1. PRODUCT AND COMPANY IDENTIFICATION

Product Name  
CHES

Cat No.  
BP318-100; BP2934-100

Synonyms  
2-(Cyclohexylamino)ethanesulfonic acid (JustPURE™)

Recommended Use  
Laboratory chemicals

Company  
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number  
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 703-527-3887

2. HAZARDS IDENTIFICATION

WARNING!  
Irritating to eyes, respiratory system and skin.

Emergency Overview  
Irritating to eyes, respiratory system and skin.

Appearance  
White

Physical State  
Solid

odor  
odorless

Target Organs  
Eyes

Potential Health Effects

Acute Effects  
Irritating to eyes.

Principle Routes of Exposure

Eyes  
Irritating to eyes.

Skin  
Irritating to skin. May be harmful in contact with skin.

Inhalation  
Irritating to respiratory system. May be harmful if inhaled.

Ingestion  
May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects  
None known.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions  
No information available.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Haz/Non-haz</th>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
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<tbody>
<tr>
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<td>2-(Cyclohexylamino)ethanesulfonic acid</td>
<td>103-47-9</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye Contact  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact  
Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

Inhalation  
Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

Ingestion  
Do not induce vomiting. Obtain medical attention.

Notes to Physician  
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point  
No information available.

Method  
No information available.

Autoignition Temperature  
No information available.

Explosion Limits  
Upper  
No data available

Lower  
No data available

Suitable Extinguishing Media  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media  
No information available.

Hazardous Combustion Products  
No information available.

Sensitivity to mechanical impact  
No information available.

Sensitivity to static discharge  
No information available.

Specific Hazards Arising from the Chemical  
Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions for Firefighters  
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

NFPA  
Health 2  Flammability 0  Instability 0  Physical hazards N/A

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions  
Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.
Environmental Precautions
Should not be released into the environment.

Methods for Containment and Clean Up
Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Handling
Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothing.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures
Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin and body protection
Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical State | Solid |
| Appearance     | White |
| odor           | odorless |
| Odor Threshold | No information available. |
| pH             | No information available. |
| Vapor Pressure | No information available. |
| Vapor Density  | No information available. |
| Viscosity      | No information available. |
| Boiling Point/Range | No information available. |
| Melting Point/Range | 300°C / 572°F |
| Decomposition temperature | No information available. |
| Flash Point    | No information available. |
| Evaporation Rate | No information available. |
| Specific Gravity | No information available. |
| Solubility     | Soluble in water |
| log Pow        | No data available |
| Molecular Weight | 207.29 |
| Molecular Formula | C8H17NO3S |
## 10. STABILITY AND REACTIVITY

### Stability

**Hygroscopic.**

### Conditions to Avoid

Avoid dust formation. Incompatible products. Excess heat. Exposure to moist air or water.

### Incompatible Materials

Strong oxidizing agents

### Hazardous Decomposition Products

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NOₓ), Sulfur oxides

### Hazardous Polymerization

Hazardous polymerization does not occur

### Hazardous Reactions

None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information**

No acute toxicity information is available for this product

**Component Information**

**Irritation**

Irritating to eyes, respiratory system and skin

**Toxicologically Synergistic Products**

No information available.

### Chronic Toxicity

**Carcinogenicity**

There are no known carcinogenic chemicals in this product

**Sensitization**

No information available.

**Mutagenic Effects**

No information available.

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Teratogenicity**

No information available.

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

**Endocrine Disruptor Information**

No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity
12. ECOLOGICAL INFORMATION

Do not empty into drains.

Persistence and Degradability
No information available

Bioaccumulation/ Accumulation
No information available

Mobility
No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT
Not regulated

TDG
Not regulated

IATA
Not regulated

IMDG/IMO
Not regulated

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>CHINA</th>
<th>KECL</th>
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<tr>
<td>2-(Cyclohexylamino)ethanesulfonic acid</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>203-115-6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)  Not applicable

SARA 313
Not applicable

SARA 311/312 Hazardous Categorization

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
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<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

Clean Water Act
Not applicable

Clean Air Act
Not applicable

OSHA
Not applicable

CERCLA
Not Applicable

California Proposition 65
This product does not contain any Proposition 65 chemicals.

State Right-to-Know
Not applicable

U.S. Department of Transportation
Reportable Quantity (RQ): N
DOT Marine Pollutant: N
DOT Severe Marine Pollutant: N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade
No information available

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
D2B  Toxic materials
16. OTHER INFORMATION

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Tel: (412) 490-8929

Creation Date
04-Mar-2010

Print Date
30-Mar-2010

Revision Summary
"***", and red text indicates revision

Disclaimer
The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS