Section 1 - Product and Company Information

Product Name              ACID BLUE 45
Product Number            A5524
Brand                     SIGMA

Company                   Sigma-Aldrich
Street Address            3050 Spruce Street
City, State, Zip, Country SAINT LOUIS MO 63103 US
Technical Phone:          314 771 5765
Emergency Phone:          414 273 3850 Ext. 5996
Fax:                      800 325 5052

Section 2 - Composition/Information on Ingredient

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
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<tbody>
<tr>
<td>ACID BLUE 45</td>
<td>2861-02-1</td>
<td>No</td>
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</table>

Formula: C14H10N2O10S2.2Na
Synonyms:
- Acid Alizarine Sapphire B, Acid Blue 45,
- Acid Leather Blue CB, Acilan sapphirol B,
- Airedale Blue B, Alizarine Blue BV,
- Alizarine Blue MB, Alizarine Blue SAP-CF,
- Alizarine Blue SAPR-CF,
- Alizarine Blue SAP Special CF,
- Alizarine Brilliant Blue 2BS,
- Alizarine Brilliant Blue G, Alizarine Light Blue B,
- Alizarine Light Blue BN, Alizarine Paper Blue BP,
- Alizarine sapphirol B, Alizarine sapphire,
- Alizarine Sapphire BLN, Alizarine sapphire BN,
- Alizarine sapphirol B, Anthraquinone Blue B,
- Anthraquinone Blue BN, Anthraquinone Blue BP,
- Bucacid Blue BL, Calcocid Alizarine Blue SAPB,
- C.I. 63010, C.I. Acid Blue 45, Eloxon Blue RL,
- Erio Cyanine S, Ext D and C Blue No. 4,
- Fast Bond Blue GDS, Fenazo Light Blue,
- Kiton Fast Blue CB, Mitsui Alizarine Saphirol B,
- Oxanil Fast Blue CB, Quinizol Blue BP,
- Tetracid Light Blue B, Vondacid Light Blue BG,
- Vondacid Light Blue BN

RTECS Number: CB0548500

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Caution: Avoid contact and inhalation.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT
N/A

AUTOIGNITION TEMP
N/A

FLAMMABILITY
N/A

EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING
User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE
Suitable: Keep tightly closed. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Safety shower and eye bath. Mechanical exhaust required.
PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
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<tr>
<td>Molecular Weight</td>
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<tr>
<td>pH</td>
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<tr>
<td>BP/BP Range</td>
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<td>Freezing Point</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
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<td>Saturated Vapor Conc.</td>
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<td>Volatile%</td>
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<tr>
<td>Water Content</td>
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<tr>
<td>Solvent Content</td>
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<td>Decomposition Temp.</td>
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<td>Miscellaneous Data</td>
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<tr>
<td>Solubility</td>
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</tbody>
</table>

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Stable: Stable.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides, Sodium/sodium oxides.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Eye Contact: May cause eye irritation.
Inhalation: Material may be irritating to mucous membranes and
upper respiratory tract. Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Intraperitoneal
Rat
1300 MG/KG
LD50

Oral
Mouse
2900 mg/kg
LD50

Section 12 - Ecological Information
No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

US CLASSIFICATION AND LABEL TEXT
US Statements: Caution: Avoid contact and inhalation.

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No
TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

DISCLAIMER
WARRANTY

The above information is believed to be correct but does not
purport to be all inclusive and shall be used only as a guide.
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