-2.5%)

IOELV Short-term value: 16 mg/m³, 4 ppm Long-term value: 8 mg/m³, 2 ppm Skin

• Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

- Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as 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. Store protective clothing separately. 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.

Suitable respiratory protective device recommended.

· Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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/face protection



Tightly sealed goggles

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9.1 Information on basic physical and chemical pro	operties		
General Information	F		
Physical state	Fluid		
Colour:	According to product specification		
Odour:	Characteristic		
Odour threshold:	Not determined.		
Melting point/freezing point:	Undetermined.		
Boiling point or initial boiling point and boiling ran	1ge 64 °C		
Flammability	Highly flammable.		
Lower and upper explosion limit			
Lower:	2.1 Vol %		
Upper:	13.5 Vol %		
Flash point:	11 °C		
Auto-ignition temperature:	360 °C		
Decomposition temperature:	Not determined.		
pH	Not determined.		
Viscosity:			
Kinematic viscosity	Not determined.		
Dynamic:	Not determined.		
Solubility			
water:	Not miscible or difficult to mix.		
Partition coefficient n-octanol/water (log value)	Not determined.		
Vapour pressure at 20 °C:	23 hPa		
Density and/or relative density			
Density at 20 °C:	0.89234 g/cm ³		
Relative density	Not determined.		
Vapour density	Not determined.		
9.2 Other information			
Appearance:			
Appearance. Form:	Fluid		
I orm. Important information on protection of health a			
environment, and on safety.			
Ignition temperature:	Product is not selfigniting.		
Explosive properties:	Product is not setting. Product is not explosive. However, formation of		
	explosive air/vapour mixtures are possible.		
Solvent content:			
Organic solvents:	57.2 %		
Water:	42.8%		
Solids content:	2.0%		
Change in condition	,.		
Evaporation rate	Not determined.		
*			
Information with regard to physical hazard classes			
Explosives	Void		
Flammable gases	Void		
Aerosols	Void		
Oxidising gases	Void		
Gases under pressure	Void		
Flammable liquids	Highly flammable liquid and vapour.		
Flammable solids	Void		
Self-reactive substances and mixtures	Void		
Pyrophoric liquids	Void		

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Pyrophoric solids	Void	
Self-heating substances and mixtures	Void	
Substances and mixtures, which emit flamme	able gases	
in contact with water	Void	
Oxidising liquids	Void	
Oxidising solids	Void	
Organic peroxides	Void	
Corrosive to metals	Void	
Desensitised explosives	Void	

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 hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Harmful if inhaled.

· LD/LC50 values relevant for classification:

71-23-8 propan-1-ol

Oral LD50 1,870 mg/kg (rat)

Dermal LD50 5,040 mg/kg (rabbit)

· Skin corrosion/irritation Causes skin irritation.

- Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Suspected of causing genetic defects.
- 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

May cause damage to the central nervous system and the visual organs.

- May cause drowsiness or dizziness.
- · 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.
- 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

· 12.1 Toxicity

• Aquatic toxicity: No further relevant information available.

• 12.2 Persistence and degradability No further relevant information available.

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Trade name: (-)-Cyanopindolol, [125I]-iodo-,

• 12.3 Bioaccumulative potential No further relevant information available.

- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment

• *PBT:* Not applicable.

• **vPvB:** Not applicable.

· 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

· 12.7 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. Hand over to hazardous waste disposers.

Must be specially treated adhering to official regulations.

• Uncleaned packaging:

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

· 14.1 UN number or ID number	
· ADR, IMDG, IATA	UN1993
· 14.2 UN proper shipping name	
ADR	1993 FLAMMABLE LIQUID, N.O.S. (n-PROPANO
	(PROPYL ALCOHOL, NORMAL), METHANOL)
· IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (n-PROPANOL (PROPY ALCOHOL, NORMAL), METHANOL)
· 14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
· Class	3 Flammable liquids.
· Label	3
· 14.4 Packing group	
· ADR, IMDĞ, IATA	II
14.5 Environmental hazards:	
· Marine pollutant:	No
14.6 Special precautions for user	Warning: Flammable liquids.
Hazard identification number (Kemler code):	33
• EMS Number:	<i>F-E,<u>S-E</u></i>
Stowage Category	В
14.7 Maritime transport in bulk according to IM	10
instruments	Not applicable.

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· Transport/Additional information:	(Contd. of page
$\cdot ADR$	
· Limited quantities (LQ)	lL
• Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· Transport category	2
• Tunnel restriction code	D/E
· IMDG	
Limited quantities (LQ)	1L
Excepted quantities $(\widetilde{E}Q)$	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (N-PROPANO
	(PROPYL ALCOHOL, NORMAL), METHANOL), 3, II

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 None of the ingredients is listed.

· Seveso category P5c FLAMMABLE LIQUIDS

• Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

• Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

• REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 69

• DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

• Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with

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raution. Although certain hazards are described, we cannot guarantee that these are the only Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with th	
Abbreviations and acronyms:	
DR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Co	ncerning the International
Carriage of Dangerous Goods by Road)	
MDG: International Maritime Code for Dangerous Goods	
ATA: International Air Transport Association	
GHS: Globally Harmonised System of Classification and Labelling of Chemicals	
SINECS: European Inventory of Existing Commercial Chemical Substances	
ELINCS: European List of Notified Chemical Substances	
CAS: Chemical Abstracts Service (division of the American Chemical Society)	
C50: Lethal concentration, 50 percent	
D50: Lethal dose, 50 percent	
PBT: Persistent, Bioaccumulative and Toxic	
PvB: very Persistent and very Bioaccumulative	
^c lam. Liq. 2: Flammable liquids – Category 2	
<i>lcute Tox. 3: Acute toxicity – Category 3</i>	
cute Tox. 4: Acute toxicity – Category 4	
kin Corr. 1B: Skin corrosion/irritation – Category 1B	
kin Irrit. 2: Skin corrosion/irritation – Category 2	
ye Dam. 1: Serious eye damage/eye irritation – Category 1	
Auta. 2: Germ cell mutagenicity – Category 2	
TOT SE 1: Specific target organ toxicity (single exposure) – Category 1	
TOT SE 2: Specific target organ toxicity (single exposure) – Category 2	
TOT SE 3: Specific target organ toxicity (single exposure) – Category 3	
TOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2	