



Safety Data Sheet
acc. to OSHA HCS

Printing date 11/18/2019

Reviewed on 11/18/2019

1 Identification

- **Product identifier**
- **Trade name:** para-Cymene techn.
- **Article number:** F323000
- **CAS Number:** 99-87-6
- **EINECS Number:** 202-796-7
- **Application of the substance / the mixture** Solvents
- **Details of the supplier of the safety data sheet**
- **Information department:** Product Safety Department: sds@metadynea.com
- **Emergency telephone number:**
USA: FOR CHEMICAL OR MEDICAL EMERGENCY CALL INFOTRAC +1-800-535-5053
INTERNATIONAL: FOR CHEMICAL OR MEDICAL EMERGENCY CALL INFOTRAC +1-352-323-3500

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02

- **Signal word** Warning
- **Hazard statements**
Flammable liquid and vapor.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

| | | |
|---------|----------|-----------|
| 99-87-6 | p-cymene | >75-≤100% |
|---------|----------|-----------|

4 First-aid measures

- **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.

Do not leave affected persons unattended.

Personal protection for the First Aider.

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer an appropriate mask or self-contained breathing apparatus must wear. For the first person providing aid it can be dangerous to perform mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before you take them off or wear gloves.

Move the victim to a safe area as soon as possible. If unconscious, place in a stable side position and seek medical advice. In the case of non-existent or irregular breathing or the occurrence of respiratory arrest, trained medical personnel shall initiate artificial respiration or oxygenation. Keep the airway open. Loosen tight-fitting garments (eg collar, tie, belt or waistband). Rest the affected person in a well-ventilated room.

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· **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.

Call a doctor immediately.

Remove affected person to fresh air. Keep person warm and calm. Do not induce vomiting unless expressly advised by medical personnel. If vomiting occurs, keep the head low so that the vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in a stable lateral position and seek medical help immediately. Keep the airway open. Loosen tight fitting garments (eg collar, tie, belt or waistband).

· **After skin contact:**

Wash skin immediately with plenty of water. Put off contaminated clothing and shoes. If irritation occurs, consult a doctor. Wash clothing before reuse.

· **After eye contact:**

Open eye and rinse with clear, running water. Remove contact lenses. Then consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Call a doctor immediately. Rinse mouth with water.

Remove affected person to fresh air. Keep person warm and calm. If the substance has been swallowed and the affected person is conscious, give them small amounts of water to drink. In case of nausea, do not continue drinking because vomiting can be dangerous. Do not induce vomiting unless expressly advised by medical personnel. If vomiting occurs, keep the head low so that the vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in a stable lateral position and seek medical help immediately. Keep the airway open. Loosen tight garments.

· **Information for doctor:**

· **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, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

CO₂, sand, extinguishing powder. Do not use water.

Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

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· **Advice for firefighters**

Wear a self-contained breathing apparatus and chemical resistant suit
Firefighters should wear appropriate protective clothing and self-contained full-face respirators operating in positive-pressure mode. Clothing for firefighters (including helmets, protective boots and protective gloves), which complies with European Standard EN 469, provides basic protection against accidents involving chemicals.

· **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
In case of seepage into the ground inform responsible authorities.
Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Do not flush with water or aqueous cleansing agents

· **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.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

| | | |
|---------|----------|-----------------------|
| 99-87-6 | p-cymene | 120 mg/m ³ |
|---------|----------|-----------------------|

· **PAC-2:**

| | | |
|---------|----------|-------------------------|
| 99-87-6 | p-cymene | 1,300 mg/m ³ |
|---------|----------|-------------------------|

· **PAC-3:**

| | | |
|---------|----------|-------------------------|
| 99-87-6 | p-cymene | 1,900 mg/m ³ |
|---------|----------|-------------------------|

7 Handling and storage

· **Handling:**

· **Precautions for safe handling** No special precautions are necessary if used correctly.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

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- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Filter A/P2
- **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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **As protection from splashes gloves made of the following materials are suitable:**
Nitrile rubber, NBR
- **Eye protection:**



Tightly sealed goggles

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· **Form:** Fluid
· **Color:** Colorless
· **Odor:** Petrol-like
· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· **Melting point/Melting range:** -68 °C (-154.4 °F)
-68 °C (-154.4 °F)
· **Boiling point/Boiling range:** 177 °C (350.6 °F)

· **Flash point:** 52 °C (125.6 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 435 °C (815 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

· **Lower:** 0.7 Vol %
· **Upper:** 5.6 Vol %

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 0.855 g/cm³ (7.13498 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

· **Water:** Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

· **Dynamic at 20 °C (68 °F):** 7 mPas
· **Kinematic:** Not determined.

· **Solvent content:**

· **Organic solvents:** 97.2 %
· **Water:** 0.1 %

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| | |
|--------------------------|--|
| VOC content: | 97.22 % |
| Solids content: | 0.0 % |
| Other information | No further relevant information available. |

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 that are relevant for classification:**
p-Cymene

LD50: 4 750 mg/kg bw rat oral
LD50 : > 5000 mg/kg dermal rabbit

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**
p-Cymene

LC50 Fish 48 mg/l 96h
LC50 Crustaceae 6,5 mg/l 48h
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
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.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- | | |
|----------------------------------|---------------------------|
| · UN-Number | |
| · DOT, IMDG, IATA | UN2046 |
| · UN proper shipping name | |
| · DOT | Cymenes |
| · IMDG | CYMENES, MARINE POLLUTANT |
| · IATA | CYMENES |

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· **Transport hazard class(es)**

· **DOT**



· **Class** 3 Flammable liquids
· **Label** 3

· **IMDG**



· **Class** 3 Flammable liquids
· **Label** 3

· **IATA**



· **Class** 3 Flammable liquids
· **Label** 3

· **Packing group**

· **DOT, IMDG, IATA** III

· **Environmental hazards:** Product contains environmentally hazardous substances: p-cymene

· **Marine pollutant:** Yes
Symbol (fish and tree)

· **Special precautions for user** Warning: Flammable liquids

· **Danger code (Kemler):** 30

· **EMS Number:** F-E,S-D

· **Stowage Category** A

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**

· **Remarks:** Special marking with the symbol (fish and tree).

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· **UN "Model Regulation":** UN 2046 CYMENES, 3, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

| | | |
|-----------|---|--------|
| 99-87-6 | p-cymene | ACTIVE |
| 7732-18-5 | water, distilled, conductivity or of similar purity | ACTIVE |

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**



GHS02

· **Signal word** Warning

· **Hazard statements**

Flammable liquid and vapor.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use for extinction: CO₂, powder or water spray.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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:** Metadynea Regulatory Department

· **Contact:** Dr. Michael Gann michael.gann@metadynea.com +43 2732 899 1216

· **Date of preparation / last revision** 11/18/2019 / 1

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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Flam. Liq. 3: Flammable liquids – Category 3

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· * **Data compared to the previous version altered.**

US