



Safety Data Sheet

Version 7.0
Revision Date: 09/12/2020

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **Deuterated Aniline-d₇**
Product number: d7-AN
Product use: For laboratory research purposes.
Supplier / Manufacturer: Polymer Source, Inc.
Address: 124 Avro street, Dorval (Montreal), Quebec H9P 2X8, Canada
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2. HAZARDS IDENTIFICATION

GHS classification: Flammable liquids (Category 4);
Acute toxicity – Oral (Category 3);
Acute toxicity – Inhalation (Category 3);
Acute toxicity – Dermal (Category 3);
Serious eye damage (Category 1);
Skin sensitization (Category 1);
Germ cell mutagenicity (Category 2);
Carcinogenicity (Category 2);
Specific target organ toxicity – Repeated exposure (Category 1):
Short-term (acute) aquatic hazard (Category 1),
Long-term (chronic) aquatic hazard (Category 1).

GHS Label elements, including precautionary statements:

Pictogram:



Signal word: Danger

Hazard statements: H227. Combustible liquid.
H301 + H311 + H331. Toxic if swallowed, in contact with skin or if inhaled.
H317. May cause an allergic skin reaction.
H318. Causes serious eye damage.
H341. Suspected of causing genetic defects.
H351. Suspected of causing cancer.
H372. Causes damage to organs through prolonged or repeated exposure.

- H410. Very toxic to aquatic life with long lasting effects.
- Precautionary statements:
- P201. Obtain special instructions before use.
 - P202. Do not handle until all safety precautions have been read and understood.
 - P210. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P260. Do not breathe dust / fume / gas / mist / vapors / spray.
 - P264. Wash skin thoroughly after handling.
 - P270. Do not eat, drink or smoke when using this product.
 - P271. Use only outdoors or in a well-ventilated area.
 - P272. Contaminated work clothing should not be allowed out of the workplace.
 - P273. Avoid release to the environment.
 - P280. Wear protective gloves / protective clothing / eye protection / face protection.
 - P301 + P310 + P330. *IF SWALLOWED:*
Immediately call a Poison Center / doctor. Rinse mouth.
 - P302 + P352 + P312. *IF ON SKIN:*
Wash with plenty of water. Call a Poison Center / doctor if you feel unwell.
 - P304 + P340 + P311. *IF INHALED:*
Remove person to fresh air and keep comfortable for breathing. Call a Poison Center / doctor.
 - P305 + P351 + P338 + P310. *IF IN EYES:*
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call Poison Center / doctor.
 - P308 + P313. *IF exposed or concerned:*
Get medical advice / attention.
 - P333 + P313. *If skin irritation or rash occurs:*
Get medical advice / attention.
 - P361 + P364. Take off immediately all contaminated clothing and wash it before reuse.
 - P370 + P378. *In case of fire:*
Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
 - P391. Collect spillage.
 - P403. Store in a well-ventilated place.
 - P403 + P233. Store in a well-ventilated place. Keep container tightly closed.
 - P405. Store locked up.
 - P501. Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| | | |
|-------------------|---|---------------------------------|
| Formula: | Aniline-d ₇ : | C ₆ D ₇ N |
| Synonyms: | Phenylamine-d ₇ , Aminobenzene-d ₇ , Benzamine-d ₇ | |
| Concentration: | ≥ 99 % | |
| Molecular weight: | 100 g/mol | |

4. FIRST AID MEASURES

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| General advice: | Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. |
| If inhaled: | If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact: | Wash off with soap and plenty of water. Consult a physician. |
| In case of eye contact: | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| If swallowed: | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |

5. FIRE-FIGHTING MEASURES

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| Suitable extinguishing media: | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Special protective equipment for firefighters: | Wear self-contained breathing apparatus for firefighting if necessary. |
| Hazardous combustion products: | Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NO _x). |
| Explosion data: | Sensitivity to mechanical impact: no data available Sensitivity to static discharge: no data available |
| Further information: | Use water spray to cool unopened containers. |

6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions: | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. |
| Environmental precautions: | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. |
| Methods and materials for containment and cleaning up: | Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal. |

7. HANDLING AND STORAGE

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| Precautions for safe handling: | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition – No smoking. Take measures to prevent the buildup of electrostatic charge. |
| Conditions for safe storage: | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

Store under inert gas. Hygroscopic.

Recommended storage temperature 2 – 8 °C.

Storage class (TRGS 510) – 6.1B: Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters: Ingredients with workplace control parameters:

| <i>Components</i> | <i>CAS #</i> | <i>Value</i> | <i>Control parameters</i> | <i>Basis</i> | <i>Remarks</i> |
|-------------------|--------------|--------------|--------------------------------|--|--|
| [2H] Aniline | 14545-23-4 | TWAEV | 2 ppm 7.6 mg/m ³ | <u>Canada, Québec:</u> Regulation respecting occupational health and safety, <i>Schedule 1, Part 1</i> : Permissible exposure values for airborne contaminants. | Skin (percutaneous) |
| | | TWA | 2 ppm 7.6 mg/m ³ | <u>Canada, Alberta:</u> Occupational Health and Safety Code (table 2: OEL). | Substance may be readily absorbed through intact skin. |
| | | TWA | 2 ppm | <u>Canada, British Columbia:</u> OEL. | Contributes significantly to the overall exposure by the skin route. |
| | | TWA | 2 ppm | <u>USA:</u> ACGIH Threshold Limit Values (TLV). | |

Exposure control:

Appropriate engineering controls: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment:

- Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- Eye protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

- Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- Body protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
- Specific engineering controls: Use mechanical exhaust or laboratory fumehood to avoid exposure.
- Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance: | Form: | Liquid |
| | Colour: | no data available |
| Safety data: | pH: | no data available |
| | Melting point / Freezing point: | -6 °C (lit.) |
| | Boling point: | 184 °C (lit.) |
| | Flash point: | 70 °C, closed cup (lit.) |
| | Ignition temperature: | no data available |
| | Auto-ignition temperature: | no data available |
| | Lower explosion limit: | no data available |
| | Upper explosion limit: | no data available |
| | Vapour pressure: | no data available |
| | Density: | no data available |
| | Water solubility: | no data available |
| | Partition coefficient: n-octanol/water: | no data available |
| | Relative vapour density: | 1.098 g/mL at 25 °C (lit.) |
| | Odour: | no data available |
| | Odour threshold: | no data available |
| | Evaporation rate: | no data available |

10. STABILITY AND REACTIVITY

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| Chemical stability: | Stable under recommended storage conditions. |
| Reactivity: | no data available |
| Possibility of hazardous reactions: | no data available |

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| Conditions to avoid: | Heat, flames and sparks. |
| Materials to avoid: | Oxidizing agents, acids, bases, iron, aluminum, zinc. |
| Hazardous decomposition products: | Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides. Other decomposition products: no data available. |
| Radioactivity: | Stable isotope compound. Not radioactive. |

11. TOXICOLOGICAL INFORMATION

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| Acute toxicity: | Oral LD50: | no data available |
| | Inhalation LC50: | no data available |
| | Dermal LD50: | no data available |
| | Other information on acute toxicity: | no data available |
| Skin corrosion/irritation: | no data available | |
| Serious eye damage/eye irritation. | no data available | |
| Respiratory or skin sensitization: | no data available | |
| Germ cell mutagenicity: | In vitro tests showed mutagenic effects. | |
| Carcinogenicity: | IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| | ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| Reproductive toxicity: | no data available | |
| Teratogenicity: | no data available | |
| Specific target organ toxicity: | Single exposure (GHS): | no data available |
| | Repeated exposure (GHS): | no data available |
| Potential health effects: | no data available | |
| Possible symptoms: | no data available | |
| Aspiration hazard: | no data available | |
| Synergistic effects: | no data available | |
| Additional information: | RTECS: | no data available |

12. ECOLOGICAL INFORMATION

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|--------------------------------|-------------------|
| Toxicity: | no data available |
| Persistence and degradability: | no data available |
| Bioaccumulative potential: | no data available |
| Mobility in soil: | no data available |

PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Product: This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US): UN number: 1547
Class: 6.1
Packing group: II
Proper shipping name: Aniline
Reportable Quantity (RQ): 5000 lbs
Marine Pollutant: Yes
Poison Inhalation Hazard: No

IMDG: UN number: 1547
Class: 6.1
Packing group: II
EMS-No: F-A, S-A
Proper shipping name: Aniline
Marine Pollutant: Yes

IATA: UN number: 1547
Class: 6.1
Packing group: II
Proper shipping name: Aniline

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. OTHER INFORMATION

Date of the latest revision: 9 December 2020

Further information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Polymer Source, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See www.polymersource.ca for additional terms and conditions of sale.