

Product Name: TBARS Parameter Assay Kit, 2 Plate


Reviewed on: 1FEB2022

1. Identification of Substance:

- Other means of identification: Catalog Number: KGE013**
Components: Microplates, TBA Reagent (contains Methanol), Standard, Acid Reagent (contains Trichloroacetic acid).
- GHS product identifier:** TBARS Parameter Assay Kit, 2 Plate
- Application of the substance / the preparation:** For Research Use Only
- Manufacturer/Supplier:**

Bio-Techne - R&D Systems Inc. 614 McKinley Place N.E. Minneapolis, MN 55413 USA Telephone: 1-800-343-7475 Internet: www.rndsystems.com Email: info@bio-techne.com	Canada 461 North Service Rd West Unit B37 Oakville, ON L6M 2V5 Phone: 1-855-668-8722 Email: Canada.inquiries@bio-techne.com	United Kingdom 19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB Phone: 44 (0)1235 529449 Email: Info.emea@bio-techne.com
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- For product related questions call:** 1-800-343-7475. In Europe call: +44(0)1235-529449.
- Emergency information:** In case of a chemical emergency, spill, leak, fire, or accident call **CHEMTREC** at 1-800-424-9300 (US or Canada). Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

2. Hazards Identification:

- Classification: Regulation (EC) No. 1272/2008 (CLP/GHS), 29 CFR 1910.1200 (OSHA): TBARS Acid Reagent**
- Skin Corrosion, 1A
Aquatic Acute 1
Aquatic Chronic 1
STOT SE 3
- 
- Signal Word:** DANGER
- Hazard Statement(s):** H314: Causes severe skin burns and eye damage. H410: Harmful to aquatic life with long lasting effects. H335: May cause respiratory irritation.
- Precautionary Statement(s):** P260: Do not breathe dust or mists. P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. P391: Collect spillage.
- Response:**
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove victim to fresh air and keep comfortable for breathing. Call a POISON CONTROL center or physician if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF EXPOSED: Immediately Call a POISON CONTROL center or physician. See specific treatment in this SDS.
- Classification according to Directive 67/548/EEC:** C: Corrosive. N: Dangerous for the environment.
- R-phrases:** R35: Causes severe burns. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S-phrases:** S1/2: Keep locked up and out of reach of children. S26: In case of contact with eyes, rinse immediately with plenty of water and see medical advice. S36: Wear suitable protective clothing, gloves and eye/face protection. S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible). S60: This material and its container must be disposed of as hazardous waste. S61 Avoid release to the environment. Refer to special instructions/safety data sheet.
- Other Hazards:** Not available.

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3. Information on Ingredients:

Contains	EINECS	CAS No.	Index No.	Content %
Trichloroacetic Acid (TCA)	200-927-2	76-03-9	Not available.	10%

4. First Aid Measures:

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for at least 15 minutes under running water. Then consult a doctor.
- **After swallowing:** Rinse mouth with water. Do NOT induce vomiting. Immediately seek medical attention and appropriate follow-up.

5. Fire Fighting Measures:

- **Suitable extinguishing agents:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- **Specific hazards arising from the chemical:** Not available.
- **Protective equipment:** Wear appropriate protective clothing and a self-contained breathing apparatus if necessary.

6. Accidental Release Measures:

- **Person-related safety precautions:** Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
- **Measures for environmental protection:** Prevent further spillage or leakage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- **Measures for containment and cleaning:** Absorb liquid components with inert liquid-binding material. Pick up mechanically. Dispose contaminated material as waste according to item 13.

7. Handling and Storage:

- **Precautions for safe handling:** Store in a well ventilated place. Keep container tightly closed.
- **Information about protection against explosions and fires:** Normal measures for preventive fire protection.
- **Conditions for safe storage:** Store locked up. Keep container tightly closed in a dry and well ventilated place.

8. Exposure Controls and Personal Protection:

- **Components: Trichloroacetic Acid**
NIOSH REL: Value: TWA 1.0 ppm (7 mg/m³)
- **Appropriate engineering controls:** Follow usual standard laboratory practices. The following personal protection is recommended:
 - Respiratory Protection:** Use respirators and components approved under appropriate government standards.
 - Hand Protection:** Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
 - Eye Protection:** Use equipment for eye protection tested and approved under appropriate government standards.
 - Skin and Body Protection:** Use impervious clothing. 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 the workday.

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9. Physical and Chemical Properties:

- **Appearance:** Clear liquid.
- **Odor:** Pungent, sharp odor.
- **Odor threshold:** Not available.
- **pH:** Not available.
- **Melting point/freezing point:** Not available.
- **Boiling point/Boiling range:** Not available.
- **Flash point:** Not available.
- **Evaporation rate:** Not available.
- **Flammability:** Not available.
- **Upper/lower flammability or explosive limits:** Not available.
- **Vapor pressure/density:** Not available.
- **Relative Density:** Not available.
- **Solubility in/Miscibility with Water:** Not available.
- **Partition coefficient: noctanol/water:** Not available
- **Auto igniting:** Product is not self igniting.
- **Decomposition temperature:** Not available.
- **Viscosity:** Not available.

10. Stability and Reactivity:

- **Reactivity:** Reacts with moisture, iron, zinc, aluminum, strong oxidizers.
- **Chemical Stability:** Stable under normal ambient and storage and handling temperatures.
- **Thermal:** Decomposes on heating to form phosgene and hydrogen chloride.
- **Incompatible materials to be avoided:** Metals and metallic compounds.
- **Hazardous decomposition products:** Hazardous decompositions formed under fire conditions, Hydrogen chloride gas, carbon monoxide and carbon dioxide.

11. Toxicological Information:

- **Acute toxicity:** Oral LD50: 3310 – 6900 mg/kg (rat); 4970 mg/kg (mouse).
Inhalation LD50: >4800 ppm (rat).
Skin LD50: >2000 mg/kg (rat).
- **Skin corrosion / irritation:** May cause skin irritation, burns, or dermatitis.
- **Serious eye damage / irritation:** May cause eye irritation, burns.
- **Respiratory or skin sensitization:** Cough, dyspnea (breathing difficulty, delayed pulmonary edema).
- **Germ cell mutagenicity:** Not available.
- **Carcinogenicity:** Not available.
- **Reproductive toxicity:** Not available.
- **STOT-single exposure:** Not available.
- **STOT-repeated exposure:** Not available.
- **Aspiration hazard:** May be harmful if inhaled. May cause respiratory tract irritation.
- **Additional Information:** RTECS: AJ7875000

12. Ecological Information:

- **Ecotoxicity:** Harmful to aquatic life. LC50, 96 Hrs, Fish *Pimephales promelas* - 2000 mg/L; EC50, 48 Hrs, *Daphnia magna* - 2000 mg/L.
- **Persistence and degradability:** Non-biodegradable.
- **Bioaccumulative potential:** Low bioaccumulation potential for fish; high bioaccumulation potential for plants.
- **Mobility in soil:** Not available.
- **Other adverse effects:** Not available.

13. Disposal Considerations:

- **Disposal methods:** Dispose of waste in accordance to applicable national, regional, or local regulations.
- **Contaminated packaging:** Dispose in the same manner as unused product.

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- **Special precautions:** Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilt material to soil, waterways, drains and sewers.

14. Transport Information:

▪ ADR/RID ADN/ADNR IMDG IATA/DOT

ADR/DOT/:	UN Number:	UN2564
	Proper Shipping Name:	Trichloroacetic Acid Solution
	Hazard class:	8
	Packing group:	II
IATA:	UN Number:	UN2564
	Proper Shipping Name:	Trichloroacetic Acid Solution
	Hazard class:	8
	Packing group:	II
IMDG:	UN Number:	UN2564
	Proper Shipping Name:	Trichloroacetic Acid Solution
	Hazard class:	8
	Packing group:	II
	Marine Pollutant:	Yes

15. Regulations:


▪ US Federal and State Regulations

TSCA (Toxic Substances Control Act): Trichloroacetic acid is listed.

SARA 313: Not available.

SARA 311/312 Hazards: Not available.

CERCLA Reportable Quantity: Not available.

California Proposition 65:  **WARNING:** This product can expose you to chemicals including Trichloroacetic acid, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

16. Other Information:

- **Notice to reader:** To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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2. Hazards Identification:

- **TBARS Standard**
- **Classification:** Not hazardous at concentration
- **Other Hazards:** Not available.

3. Information on Ingredients:

Contains	EINECS	CAS No.	Index No.	Content %
Methanol	200-659-6	67-56-1	Not available.	>1%

4. First Aid Measures:

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for at least 15 minutes under running water. Then consult a doctor.
- **After swallowing:** Rinse mouth with water. Do NOT induce vomiting. Immediately seek medical attention and appropriate follow-up.

5. Fire Fighting Measures:

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9. Physical and Chemical Properties:

- | | |
|---|---|
| ▪ Appearance: Clear liquid. | Upper/lower flammability or explosive limits: Not available. |
| ▪ Odor: Pungent, sharp odor. | Vapor pressure/density: Not available. |
| ▪ Odor threshold: Not available. | Relative Density: Not available. |
| ▪ pH: Not available. | Solubility in/Miscibility with Water: Not available. |
| ▪ Melting point/freezing point: Not available. | Partition coefficient: noctanol/water: Not available |
| ▪ Boiling point/Boiling range: Not available. | Auto igniting: Product is not self igniting. |
| ▪ Flash point: Not available. | Decomposition temperature: Not available. |
| ▪ Evaporation rate: Not available. | Viscosity: Not available. |
| ▪ Flammability: Not available. | |

10. Stability and Reactivity:

- **Reactivity:** Reacts with moisture, iron, zinc, aluminum, strong oxidizers.
- **Chemical Stability:** Stable under normal ambient and storage and handling temperatures.
- **Thermal:** Decomposes on heating to form phosgene and hydrogen chloride.
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14. Transport Information:

▪ ADR/RID ADN/ADNR IMDG IATA/DOT


ADR/DOT/: UN Number: Not Regulated
Proper Shipping Name:
Hazard class:
Packing group:

IATA: UN Number: Not Regulated
Proper Shipping Name:
Hazard class:
Packing group:

IMDG: UN Number:
Proper Shipping Name: Not Regulated
Hazard class:
Packing group:
Marine Pollutant:

15. Regulations:

- **US Federal and State Regulations**
TSCA (Toxic Substances Control Act): Methanol is listed.
SARA 313: Not available.
SARA 311/312 Hazards: Not available.
CERCLA Reportable Quantity: Not available.

California Proposition 65:  **WARNING:** This product can expose you to chemicals including Methanol, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

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