## according to WHS Regulations

Hazardous according to criteria of Australian Safety and Compensation Council.

## 1 Identification

## - Product identifier

- Trade name: Standard Tricaprin in Pyridine- 5mL
- Article number: N9331073
- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

PerkinElmer, Inc.
710 Bridgeport Avenue
Shelton, Connecticut 06484 USA
CustomerCareUS@perkinelmer.com
203-925-4600
Supplier/Local:
PerkinElmer Australia
Lvl 2, Bldg 5, Brandon Office Park
530-540 Springvale Road
Glen Waverley
Melbourne
VIC 3150
Australia
1-800-033-391
ausales@perkinelmer.com

- Emergency telephone number:

CHEMTREC (within US) 800-424-9300
CHEMTREC (from outside US) +1 703-527-3887 (call collect)
CHEMTREC (within AU) + (61)-290372994

## 2 Hazard(s) Identification

- Classification of the substance or mixture

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


Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H312 Harmful in contact with skin.

## according to WHS Regulations

## Trade name: Standard Tricaprin in Pyridine- 5mL

Acute Tox. 4 H332 Harmful if inhaled.

## - Label elements

- GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- Hazard pictograms GHS02, GHS07

Signal word Danger

- Hazard-determining components of labelling:
pyridine
- Hazard statements

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.

- Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.


## 3 Composition and Information on Ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

| - Dangerous components: |  |  |
| :---: | :---: | :---: |
| 110-86-1 | pyridine | 99.9992\% |
|  | © Flam. Lia (1) Acute To |  |
| - Additional Components |  |  |
| 621-71-6 | TRICAPRIN | 0.0008\% |

## 4 First Aid Measures

- Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

## according to WHS Regulations

Trade name: Standard Tricaprin in Pyridine- 5mL
(Contd. of page 2)
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.

- After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Call for a doctor immediately.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 5 Fire Fighting Measures

- 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
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters

Protective equipment: Mouth respiratory protective device.

## 6 Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.
Prevent seepage into sewage system, workpits and cellars.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

- 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.

## 7 Handling and Storage

## - Handling:

- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

- Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

## according to WHS Regulations

Trade name: Standard Tricaprin in Pyridine- 5mL

Protect against electrostatic charges.

- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: 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.

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


## 8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.


## Control parameters

Ingredients with limit values that require monitoring at the workplace:
110-86-1 pyridine
WES Long-term value: $16 \mathrm{mg} / \mathrm{m}^{3}, 5 \mathrm{ppm}$

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

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.
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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

## according to WHS Regulations

Trade name: Standard Tricaprin in Pyridine- 5mL

Eye protection:


Tightly sealed goggles

## 9 Physical and Chemical Properties

| - Information on basic physical and chem <br> - General Information <br> - Appearance: <br> Form: <br> Colour: <br> - Odour: <br> - Odour threshold: | ical properties <br> Liquid <br> Transparent <br> Pungent <br> Not determined. |
| :---: | :---: |
| - pH-value: | Not determined. |
| Change in condition Melting point/freezing point: Initial boiling point and boiling range | $\begin{aligned} & -41.8^{\circ} \mathrm{C} \\ & 1155^{\circ} \mathrm{C} \end{aligned}$ |
| - Flash point: | $17^{\circ} \mathrm{C}$ |
| - Flammability (solid, gas): | Not applicable. |
| - Ignition temperature: | $550{ }^{\circ} \mathrm{C}$ |
| - Decomposition temperature: | Not determined. |
| - Auto-ignition temperature: | Product is not selfigniting. |
| - Explosive properties: | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| Explosion limits: Lower: Upper: | $\begin{aligned} & \text { 1.7 Vol \% } \\ & \text { 10.6 Vol \% } \end{aligned}$ |
| - Vapour pressure at $20{ }^{\circ} \mathrm{C}$ : | 20 hPa |
| Density at $20^{\circ} \mathrm{C}$ : <br> - Relative density <br> - Vapour density <br> - Evaporation rate | $0.9819 \mathrm{~g} / \mathrm{cm}^{3}$ <br> Not determined. <br> Not determined. <br> Not determined. |
| Solubility in / Miscibility with water: | Not miscible or difficult to mix. |
| - Partition coefficient: n-octanol/water: | Not determined. |
| Viscosity: Dynamic: Kinematic: | Not determined. Not determined. |

## according to WHS Regulations

Trade name: Standard Tricaprin in Pyridine- 5mL
$\square$

## 10 Stability and Reactivity

- Reactivity No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.


## 11 Toxicological Information

- Information on toxicological effects
- Acute toxicity
- LD/LC50 values relevant for classification:

110-86-1 pyridine

Oral | LD50 | $891 \mathrm{mg} / \mathrm{kg}$ (rat) |
| :--- | :--- | :--- |

Dermal LD50 $1121 \mathrm{mg} / \mathrm{kg}$ (rabbit)

- Primary irritant effect:
- Skin corrosion/irritation No irritant effect.
- Serious eye damage/irritation No irritating effect.
- Respiratory or skin sensitisation No sensitising effects known.
- Additional toxicological information: Harmful


## 12 Ecological Information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes:

Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects No further relevant information available.


## according to WHS Regulations

Trade name: Standard Tricaprin in Pyridine- 5mL
(Contd. of page 6)

## 13 Disposal considerations

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 Transport information

- UN-Number
- ADG, IMDG, IATA UN1282
- UN proper shipping name
- ADG

1282 PYRIDINE mixture

- IMDG, IATA

PYRIDINE mixture

- Transport hazard class(es)
- ADG

- Class

3 (F1) Flammable liquids.

- Label

3
IMDG, IATA


| - Class | 3 Flammable liquids. |
| :--- | :--- |
| - Label | 3 |

- Packing group
- ADG, IMDG, IATA

II

- Environmental hazards:
- Marine pollutant: No
- Special precautions for user Warning: Flammable liquids.
- Hazard identification number (Kemler code):

33

- EMS Number:
$F-E, S-D$
- Stowage Category

B
Stowage Code
SW2 Clear of living quarters.

```
· Transport in bulk according to Annex II of Marpol
and the IBC Code
Not applicable.
```


## according to WHS Regulations

Trade name: Standard Tricaprin in Pyridine- 5mL

## (Contd. of page 7)

- Transport/Additional information:
- ADG
$\cdot$ Limited quantities (LQ) $\quad 1 L$
- Excepted quantities (EQ)

Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

- Transport category
- Tunnel restriction code 2

D/E

- IMDG
- Limited quantities (LQ) $1 L$
- Excepted quantities (EQ) Code: E2

|  | Maximum net quantity per inner packaging: 30 ml <br> Maximum net quantity per outer packaging: 500 ml |
| :--- | :--- |
| $\cdot$ UN "Model Regulation": | UN 1282 PYRIDINE MIXTURE, 3, II |

## 15 Regulatory information



- Australia: Priority Existing Chemicals

None of the ingredients is listed.

- 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 $5000 t$
- Qualifying quantity (tonnes) for the application of upper-tier requirements $50000 t$
- National regulations:
- Information about limitation of use:

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.


## 16 Other information

Disclaimer
The information provided in this Material Safety Data Sheet is based on our present knowledge, and 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 considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that

## according to WHS Regulations

## Trade name: Standard Tricaprin in Pyridine- 5mL

## (Contd. of page 8)

these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

## Relevant phrases

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.

- Department issuing SDS: Environmental, Health and Safety

Contact:
Within the USA: 1-(800)-762-4000
Outside the USA: 1-(203)-712-8488

- Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
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
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids - Category 2
Acute Tox. 4: Acute toxicity - Category 4
. * Data compared to the previous version altered.

