1. IDENTIFICATION
   Product identifier
   Mixture identification: Ink Cartridge, T834D
   Trade name: Ink Cartridge, T834D

   Recommended use of the chemical and restrictions on use
   Recommended use: Ink for inkjet printing

   Details of the supplier of the safety data sheet
   Company: EPSON AMERICA Inc.
   3840 Kilroy Airport Way
   Long Beach, CA 90806
   United States
   Telephone: 562.276.1369
   Emergency phone number
   Telephone: 562.276.1369

2. HAZARD(S) IDENTIFICATION
   Classification of the chemical
   The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

   Label elements
   The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

   Hazard pictograms: None
   Hazard statements: None
   Precautionary statements: None
   Special Provisions: None
   Hazards not otherwise classified identified during the classification process: None
   Additional classification information
   NFPA rating:
   HMIS rating:

3. COMPOSITION/INFORMATION ON INGREDIENTS
   Substances
   No
   Mixtures
   Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:
4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:
Wash with plenty of water and soap.

In case of eyes contact:
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:
Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:
Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed
None

Indication of immediate medical attention and special treatment needed
Treatment:
None

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:
Water.
Carbon dioxide (CO2).

Unsuitable extinguishing media:
None in particular.

Specific hazards arising from the chemical
Do not inhale explosion and combustion gases.
 Burning produces heavy smoke.

Hazardous combustion products:
None

Explosive properties: No data available
Oxidizing properties: No data available

Special protective equipment and precautions for fire-fighters
Use suitable breathing apparatus.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Remove persons to safety.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.
Methods and materials for containment and cleaning up
Wash with plenty of water.

7. HANDLING AND STORAGE
Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Do not use on extensive surface areas in premises where there are occupants.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
Conditions for safe storage, including any incompatibilities
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.
Storage temperature:
Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters
Glycerol - CAS: 56-81-5
- OEL Type: OSHA - TWA: 5 mg/m3 - Notes: Respirable dust
- OEL Type: OSHA - TWA: 15 mg/m3 - Notes: Total dust
Triethanol amine - CAS: 102-71-6
- OEL Type: ACGIH - TWA(8h): 5 mg/m3
DNEL Exposure Limit Values
No data available
PNEC Exposure Limit Values
No data available
Appropriate engineering controls:
None
Individual protection measures
Eye protection:
Use personal protective equipment as required.
Protection for skin:
Use personal protective equipment as required.
Protection for hands:
Use personal protective equipment as required.
Respiratory protection:
Use personal protective equipment as required.
Thermal Hazards:
None

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance and colour: Violet Liquid
Odour: Slightly
Odour threshold: No data available
PH: 8.4 ~ 9.8 at 20 °C
Melting point / freezing point: No data available
Initial boiling point and boiling range: No data available
10. STABILITY AND REACTIVITY
Reactivity
Stable under normal conditions
Chemical stability
Stable under normal conditions
Possibility of hazardous reactions
None
Conditions to avoid
Stable under normal conditions.
Incompatible materials
None in particular.
Hazardous decomposition products
None.

11. TOXICOLOGICAL INFORMATION
Toxicological information of the product:
e) germ cell mutagenicity:
   Test: Mutagenesis - Species: Salmonella Typhimurium and Escherichia coli Negative
f) carcinogenicity:
   Does not contain carcinogens (Ref. 1)
g) reproductive toxicity:
   Does not contain reproductive toxicity and developmental toxic substances (Ref. 2)
Toxicological information of the main substances found in the product:
Glycerol - CAS: 56-81-5
a) acute toxicity:
   Test: LD50 - Route: Oral - Species: Guinea pig = 7750 mg/kg - Source: Journal of
   Industrial Hygiene and Toxicology. Vol. 23, Pg. 259, 1941
   Test: LDLo - Route: Oral - Species: Human = 1428 mg/kg - Source: "Toxicology of
   Pg. 288, 1969.
Triethanol amine - CAS: 102-71-6
a) acute toxicity:
   Test: LD50 - Route: Oral - Species: Guinea pig = 2200 mg/kg - Source: "Toxicometric
   Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al.,
   Test: LD50 - Route: Oral - Species: Mouse = 5846 mg/kg - Source: Science Reports of
   the Research Institutes, Tohoku University, Series C: Medicine. Vol. 36(1-4), Pg. 10,
   1989.
Substance(s) listed on the NTP report on Carcinogens:
  None.
Substance(s) listed on the IARC Monographs:
  Triethanol amine - Group 3.
Substance(s) listed as OSHA Carcinogen(s):
  None.
Substance(s) listed as NIOSH Carcinogen(s):
  None.

12. ECOLOGICAL INFORMATION
  Ecotoxicity
    Adopt good working practices, so that the product is not released into the environment.
    No data available
  Persistence and degradability
    No data available
  Bioaccumulative potential
    No data available
  Mobility in soil
    No data available
  Other adverse effects
    None

13. DISPOSAL CONSIDERATIONS
  Waste treatment and disposal methods
    Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION
  UN number
    Not classified as dangerous in the meaning of transport regulations.
  UN proper shipping name
    No data available
  Transport hazard class(es)
    No data available
  Packing group
    No data available
  Environmental hazards
    No data available
  Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)
    No data available
  Special precautions
    No data available

15. REGULATORY INFORMATION
  USA - Federal regulations
    TSCA - Toxic Substances Control Act
      TSCA inventory: all the components are listed on the TSCA inventory.
      TSCA listed substances:
        None.
    SARA - Superfund Amendments and Reauthorization Act
      Section 302 – Extremely Hazardous Substances: no substances listed.
      Section 304 – Hazardous substances: no substances listed.
      Section 313 – Toxic chemical list: no substances listed.
    CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
No substances listed.

CAA - Clean Air Act
CAA listed substances:
Glycerol is listed in CAA Section 111.

CWA - Clean Water Act
CWA listed substances:
None.

USA - State specific regulations
California Proposition 65
Substance(s) listed under California Proposition 65:
None.

Massachusetts Right to know
Substance(s) listed under Massachusetts Right to know:
No substances listed.

New Jersey Right to know
Substance(s) listed under New Jersey Right to know:
No substances listed.

Pennsylvania Right to know
Substance(s) listed under Pennsylvania Right to know:
No substances listed.

16. OTHER INFORMATION

Safety Data Sheet dated March 12, 2019, Revision: 3.0
Sections modified from the previous revision:
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
11. TOXICOLOGICAL INFORMATION
15. REGULATORY INFORMATION

Main bibliographic sources:
Ref. 1 · Journal of Occupational Health (JOH) (Japan Society of Occupational Health (JSOH))
· TLVs and BEIs (ACGIH: American Conference of Governmental Industrial Hygienists)
· IRIS Carcinogenic Assessment (IRIS: Integrated Risk Information System of US EPA)
· MAK und BAT Werte Liste (DFG: German Research Foundation)
· TRGS 905, Verzeichnis krebserzeugender, keimzell mutagener oder reproduktionstoxischer Stoffe (AGS: Committee on Hazardous Substances, Germany)

· TRGS 905, Verzeichnis krebserzeugender, keimzell mutagener oder reproduktionstoxischer Stoffe (AGS: Committee on Hazardous Substances, Germany)

Disclaimer:
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.
This Safety Data Sheet cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of
Safety Data Sheet

Dangerous Goods by Road.

**CAS:** Chemical Abstracts Service (division of the American Chemical Society).

**CLP:** Classification, Labeling, Packaging.

**DNEL:** Derived No Effect Level.

**EINECS:** European Inventory of Existing Commercial Chemical Substances.

**GHS:** Globally Harmonized System of Classification and Labeling of Chemicals.

**HMIS:** Hazardous Materials Identification System

**IARC:** International Agency for Research on Cancer

**IATA:** International Air Transport Association.

**IATA-DGR:** Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

**ICAO:** International Civil Aviation Organization.

**ICAO-TI:** Technical Instructions by the "International Civil Aviation Organization" (ICAO).

**IMDG:** International Maritime Code for Dangerous Goods.

**INCI:** International Nomenclature of Cosmetic Ingredients.

**KSt:** Explosion coefficient.

**LC50:** Lethal concentration, for 50 percent of test population.

**LD50:** Lethal dose, for 50 percent of test population.

**LTE:** Long-term exposure.

**NFPA:** National Fire Protection Association

**NIOH:** National Institute for Occupational Safety and Health

**NTP:** National Toxicology Program

**OSHA:** Occupational Safety and Health Administration

**PNEC:** Predicted No Effect Concentration.

**RID:** Regulation Concerning the International Transport of Dangerous Goods by Rail.

**STE:** Short-term exposure.

**STEL:** Short Term Exposure limit.

**STOT:** Specific Target Organ Toxicity.

**TLV:** Threshold Limiting Value.

**TWATLV:** Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).