

Safety Data Sheet

Section 1: Identification

- 1.1. **Product Name:** Aspartate Transaminase Reagent (AST)
- 1.2. **Part Number:** BL241, ST241, AU-241, CC241, DT241
- 1.3. **Application of the substance:** In Vitro Diagnostic Reagent. See product literature for details.
- 1.4. **Manufacturer / Supplier**
 Carolina Liquid Chemistries, Corp.
 510 West Central Avenue, Suite C
 Brea, California, 92821, U.S.A.
 877-722-8910
- 1.5. **Emergency Number**
 Chemtrec (800) 424-9300

Section 2: Hazard(s) Identification

- 2.1. **GHS classification of substance or mixture**
 - 2.1.1. Mixture Physical State: Liquid, Appearance: Clear Odor: Mild
 - 2.1.2. This mixture is not considered hazardous by the 2012 OSHA Hazardous Communication Standard (29CFR 1910.1200).
- 2.2. **GHS label elements**
 - 2.2.1 Non Hazardous
- 2.3. **Other hazards which do not result in classification or are not covered by the GHS.**
 - 2.3.1 Not Applicable

Section 3: Composition/Information on Ingredients

3. **Section: COMPOSITION / INFORMATION ON INGREDIENTS**
 - 3.1 Description: *Aqueous mixture of chemicals for in vitro diagnostic reagent use.*
 - 3.2 Mixture
 - 3.2.1 The chemical identity and concentration or concentration ranges of all ingredients.
 - 3.2.2 All hazardous materials within the meaning of the GHS, but all fall below their OSHA cutoff level

CHEMICAL NAME	CAS NUMBER	EC NUMBER	Weight %
L-Aspartic Acid Sodium Salt, Monohydrate			< 4%
Trisat(R) Hydrochloride Irritating to eyes, respiratory system and skin.	1185-53-1		< 2%
Tris(hydroxymethyl)-aminomethane Skin irritation (Category 2), H315 Serious eye damage (Category 2A), H318	77-86-1		< 1%
α-Ketoglutaric Acid, Disodium Salt GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335	328-50-7		< 1%
Ethylenedinitrilo tetraacetic Acid Disodium This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)	6381-92-6		< 1%
Sodium Azide GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Acute toxicity, Oral (Category 2), H300 Acute toxicity, Dermal (Category 1), H310	26628-22-8	247-852-1	< 1%

Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410			
MDH This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)	Proprietary Information	Proprietary Information	Proprietary Information
LDH This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)	Proprietary Information	Proprietary Information	Proprietary Information

Section 4: First-Aid Measures

- 4.1. **Description of necessary measures:** No special measures required.
- 4.2. **Subdivided according to the different routes of exposure, i.e:**
 - 4.2.1. **Inhalation:** Supply fresh air; if breathing is difficult seek medical attention immediately..
 - 4.2.2. **Skin Contact:** Wash with soap and copious amounts of water for at least 15 minutes. Remove soiled clothing. If pain or irritation occurs, seek medical attention immediately.
 - 4.2.3. **Eye Contact:** Flush eyes with copious amounts of water for at least 15 minutes. If pain or irritation occurs, seek medical attention immediately.
 - 4.2.4. **Ingestion:** Flush out mouth with copious amounts of water for at least 15 minutes if ingested. . If pain or irritation occurs, seek medical attention immediately.
- 4.3. **Most important symptoms/effects, acute and delayed:**
- 4.4. **Indication of immediate medical attention and special treatment needed, if necessary.**

Section 5: Fire-Fighting Measures

- 5.1. **Flammable:** No
- 5.2. **Means of Extinction:** Non Applicable
- 5.3. **Flashpoint (°C) and Method:** Non Applicable
- 5.4. **Upper Flammable Limit (% by volume):** Non Applicable
- 5.5. **Lower Flammable Limit (% by volume):** Non Applicable
- 5.6. **Auto ignition Temperature (°C):** Non Applicable
- 5.7. **Explosion Data – Sensitivity to Impact:** Non Applicable
- 5.8. **Explosion Data – Sensitivity to Discharge:** Non Applicable
- 5.9. **Hazardous Combustion Products:** Non Applicable
- 5.10. **[NFPA]**

Section 6: Accidental Release Measures

Spill Response: Ventilate area. Eliminate ignition sources. Absorb with non-reactive absorbent. After absorption, scoop up into a container for proper disposal. Wash area clean after all material is picked up.

Section 7: Handling and Storage

- 7.1. **Precautions for Safe Handling:** Normal precautions for handling chemicals must be observed.
 - 7.1.1. Observe general safety regulations when handling chemicals.
 - 7.1.2. Avoid contact with the eyes, mucous membranes, and skin.
- 7.2. **Conditions for Safe Storage:** Store in original containers between 2 °C and 8 °C.

Section 8: Exposure Controls/Personal Protection

- 8.1. Control parameters, e.g., occupational exposure limit values or biological limit values.
- 8.2. Appropriate engineering controls.
 - 8.2.1. Local Exhaust: Not Required
- 8.3. Individual protection measures, such as personal protective equipment.
 - 8.3.1. Protection of Body: Lab Coat
 - 8.3.2. Protection of Eyes: Safety Glasses / Goggles
 - 8.3.3. Protection of Feet: Not Established
 - 8.3.4. Protective of Hands: Latex / Natural Rubber (N/R)
 - 8.3.5. Respiratory Protection: Not Established
 - 8.3.6. General Protection and Hygienic Measures:
 - 8.3.6.1. Wash hands before breaks and at the end of work.
 - 8.3.6.2. Adhere to Good Laboratory Practices (GLP).

Section 9: Physical and Chemical Properties

- 1.1. Physical State: Liquid
- 1.2. Colour, etc.: Colourless, transparent
- 1.3. Odor:
- 1.4. Odor Threshold: Not Available
- 1.5. pH:
- 1.6. Melting Point: Not Available
- 1.7. Freezing point: Not Available
- 1.8. Initial Boiling Point: Not Available
- 1.9. Boiling Range: Not Available
- 1.10. Flash Point: Not Available
- 1.11. Evaporation Rate: Not Available
- 1.12. Flammability (solid, gas): Not Available
- 1.13. Upper Flammability: Not Available
- 1.14. Lower Flammability: Not Available
- 1.15. Explosive limits: Not Available
- 1.16. Vapor Pressure: Not Available
- 1.17. Vapor Density: Not Available
- 1.18. Relative Density: Not Available
- 1.19. Solubility (ies): Fully miscible
- 1.20. Partition Coefficient: n-octanol/water: Not Available
- 1.21. Autoignition Temperature: Not Available
- 1.22. Decomposition Temperature: Not Available

Section 10: Stability and Reactivity

AST (GOT) Reagent (Contains Tris Base, Tris HCL and L-Aspartate)
Stability: Stable
Incompatibility: None
Hazardous Polymerization: Will not occur

Section 11: Toxicological Information

- 11.1. **Effects of Acute Exposure:** Toxicological data for this product is not available.
- 11.2. **Effects of Chronic Exposure:** Not Available
- 11.3. **Irritancy of Product:** Not Available
- 11.4. **Skin Sensitization:** Not Available
- 11.5. **Respiratory Sensitization:** Not Available
- 11.6. **Carcinogenicity -IARC:** Not Available
- 11.7. **Carcinogenicity – ACGIH:** Not Available
- 11.8. **Reproductive Toxicity:** Not Available
- 11.9. **Teratogenicity:** Not Available
- 11.10. **Embriotoxicity:** Not Available
- 11.11. **Mutagenicity:** Not Available
- 11.12. **Name of Synergistic Products / Effects:** Not Available
- 11.13. **Additional Toxicological Information:** Hydrolysis of 2-Chloro-4-Nitrophenyl maltorioside produces the end – product 2-Chloro-4-Nitrophenl which may be absorbed through the skin.

Section 12: Ecological Information

12.1 **Ecotoxicity:** No data Available

Section 13: Disposal Considerations

13.1. **Waste Disposal:** To ensure compliance we recommend that you contact the relevant federal, state and local authorities and / or an approved waste- disposal company for information.

Section 14: Transport Information

Transportation of this product is not regulated according to the definition of hazardous in 49 CFR (USDOT).

Section 15: Regulatory Information

The state of California Safe Drinking Water and Toxic Enforcement Act of 1986 (commonly known as Proposition 65) requires the following warning: This product contains a chemical known to the State of California to cause cancer.

Section 16: Other Information

The information published in this Safety Data Sheet has been compiled from experience and data presented in various technical publications. This information should be used as a guide together with other information gathered by the user in the overall evaluation of suitability for use.

**Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15(29 CFR 1910.1200(g)(2)).*