1 Identification

- **Product identifier**
  - **Trade name:** LENS BOND OPTICAL CEMENT CATALYST FOR DC-90
  - **Article number:** S13000-DC90
  - **CAS Number:** 614-45-9
  - **EC number:** 210-382-2

- **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:**
    Electron Microscopy Sciences
    1560 Industry Road
    USA-Hatfield, PA 19440
    Tel: 215-412-8400 Fax: 215-412-8450
    email: sgkceck@aol.com
    www.emsdiasum.com

- **Information department:** Product safety department

- **Emergency telephone number:**
  - ChemTrec 1-800-424-9300 Contract CCN7661
  - 1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**
  
  - GHS07
  
  Acute Tox. 4  H302  Harmful if swallowed.
  Skin Irrit. 2  H315  Causes skin irritation.
  Eye Irrit. 2A  H319  Causes serious eye irritation.
  STOT SE 3  H335  May cause respiratory irritation.
  Flam. Liq. 4  H227  Combustible liquid.

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

  - GHS07

- **Signal word** Warning

- **Hazard-determining components of labeling:**
  - tert-butyl perbenzoate
  - **Hazard statements**
    - Combustible liquid.
    - Harmful if swallowed.
Trade name: LENS BOND OPTICAL CEMENT CATALYST FOR DC-90

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

Precautionary statements
Keep away from flames and hot surfaces. – No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves / eye protection / face protection.
Wear protective glasses.
Wear eye protection / face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
If swallowed: Call a poison center/doctor if you feel unwell.
If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
In case of fire: Use for extinction: CO2, powder or water spray.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)

Health = 1
Fire = 2
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1
Fire = 2
Reactivity = 0

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

3 Composition/information on ingredients

Chemical characterization: Substances
CAS No. Description
614-45-9 tert-butyl perbenzoate
Identification number(s)
EC number: 210-382-2
4 First-aid measures

· Description of first aid measures
· General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· 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: Immediately call a doctor.
· 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.
· Special hazards arising from the substance or mixture No further relevant information available.
· Advice for firefighters
· Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.
· Environmental precautions: 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). Dispose contaminated material as waste according to item 13.
· 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 protection against explosions and fires: Protect from heat.
· 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.
· Further information about storage conditions:
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.

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: Not required.

Additional information: The lists that were valid during the creation 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.

Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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

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 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
Form: Liquid
Color: Yellow
Odor: Pungent
Odour threshold: Not determined.
### 10 Stability and reactivity

- **Reactivity**
- **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:

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<th>Compound</th>
<th>LD50 (mg/kg) (rat)</th>
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- Primary irritant effect:
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritating effect.
  - Sensitization: No sensitizing effects known.

- Additional toxicological information:

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    Substance is not listed.
  - NTP (National Toxicology Program)
    Substance is not listed.
  - OSHA-Ca (Occupational Safety Health Administration)
    Substance is not listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
- 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 1 (Assessment by list): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- 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: Disposal must be made according to official regulations.
### 14 Transport information

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| Environmental hazards: |
| Marine pollutant:      |
| Yes | Symbol (fish and tree) |

| Special precautions for user |
| Danger code (Kemler):       |
| EMS Number:                 |
| Warning: Flammable liquids | 663 |
| F-E,S-D                     |
Trade name: LENS BOND OPTICAL CEMENT CATALYST FOR DC-90

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

- DOT
  - Quantity limitations
    On passenger aircraft/rail: 5 kg
    On cargo aircraft only: 5 kg

- ADR
  - Excepted quantities (EQ)
    Code: E0
    Not permitted as Excepted Quantity

- UN "Model Regulation":
  UN3269, Polyester resin kit, 6.1 (3), III

15 Regulatory information

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

  - Sara
    - Section 355 (extremely hazardous substances):
      Substance is not listed.
    - Section 313 (Specific toxic chemical listings):
      Substance is not listed.

  - TSCA (Toxic Substances Control Act):
    Substance is listed.

  - Proposition 65
    - Chemicals known to cause cancer:
      Substance is not listed.
    - Chemicals known to cause reproductive toxicity for females:
      Substance is not listed.
    - Chemicals known to cause reproductive toxicity for males:
      Substance is not listed.
    - Chemicals known to cause developmental toxicity:
      Substance is not listed.

  - Carcinogenic categories

    - EPA (Environmental Protection Agency)
      Substance is not listed.
    - TLV (Threshold Limit Value established by ACGIH)
      Substance is not listed.

    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      Substance is not listed.

    - GHS label elements
      The substance is classified and labeled according to the Globally Harmonized System (GHS).
Trade name: LENS BOND OPTICAL CEMENT CATALYST FOR DC-90

- **Hazard pictograms**

  GHS07

- **Signal word** Warning

- **Hazard-determining components of labeling:**
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- **Hazard statements**
  - Combustible liquid.
  - Harmful if swallowed.
  - Causes skin irritation.
  - Causes serious eye irritation.
  - May cause respiratory irritation.

- **Precautionary statements**
  - Keep away from flames and hot surfaces. – No smoking.
  - Avoid breathing dust/fume/gas/mist/vapors/spray
  - Wear protective gloves / eye protection / face protection.
  - Wear protective gloves.
  - Wear eye protection / face protection.
  - Wash thoroughly after handling.
  - Do not eat, drink or smoke when using this product.
  - Use only outdoors or in a well-ventilated area.
  - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Specific treatment (see on this label).
  - If swallowed: Call a poison center/doctor if you feel unwell.
  - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - If skin irritation occurs: Get medical advice/attention.
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  - Rinse mouth.
  - In case of fire: Use for extinction: CO2, powder or water spray.
  - If on skin: Wash with plenty of water.
  - Take off contaminated clothing and wash it before reuse.
  - Store locked up.
  - Store in a well-ventilated place. Keep container tightly closed.
  - 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.

- **Date of preparation / last revision** 09/22/2015 / -

- **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
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
Trade name: LENS BOND OPTICAL CEMENT CATALYST FOR DC-90

EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 4: Flammable liquids, Hazard Category 4
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3