

SAFETY DATA SHEET

Preparation Date: 9/10/2015

Revision date 03/21/2019

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: DI117
Product Name: DIETHYLAMINE, REAGENT

Other means of identification

Synonyms: DEN
 Diethamine
 N,N-Diethylamine
 N-Ethylethanamine
CAS #: 109-89-7
RTECS # HZ8750000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Corrosion inhibitor. In pharmaceuticals. Laboratory reagent. Research and Development.

Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300

Contact Person: Tom Tyner (USA - West Coast)

Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Gases)	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Flammable liquids	Category 2

Label elements

Danger

Hazard statements

Harmful if swallowed or if inhaled
Toxic in contact with skin
Causes severe skin burns and eye damage
Highly flammable liquid and vapor

**Hazards not otherwise classified (HNOC)**

Not Applicable

Other hazards

May be harmful if inhaled
Harmful to aquatic life with long lasting effects
Harmful to aquatic life

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/.../equipment
Use only non-sparking tools
Take precautionary measures against static discharge

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
In case of fire: Use CO₂, dry chemical, or foam to extinguish.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Diethylamine	109-89-7	100

4. FIRST AID MEASURES

First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.
- Skin Contact:** Toxic in contact with skin. Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
- Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.
- Inhalation:** Harmful by inhalation. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
- Ingestion:** Harmful if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

- Symptoms**
- Toxic in contact with skin
 - Harmful if swallowed or if inhaled
 - Causes severe skin burns and eye damage
 - Ingestion causes burns of the upper digestive and respiratory tracts
 - Irritating to mucous membranes
 - Laryngitis
 - May cause inflammation and edema of the larynx and bronchi
 - Coughing and wheezing
 - Dyspnea (Difficulty breathing and shortness of breath)
 - May cause nausea, headache, vomiting
 - Lacrimation
 - May cause chemical pneumonitis
 - May cause pulmonary edema
 - Burning pain in the mouth, throat, esophagus, stomach. Ulceration/burning of the mouth, throat, esophagus, stomach
 - May affect eyes/vision
 - May cause bronchitis
 - Can cause lung irritation
 - May affect the liver (hepatotoxin)
 - It may affect the kidneys

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:

Water spray. Dry chemical. Carbon dioxide (CO₂). Alcohol-resistant foam.

Unsuitable Extinguishing Media:

Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous combustion products

Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

Specific hazards

Flammable. May be ignited by heat, sparks or flames. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Container explosion may occur under fire conditions or when heated. Fire may produce irritating, corrosive and/or toxic gases.

Special Protective Actions for Firefighters

Specific Methods:

Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

Special Protective Equipment for Firefighters:

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas. Do not let this chemical enter the environment.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Dilute with water. Neutralize with a dilute solution of acetic acid. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Oxidizing agents
Acids
Aldehydes
Alcohols
dicyanofurazan
Ketones
Phenols
halogenated hydrocarbons
epoxides

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Diethylamine	109-89-7	25 ppm TWA 75 mg/m ³ TWA	10 ppm TWA 30 mg/m ³ TWA 25 ppm STEL 75 mg/m ³ STEL	15 ppm STEL 5 ppm TWA	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Diethylamine	109-89-7	5 ppm TWA 15 mg/m ³ TWA 15 ppm STEL 45 mg/m ³ STEL	5 ppm TWA 15 ppm STEL	15 ppm STEL	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Diethylamine	109-89-7	25 ppm STEL 75 mg/m ³ STEL 10 ppm TWA 30 mg/m ³ TWA	5 ppm TWA 15 ppm STEL

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Face-shield.

Skin and body protection: Chemical resistant protective suit
Boots
Gloves

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Liquid

Appearance:
Clear.

Color:
Colorless.

Odor:
Ammonia-like. Fishy.

Taste
No information available.

Formula
C₄H₁₁N

Product code: DI117

Product name: DIETHYLAMINE,
REAGENT

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Molecular/Formula weight (g/mole): 73.14 g/mol	Flammability (solid, gas) no data available	Flashpoint (°C/°F): -28°C/-18°F -18°C/0°F
Flash Point Tested according to: Open cup Closed cup	Autoignition Temperature (°C/°F): 312°C/593°F	Lower Explosion Limit (%): 1.8%
Upper Explosion Limit (%): 10.1%	Melting point/range(°C/°F): -50°C/-58°F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 55.5°C/132°F	Bulk density: No information available	Density (g/cm3): 0.707
Specific gravity: No information available	pH 13 (10%)	Vapor pressure @ 20°C (kPa): 25.9
Evaporation rate: 16.9	Vapor density: 2.53	VOC content (g/L): No information available
Odor threshold (ppm): 0.02 ppm (low) 14 ppm (high)	Partition coefficient (n-octanol/water): 0.58	Viscosity: No information available
Miscibility: Miscible with water Miscible with Ethanol	Solubility: Soluble in Water Soluble in Ether Soluble in carbon tetrachloride Soluble in Chloroform Soluble in hydrocarbons Soluble in n-octanol	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents
Attacks some plastics, rubber, and coatings.
Reactive with acids

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat, flames and sparks. Ignition sources. Incompatible materials.

Incompatible Materials: Oxidizing agents
Acids
Aldehydes
Alcohols
dicyanofurazan
Ketones
Phenols
halogenated hydrocarbons
epoxides

Hazardous decomposition products: Carbon oxides. Nitrogen oxides (NOx).

Other Information**Corrosivity:** Will attack some forms of plastic, rubber, and coatings**Special Remarks on Corrosivity:** No information available**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Principal Routes of Exposure:**

Ingestion. Inhalation. Skin.

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Component Information

Diethylamine	
CAS No	109-89-7

LD50/oral/rat = 540 mg/kg Oral LD50 (RTECS)= 248 mg/kg Oral LD50 Rat(Loli)**LD50/oral/mouse** = 500 mg/kg oral LD50 mouse**LD50/dermal/rabbit** = 580 mg/kg Dermal LD50 Rabbit (RTECS)**LD50/dermal/rat** = 582 mg/kg Dermal LD50**LC50/inhalation/rat** = 12.1 mg/L Inhalation LC50 Rat 4 h

4000 ppm inhalation LC50 rat 4h

LC50/inhalation/mouse = 3 g/m³ Inhalation LC50 Mouse**Other LD50 or LC50 information** = No information available**Product Information****LD50/oral/rat =****Value - Acute Tox** = 540 mg/kg**LD50/oral/mouse =****Value - Acute Tox Oral** = 500 mg/kg**LD50/dermal/rabbit****Value - Acute Tox** = 580 mg/kg**LD50/dermal/rat****VALUE - Acute Tox Dermal** = 582 mg/kg**LC50/inhalation/rat****VALUE-Vapor** = 4000 ppm**VALUE-Gas** = No information available**VALUE-Dust/Mist** = No information available**LC50/Inhalation/mouse****VALUE-Vapor** = 3 g/m³**VALUE - Gas** = No information available**VALUE - Dust/Mist** = No information available**Symptoms****Skin Contact:**

Toxic in contact with skin. Causes skin burns. May cause burning or stinging sensation, redness of the skin, inflammation of the skin. Necrosis of the skin. It

may affect the liver if absorbed through the skin.

Eye Contact: Causes eye burns. May cause blurred or foggy vision. May cause lachrymation.

Inhalation Harmful by inhalation. It may cause pulmonary edema. May cause pulmonary edema, inflammation, edema of bronchi and larynx. May cause bronchitis. May cause chemical pneumonitis. Causes upper respiratory tract and mucous membrane irritation. Symptoms may include cough and hoarseness. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting.

Ingestion Causes gastrointestinal tract irritation and burns. Symptoms may include nausea, vomiting, abdominal pain. Corrosive to the mouth, throat, and stomach.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Repeated exposure may cause bronchitis to develop with cough, phlegm, and /or shortness of breath. Chronic exposure may affect the liver and kidneys.

Sensitization: No information available.

Mutagenic Effects: Mutations in microorganisms

Carcinogenic effects: Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Diethylamine	109-89-7	Not listed	A4 Not Classifiable as a Human Carcinogen	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organs: Liver. Kidneys. Lungs. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Diethylamine - 109-89-7

Algae/aquatic plants

Fish

20 mg/L EC50 Pseudokirchneriella subcapitata 96 h
100 - 180 mg/L LC50 Poecilia reticulata 96 h semi-static
25 mg/L LC50 Oncorhynchus mykiss 96 h
855 mg/L LC50 Pimephales promelas 96 h flow-through 1
27 mg/KL LC50 Oryzias latipes 96h
Crustacea
100 mg/L EC50 Daphnia magna 48 h
4.6 mg/L EC50 Ceriodaphnia dubia 48h semi static
161-168 mg/L EC50 Daphnia magna 24h

Toxicity to microorganisms	47 mg/L LC50 Pseudomonas putida 17h
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Persistence and degradability: Readily biodegradable

Bioaccumulative potential: An estimated Biocentration Factor (BCF) value of 3. Potential for bioconcentration in aquatic organisms is low.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal Do not re-use empty containers
Dispose of as unused product.

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Diethylamine	109-89-7	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1154
Proper Shipping Name: Diethylamine
Hazard Class 3
Subsidiary Class 8
Packing group: II
Emergency Response Guide Number 132
Marine Pollutant Severe Marine Pollutant
DOT RQ (lbs): No information available
Special Provisions A3, IB2, N34, T7, TP1
Symbol(s): [DOT]: (R3) - Identifies a material that is a hazardous substance that has a reportable quantity (RQ) of 100 pounds (45.4 Kilograms).
Description: UN1154, Diethylamine, 3 (8), II

TDG (Canada)

Product code: DI117

Product name: DIETHYLAMINE,
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UN-No: UN1154
Proper Shipping Name: Diethylamine
Hazard Class 3
Subsidiary Risk: (8)
Packing Group: II
Marine Pollutant No Information available
Description: UN1154, Diethylamine, 3 (8), II

ADR

UN Number UN1154
Proper Shipping Name: Diethylamine
Transport hazard class(es) 3
Packing group II
Subsidiary Risk: 8
Description: UN1154, Diethylamine, 3 (8), II

IMDG

UN-No: UN1154
Proper Shipping Name: Diethylamine
Hazard Class: 3
Subsidiary Risk: 8
Packing Group: II
Marine Pollutant No information available
EMS: F-E
Description UN1154, Diethylamine, 3 (8), II

RID

UN Number UN1154
Proper Shipping Name: Diethylamine
Transport hazard class(es) 3
Subsidiary Risk: 8
Packing group II
Description: UN1154, Diethylamine, 3 (8), II

ICAO (air)

UN-No: UN1154
Proper Shipping Name: Diethylamine
Hazard Class 3
Subsidiary Risk: 8
Packing Group: II
Description: UN1154, Diethylamine, 3 (8), II

IATA

UN Number UN1154
Proper Shipping Name: Diethylamine
Transport hazard class(es) 3
Subsidiary Risk: 8
Packing group II
Precautionary Statements - Response 3CH
Special Provisions No information available
Description: UN1154, Diethylamine, 3 (8), II

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Diethylamine	109-89-7	PresentACTIVE	Present KE-13688	Present	Present (2)-135	Present	Present	Present 203-716-3

U.S. Regulations

Diethylamine

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0690
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
New Jersey TCPA - EHS: 9600lbTQ
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List Present
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances:
 1000 lb RQ
 1 lb RQ
Louisiana Reportable Quantity List for Pollutants: 100 lb final RQ
 45.4 kg final RQ
 5000 lb RQ
California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Diethylamine	109-89-7	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Diethylamine	109-89-7	100 lb final RQ 45.4 kg final RQ	None	None	None	None

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Diethylamine	109-89-7	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
 Diethylamine
 109-89-7 (100)

WHMIS 2015 Hazard Classification
 Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Acute toxicity - Oral - Category 4: H302 Harmful if swallowed.; Acute toxicity - Dermal - Category 3: H311 Toxic in

contact with skin.; Acute toxicity - Inhalation - Category 4: H332 Harmful if inhaled.; Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Diethylamine	109-89-7	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Diethylamine	109-89-7	Present
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Diethylamine	109-89-7	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Diethylamine	109-89-7	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.; Acute toxicity - Oral - Acute Tox. 4: H302 Harmful if swallowed. (Minimum classification); Acute toxicity - Dermal - Acute Tox. 4: H312 Harmful in contact with skin. (Minimum classification); Acute toxicity - Inhalation - Acute Tox. 4: H332 Harmful if inhaled. (Minimum classification); Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage.612-003-00-X Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation. (C >= 1 %)612-003-00-X

EU - CLP (1272/2008)

R-phrase(s)

R11 - Highly flammable
 R35 - Causes severe burns
 R24 - Toxic in contact with skin
 R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

S -phrase(s)

S 3 - Keep in a cool place.
 S16 - Keep away from sources of ignition - No smoking
 S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
 S28 - After contact with skin, wash immediately with plenty of water
 S29 - Do not empty into drains
 S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label
 S63 - In case of accident by inhalation: remove casualty to fresh air and keep at rest
 S 1/2 - Keep locked up and out of the reach of children.
 S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Diethylamine	109-89-7	F; R11 Xn; R20/21/22 C; R35	10%≤C C; R35 5%≤C<10% C; R34 1%≤C<5% Xi; R36/37/38	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

F - Highly flammable
 T - Toxic
 C - Corrosive
 Xn - Harmful



16. OTHER INFORMATION

Preparation Date: 9/10/2015
 Revision date 03/21/2019
 Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet