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## **CURTIS HiSpeed P 401 eco**

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

#### 1.1. Product identifier

Trade name/designation:

## CURTIS HiSpeed P 401 eco

#### UFI:

9300-P0FM-600R-GVKF

# 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the substance/mixture:

Water-miscible coolant lubricant

#### 1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

#### **Curtis Systems GmbH**

Geheimrat-Hummel-Platz Nr. 4

65239 Hochheim

Germany

Telephone: 0614690738-0 Telefax: 061469073845 E-mail: info@curtis-systems.de

**E-mail (competent person):** fischer@curtis-systems.de

#### 1.4. Emergency telephone number

Technical department:, 06146-90738-33 (Only available during office hours.)

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Skin corrosion/irritation (Skin Irrit. 2)	H315: Causes skin irritation.	
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	

#### 2.2. Label elements

## Labelling according to Regulation (EC) No. 1272/2008 [CLP]

#### Hazard pictograms:



**GHS07** Exclamation mark

Signal word: Warning

# Hazard statements for health hazards H315 Causes skin irritation. H319 Causes serious eye irritation.

Hazard statements for environmental hazards		
H412	Harmful to aquatic life with long lasting effects.	

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#### Supplemental hazard information: none

Precautionary statements Prevention		
P264	Wash thoroughly after handling.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/	

Precautionary statements Response		
P332 + P313	If skin irritation occurs: Get medical advice/attention.	
P337 + P313	If eye irritation persists: Get medical advice/attention.	

#### 2.3. Other hazards

No data available

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

#### 3.2. Mixtures

#### Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 61827-42-7 REACH No.: 01-2119475331-43-0000	Isodecylalkohol-(4,4)polyglycolether Acute Tox. 4 (H302), Eye Dam. 1 (H318)  Danger	≥ 1 - < 5 weight-%
CAS No.: 112-34-5 EC No.: 203-961-6 Index No.: 603-096-00-8 REACH No.: 01-2119475104-44-0006	2-(2-butoxyethoxy)ethanol Eye Irrit. 2 (H319)  Warning	≥ 1 - < 5 weight-%
CAS No.: 78-96-6 EC No.: 201-162-7 REACH No.: 01-2119475104-44-0006	1-aminopropan-2-ol Acute Tox. 4 (H312), Eye Dam. 1 (H318), Skin Corr. 1B (H314) Danger	≥ 1 - < 3 weight-%
CAS No.: 101-83-7 EC No.: 202-980-7 REACH No.: 01-2119493354-33-0000	dicyclohexylamine Acute Tox. 3 (H301, H311), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Corr. 1B (H314)  Danger	< 2 weight-%

Full text of H- and EUH-phrases: see section 16.

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

#### 4.1. Description of first aid measures

#### **General information:**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

#### Following inhalation:

Provide fresh air.In case of respiratory tract irritation, consult a physician.

#### In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician. If skin irritation or rash occurs: Get medical advice/attention.

#### After eve contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Following ingestion:

Rinse mouth. Let 1 glass of water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

#### Self-protection of the first aider:

Use personal protection equipment.

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#### 4.2. Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media:

Foam, Extinguishing powder, Carbon dioxide (CO2), Sand, Water mist

#### Unsuitable extinguishing media:

Strong water jet

#### 5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO2) Carbon monoxide Nitrogen oxides (NOx)

#### **Hazardous combustion products:**

Bei Brand: Gase/Dämpfe, giftig

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Wear a self-contained breathing apparatus and chemical protective clothing.

#### 5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

#### **Personal precautions:**

Remove persons to safety.

#### **Protective equipment:**

Wear protective gloves/protective clothing/eye protection/face protection.

#### **6.1.2.** For emergency responders

#### Personal protection equipment:

Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

#### 6.3. Methods and material for containment and cleaning up

#### For containment:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### For cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal.

#### 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

#### 6.5. Additional information

Use appropriate container to avoid environmental contamination.

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

#### 7.1. Precautions for safe handling

#### **Protective measures**

#### Advices on safe handling:

Wear personal protection equipment (refer to section 8).

All work processes must always be designed so that the following is as low as possible: Inhalation Skin contact Eye contact

Always close containers tightly after the removal of product.

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#### **Environmental precautions:**

Shafts and sewers must be protected from entry of the product.

#### Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

**Storage class (TRGS 510, Germany):** 12 – non-combustible liquids that cannot be assigned to any of the above storage classes

#### Further information on storage conditions:

Empfohlene Lagerungstemperatur 5-30 storage stability max. 12 Monate

#### 7.3. Specific end use(s)

#### **Recommendation:**

Observe technical data sheet.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	<ol> <li>Long-term occupational exposure limit value</li> <li>Short-term occupational exposure limit value</li> <li>Instantaneous value</li> <li>Monitoring and observation processes</li> <li>Remark</li> </ol>
TRGS 900 (DE) from 1 Mar 2011	<b>2-(2-butoxyethoxy)ethanol</b> CAS No.: 112-34-5 EC No.: 203-961-6	① 10 ppm (67 mg/m³) ② 15 ppm (100.5 mg/m³) ⑤ (Aerosol und Dampf) EU, DFG, Y, 11
IOELV (EU)	<b>2-(2-butoxyethoxy)ethanol</b> CAS No.: 112-34-5 EC No.: 203-961-6	① 10 ppm (67.5 mg/m³) ② 15 ppm (101.2 mg/m³)
TRGS 900 (DE)	<b>1-aminopropan-2-ol</b> CAS No.: 78-96-6 EC No.: 201-162-7	① 2 ppm (5.8 mg/m³) ② 4 ppm (11.6 mg/m³) ⑤ (Aerosol und Dampf) AGS, 11
TRGS 900 (DE)	dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	<ol> <li>① 0.7 ppm (5 mg/m³)</li> <li>② 1.4 ppm (10 mg/m³)</li> <li>⑤ (Aerosol und Dampf, kann über die Haut aufgenommen werden) AGS, H, Y, 11</li> </ol>
TRGS 900 (DE) from 7 Jun 2018	<b>2,2',2''-nitrilotriethanol</b> CAS No.: 102-71-6 EC No.: 203-049-8	① 1 mg/m³ ② 1 mg/m³ ⑤ (einatembare Fraktion) DFG, Y

#### 8.1.2. Biological limit values

No data available

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#### 8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type	
		② Exposure route	
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.353 mg/m <sup>3</sup>	① DNEL worker ② Long-term – inhalation, systemic effects	
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.1 mg/kg	DNEL worker     Cong-term - dermal, systemic effects	

Substance name	PNEC Value	① PNEC type
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.00032 mg/L	① PNEC aquatic, freshwater
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.00003 mg/L	① PNEC aquatic, marine water
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	108 mg/L	① PNEC sewage treatment plant
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.00529 mg/ kg	① PNEC sediment, freshwater

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No data available

#### 8.2.2. Personal protection equipment







#### Eye/face protection:

Eye glasses with side protection EN 166

#### Skin protection:

Tested protective gloves must be worn EN ISO 374 Suitable material: Breakthrough time: min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

#### Respiratory protection:

Usually no personal respirative protection necessary. Respiratory protection necessary at: aerosol or mist formation insufficient ventilation

#### Other protection measures:

Do not put any product-impregnated cleaning rags into your trouser pockets.

Draw up and observe skin protection programme.Before starting work, apply water-resistant skincare preparations.Avoid contact with skin, eyes and clothes.

#### 8.2.3. Environmental exposure controls

No data available

#### 8.3. Additional information

See section 7. No additional measures necessary.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

**Appearance** 

Physical state: Liquid Colour: yellow

**Odour:** characteristic

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## **CURTIS HiSpeed P 401 eco**

Safety relevant basis data

Parameter Value at °C ① Method		1 Method	
			② Remark
рН	≈ 9.8	20 °C	① DIN 51369
			② 5%-ig
Melting point	not determined		
Freezing point	not determined		
Initial boiling point and boiling range	> 100 °C		
Decomposition temperature	not determined		
Flash point	> 100 °C		① DIN EN ISO 2592
Evaporation rate	not determined		
Auto-ignition temperature	not determined		
Upper/lower flammability or explosive limits	not determined		
Vapour pressure	not determined		
Vapour density	not determined		
Density	≈ 0.93 g/cm³	15 °C	① DIN EN ISO 12185
Relative density	not determined		
Bulk density	not determined		
Water solubility	not determined		
Partition coefficient: n-octanol/water	not determined		
Dynamic viscosity	not determined		
Kinematic viscosity	≈ 170 mm²/s	20 °C	① DIN EN ISO 3104

#### 9.2. Other information

No data available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

There are no data available on the mixture itself.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

No data available

#### 10.5. Incompatible materials

No data available

#### 10.6. Hazardous decomposition products

No data available

#### **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Isodecylalkohol-(4,4)polyglycolether CAS No.: 61827-42-7

LD<sub>50</sub> oral: <2,000 mg/kg

**2-(2-butoxyethoxy)ethanol** CAS No.: 112-34-5 EC No.: 203-961-6

**LD<sub>50</sub> oral:** 3,384 mg/kg (Rat) **LD<sub>50</sub> dermal:** 2,764 mg/kg (Rabbit)

1-aminopropan-2-ol CAS No.: 78-96-6 EC No.: 201-162-7

**LD<sub>50</sub> oral:** 2,813 mg/kg (Rat) **LD<sub>50</sub> dermal:** 1,851 mg/kg (Rabbit)

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dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7

**LD<sub>50</sub> oral:** 200 mg/kg (Rat)

#### Acute oral toxicity:

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

#### Acute dermal toxicity:

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

#### Acute inhalation toxicity:

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

#### 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.

#### 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.

#### **Additional information:**

No data available

#### 11.2. Information on other hazards

No data available

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Isodecylalkohol-(4,4)polyglycolether CAS No.: 61827-42-7

LC<sub>50</sub>: 100 mg/L 4 d (Acute (short-term) fish toxicity)

EC<sub>50</sub>: 100 mg/L 2 d (Daphnia magna (Big water flea))

IC<sub>50</sub>: 100 mg/L 3 d

 $LC_{50}$ : >10 mg/L 4 d

**EC<sub>50</sub>:** >10 mg/L 2 d

IC<sub>50</sub>: >10 mg/L 3 d

**2-(2-butoxyethoxy)ethanol** CAS No.: 112-34-5 EC No.: 203-961-6

LC<sub>50</sub>: 1,300 mg/L 4 d (fish, Lepomis macrochirus (Bluegill))

EC<sub>50</sub>: >100 mg/L 2 d (crustaceans, Daphnia magna, Desmodesmus subspicatus (Großer Wasserfloh))

EC<sub>50</sub>: >100 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))

**1-aminopropan-2-ol** CAS No.: 78-96-6 EC No.: 201-162-7

LC<sub>50</sub>: 215 - 464 mg/L 4 d (Leuciscus idus (golden orfe))

EC<sub>50</sub>: 32.7 mg/L 3 d (Scenedesmus subspicatus)

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## **CURTIS HiSpeed P 401 eco**

dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7

LC<sub>50</sub>: 12 mg/L 4 d (fish, Leuciscus idus (golden orfe)) OECD 203

EC<sub>50</sub>: 8 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202

EC<sub>50</sub>: 3.3 mg/L 3 d (Algae/water plant, Scenedesmus subspicatus) OECD 201

LC50: 12 mg/L 4 d (Leuciscus idus (golden orfe)) OECD 203

EC<sub>50</sub>: 3.3 mg/L 3 d (Scenedesmus subspicatus) OECD 201

#### Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

**2-(2-butoxyethoxy)ethanol** CAS No.: 112-34-5 EC No.: 203-961-6

Biodegradation: Yes, rapidly

#### 12.3. Bioaccumulative potential

No data available

#### 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

Isodecylalkohol-(4,4)polyglycolether CAS No.: 61827-42-7

Results of PBT and vPvB assessment: -

**2-(2-butoxyethoxy)ethanol** CAS No.: 112-34-5 EC No.: 203-961-6

Results of PBT and vPvB assessment: —

**1-aminopropan-2-ol** CAS No.: 78-96-6 EC No.: 201-162-7

Results of PBT and vPvB assessment: -

dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7

Results of PBT and vPvB assessment: —

#### 12.6. Endocrine disrupting properties

No data available

#### 12.7. Other adverse effects

No data available

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### 13.1.1. Product/Packaging disposal

## Waste codes/waste designations according to EWC/AVV

#### Waste code product

12 01 10 \* synthetic machining oils

\*: Evidence for disposal must be provided.

#### Remark:

Waste codes/waste designations according to EWC/AVV

#### Waste treatment options

#### Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

#### Appropriate disposal / Package:

Non-contaminated packages may be recycled. Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of.

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#### **SECTION 14: Transport information**

Land transport (ADR/RID)	(ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)	
14.1. UN number or ID	number	-		
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	
14.2. UN proper shipp	ing name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	
14.3. Transport hazard	class(es)			
not relevant	not relevant	not relevant	not relevant	
14.4. Packing group				
not relevant	not relevant	not relevant	not relevant	
14.5. Environmental hazards				
not relevant	not relevant	not relevant	not relevant	
14.6. Special precautions for user				
not relevant	not relevant	not relevant	not relevant	

#### 14.7. Maritime transport in bulk according to IMO instruments

No data available

#### **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU legislation

No data available

### 15.1.2. National regulations

[DE] National regulations

#### Water hazard class

WGK

1 - slightly hazardous to water

#### 15.2. Chemical Safety Assessment

No data available

#### **SECTION 16: Other information**

#### 16.1. Indication of changes

No data available

#### 16.2. Abbreviations and acronyms

ACGIH American Conference of Governmental Industrial Hygienists

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland

Waterways

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging

DIN German Institute for Standardization / German Industrial Standard

DNEL derived no-effect level

EC<sub>50</sub> Effective Concentration 50%

EN European Standard ES Exposure scenario

EWC European Waste Catalogue IC<sub>50</sub> Inhibition Concentration 50 %

ICAO International Civil Aviation Organization IMDG International Maritime Dangerous Goods

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IMO	International Maritime Organization
ISO	International Standards Organisation
LC <sub>50</sub>	Lethal (fatal) Concentration 50%

LD<sub>50</sub> Lethal (fatal) Dose 50%

MAK Maximum concentration in the workplace air (CH)

NFPA National Fire Protection Association

OECD Organisation for Economic Cooperation and Development

PBT persistent and bioaccumulative and toxic

PNEC Predicted No Effect Concentration

REACH Registration, Evaluation and Authorization of Chemicals RID Dangerous goods regulations for transport by rail

TRGS Technische Regeln für Gefahrstoffe

UN United Nations

#### 16.3. Key literature references and sources for data

No data available

# 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Skin corrosion/irritation (Skin Irrit. 2)	H315: Causes skin irritation.	
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	

#### 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

	• • •
Hazard statements	
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### 16.6. Training advice

No data available

#### 16.7. Additional information

No data available