# 1. Identification

## 1.1. Product identifier

<table>
<thead>
<tr>
<th>Description</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Identity</td>
<td>AC-32</td>
</tr>
<tr>
<td>Alternate Names</td>
<td>AC-32</td>
</tr>
</tbody>
</table>

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use**: 1,2,4-benzenetricarboxylic acid, ester with 1,2,3-propanetriol for industrial use.

**Application Method**: See Technical Data Sheet.

## 1.3. Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Description</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>Broadview Technologies</td>
</tr>
<tr>
<td></td>
<td>7-33 Amsterdam Street</td>
</tr>
<tr>
<td></td>
<td>Newark, NJ 07105</td>
</tr>
</tbody>
</table>

**Emergency**

<table>
<thead>
<tr>
<th>Description</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMTREC (USA)</td>
<td>(800) 424-9300</td>
</tr>
<tr>
<td>Customer Service</td>
<td>(973)-465-0077</td>
</tr>
</tbody>
</table>

# 2. Hazard(s) identification

## 2.1. Classification of the substance or mixture

No applicable GHS categories.

## 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

No applicable GHS categories.

**[Prevention]**: No GHS prevention statements

**[Response]**: No GHS response statements

**[Storage]**: No GHS storage statements

**[Disposal]**: No GHS disposal statements
3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene-1,2,4-tricarboxylic acid - propane-1,2,3-triol</td>
<td>100</td>
<td>Not Classified</td>
<td>[1]</td>
</tr>
</tbody>
</table>

CAS Number: 0071243-42-0

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes
Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion
If swallowed, immediately give 3-4 glasses of water. DO NOT induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Have physician determine if patient’s condition allows induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

4.2. Most important symptoms and effects, both acute and delayed

Overview
No specific symptom data available.

5. Fire-fighting measures

5.1. Extinguishing media
Foam, carbon dioxide, dry chemical, water.
5.2. Special hazards arising from the substance or mixture
For non-emergency personnel: Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.
For emergency responders: Caution! If spilled, wet floors may become slippery. Wear appropriate protective gear and respiratory protection where dusts or airborne particulates of unknown concentrations may be generated (self-contained breathing apparatus preferred for large spills).
Hazardous decomposition: The combustion products are toxic. As with most powdered organic compounds, dust explosions may be possible.
Thermal decomposition may produce toxic organic vapors/fumes and oxides of carbon.

5.3. Advice for fire-fighters
Firefighting personnel must wear NIOSHJ/MSHA approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.
Wear full protective clothing and self-contained breathing apparatus. Cool fire exposed containers with water spray. If water must be used, use a fog nozzle to avoid spattering of hot material and spread of burning liquid.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment (see section 8).
For non-emergency personnel: Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.
For emergency responders: Caution! If spilled, wet floors may become slippery. Wear appropriate protective gear and respiratory protection where dusts or airborne particulates of unknown concentrations may be generated (self-contained breathing apparatus preferred for large spills).

6.2. Environmental precautions
Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
For non-emergency personnel: Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.
For emergency responders: Caution! If spilled, wet floors may become slippery. Wear appropriate protective gear and respiratory protection where dusts or airborne particulates of unknown concentrations may be generated (self-contained breathing apparatus preferred for large spills).
Shovel spills into appropriate containers for recovery or disposal. Wet residue with water and absorb with inert material (sand, earth, etc.) and transfer into appropriate containers for recovery or disposal. Keep spill out of sewers and open bodies of water.
7. Handling and storage

7.1. Precautions for safe handling
Observe conventional hygiene precautions.
Keep containers tightly closed until used.

7.2. Conditions for safe storage, including any incompatibilities
Keep Containers tightly closed until used.
Follow all instructions on the label.
Incompatible materials: Bases, oxidizing agents.

7.3. Specific end use(s)
No data available.

8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0071243-42-0</td>
<td>Benzene-1,2,4-tricarboxylic acid - propane-1,2,3-triol</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Respiratory
In processes where mists or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices. In the absence of proper environmental controls, a NIOSH/MSHA jointly approved respirator is advised.

Eyes
Wear chemical goggles where there is potential for eye contact. Use safety glasses with side shields under normal use conditions.

Skin
To prevent skin contact, rubber or neoprene gloves are recommended.

Engineering Controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices
Eye wash stations, safety showers, and protective clothing should be provided to all workers. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.
9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Not Provided. Solid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>ca. 90°C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>ca. 180°C</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td><strong>Lower Explosive Limit</strong>: Not Measured</td>
</tr>
<tr>
<td></td>
<td><strong>Upper Explosive Limit</strong>: Not Measured</td>
</tr>
<tr>
<td>Vapor pressure (Pa)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Slightly soluble in water (it hydrolyzes).</td>
</tr>
<tr>
<td><strong>Partition coefficient n-octanol/water (Log Kow)</strong></td>
<td>Not Measured</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>VOC Content</td>
<td>Nil</td>
</tr>
<tr>
<td>9.2. Other information</td>
<td>No other relevant information.</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
No data available.

10.5. Incompatible materials
Bases, oxidizing agents.
10.6. Hazardous decomposition products
The combustion products are toxic. As with most powdered organic compounds, dust explosions may be possible. Thermal decomposition may produce toxic organic vapors/fumes and oxides of carbon.

11. Toxicological information

Acute toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LC50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LC50, mg/L/4hr</th>
<th>Inhalation Gas LC50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene-1,2,4-tricarboxylic acid - propane-1,2,3-triol - (71243-42-0)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product’s ATE (Acute Toxicity Estimate).

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
<th>Hazard Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Carcinogen Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0071243-42-0</td>
<td>Benzene-1,2,4-tricarboxylic acid - propane-1,2,3-triol</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
</tbody>
</table>
12. Ecological information

12.1. Toxicity
No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustaeae, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene-1,2,4-tricarboxylic acid - propane-1,2,3-triol - (71243-42-0)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.

13. Disposal considerations

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

14.1. UN number
DOT (Domestic Surface Transportation)
Not Applicable

14.2. UN proper shipping name
IMO / IMDG (Ocean Transportation)
Not Regulated

14.3. Transport hazard class(es)
ICAO/IATA
Not Regulated

14.4. Packing group
DOT Hazard Class: Not Applicable
Not Applicable

14.5. Environmental hazards
DOT
Marine Pollutant: No;

14.6. Special precautions for user
No further information
15. Regulatory information

Regulatory Overview  The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)  All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification  Not Regulated

US EPA Tier II Hazards  
- **Fire**: No
- **Sudden Release of Pressure**: No
- **Reactive**: No
- **Immediate (Acute)**: No
- **Delayed (Chronic)**: No

EPCRA 311/312 Chemicals and RQs:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%)**:
- Benzene
- Benzene, (chloromethyl)-

**Proposition 65 - Developmental Toxins (>0.0%)**:
- Benzene
- Toluene

**Proposition 65 - Female Repro Toxins (>0.0%)**:
- Toluene

**Proposition 65 - Male Repro Toxins (>0.0%)**:
- Benzene

**New Jersey RTK Substances (>1%)**: 
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Pennsylvania RTK Substances (>1%)**: 
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is: Not applicable

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