

## SAFETY DATA SHEET

Preparation Date: 08/01/2019

Revision date 08/01/2019

Revision Number: G1

### 1. IDENTIFICATION

#### Product identifier

**Product code:** D3787  
**Product Name:** DECYLAMINE

#### Other means of identification

**Synonyms:** 1-Aminodecane  
 1-Decamine  
 n-Decylamine  
 Kemamine P 190D  
 1-Decylamine  
 Monodecylamine  
**CAS #:** 2016-57-1  
**RTECS #** HD6475000  
**Cl#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** Pesticide. Research and Development. Laboratory chemicals.  
**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 3
Acute toxicity - Dermal	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

#### Label elements

**Danger**

#### **Hazard statements**

Toxic if swallowed or in contact with skin

Causes severe skin burns and eye damage



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

May be harmful if inhaled

**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  
Do not breathe mist or vapors

**Precautionary Statements - Response**

*Immediately call a POISON CENTER or physician*  
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 physician.  
Call a POISON CENTER or 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  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician.  
IF SWALLOWED: Immediately call a POISON CENTER or physician  
Rinse mouth  
Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight-%
Decylamine	2016-57-1	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 center immediately.

**Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

**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. Get medical attention.

**Ingestion:** Toxic 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**

<b>Symptoms</b>	Causes severe skin burns Causes eye damage Corrosive to the eyes and may cause severe damage including blindness Corrosive to the mucous membranes May cause chemical burns to the respiratory tract Possible corrosion and tissue destruction of the esophagus and digestive tract May cause inflammation of the lungs (pneumonitis) May cause build-up of fluid in the lungs (pulmonary edema) May cause coughing and shortness of breath May cause nausea and headache
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#### **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:** Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray mist, or 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 (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).

**Specific hazards** May be ignited by heat, sparks or flames.

### **Special Protective Actions for Firefighters**

<b>Specific Methods:</b>	No information available
<b>Special Protective Equipment for Firefighters:</b>	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. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water. Prevent product from entering drains. 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. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. 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:**

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Use only in well-ventilated areas. Keep away from open flames, hot surfaces 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 in a segregated and approved area. Store at room temperature in the original container. Store away from incompatible materials. Keep away from heat and sources of ignition.

**Incompatible Materials:**

Acids  
Acid anhydrides  
Acid chlorides  
Strong oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

### **National occupational exposure limits**

## United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Decylamine	2016-57-1	None	None	None	None

## Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Decylamine	2016-57-1	None	None	None	None

## Australia and Mexico

Component	CAS No	Australia	Mexico
Decylamine	2016-57-1	None	None

## 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:** Boots  
Chemical resistant apron  
Gloves  
Long sleeved clothing

**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:

Amine-like.

### Taste

No information available.

### Formula

C<sub>10</sub>H<sub>23</sub>N

### Molecular/Formula weight (g/mole):

157.30 g/mol

### Flammability (solid, gas)

no data available

### Flashpoint (°C/°F):

85-99°C/186-210°F

### Flash Point Tested according to:

Not available

### Autoignition Temperature (°C/°F):

No information available

### Lower Explosion Limit (%):

No information available

### Upper Explosion Limit (%):

No information available

### Melting point/range(°C/°F):

12-14°C/54-57°F

### Decomposition temperature(°C/°F):

No information available

### Boiling point/range(°C/°F):

220.5°C/429°F

**Bulk density:**  
No information available

**Density (g/cm3):**  
0.787

**Specific gravity:**  
No information available

**pH**  
No information available

**Vapor pressure @ 20°C (kPa):**  
No information available

**Evaporation rate:**  
No information available

**Vapor density:**  
5.5

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
No information available

**Partition coefficient  
(n-octanol/water):**  
log Kow 1.92

**Viscosity:**  
No information available

**Miscibility:**  
No information available

**Solubility:**  
Soluble in Water

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with acids, acid chlorides, acid anhydrides, strong oxidizing agents

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Incompatible materials.

**Incompatible Materials:** Acids  
Acid anhydrides  
Acid chlorides  
Strong oxidizing agents

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

### Other Information

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Ingestion. Skin. Eyes.

### Acute Toxicity

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

Decylamine

CAS No 2016-57-1

**LD50/oral/rat** = 280 µL/kg Oral LD50 Rat = 222 mg/kg Oral LD50

**LD50/oral/mouse** = No information available

**LD50/dermal/rabbit** = 350 uL/kg dermal LD50 rabbit  
277 mg/kg dermal LD50 rabbit  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50 information** = No information available

## Product Information

**LD50/oral/rat** =  
**Value - Acute Toxicity** = 280 µL/kg

**LD50/oral/mouse** =  
**Value - Acute Tox** = No information available

**LD50/dermal/rabbit**  
**Value - Acute Toxicity** = 350 uL/kg

**LD50/dermal/rat**  
**VALUE - Acute Tox** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**VALUE-Gas** = No information available  
**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**  
**VALUE-Vapor** = No information available  
**VALUE - Gas** = No information available  
**VALUE - Dust/Mist** = No information available

## Symptoms

<b>Skin Contact:</b>	Toxic in contact with skin. Causes skin burns. Possible burning pain and corrosive damage.
<b>Eye Contact:</b>	Causes eye burns. Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage.
<b>Inhalation</b>	Causes respiratory tract irritation with possible chemical burns. May cause chemical pneumonitis. It may cause pulmonary edema. Symptoms may include coughing and shortness of breath.
<b>Ingestion</b>	Toxic if swallowed. Corrosive to the mouth, throat, and stomach. May cause gastrointestinal tract irritation with nausea, ulceration or bleeding from stomach, and vomiting.
<b>Aspiration hazard</b>	No information available.

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

<b>Chronic Toxicity</b>	No information available.
<b>Sensitization:</b>	No information available.
<b>Mutagenic Effects:</b>	No information available

**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Decylamine	2016-57-1	Not listed	Not listed	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:** No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** Aquatic environment.

*Decylamine - 2016-57-1*

**Fish** LC50: =1.04mg/L (96h, Pimephales promelas)

**Persistence and degradability:** No information available

**Bioaccumulative potential:** An estimated Biocentration Factor (BCF) value of 6. Does not bioconcentrate significantly in aquatic organisms.

**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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Decylamine	2016-57-1	None	None	None	None



## 14. TRANSPORT INFORMATION

### DOT

**UN-No:** UN2922  
**Proper Shipping Name:** Corrosive liquids, toxic, n.o.s.  
**Hazard Class** 8  
**Subsidiary Class** 6.1  
**Packing group:** III  
**Emergency Response Guide Number** 154  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** IB3, T7, TP1, TP28  
**Symbol(s):** [DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.  
**Description:** UN2922, Corrosive liquids, toxic, n.o.s., 8 (6.1), III

### TDG (Canada)

**UN-No:** UN2922  
**Proper Shipping Name:** Corrosive liquid, toxic, n.o.s.  
**Hazard Class** 8  
**Subsidiary Risk:** (6.1)  
**Packing Group:** III  
**Marine Pollutant** No Information available  
**Description:** UN2922, Corrosive liquid, toxic, n.o.s., 8 (6.1), III

### ADR

**UN Number** UN2922  
**Proper Shipping Name:** Corrosive liquid, toxic, n.o.s.  
**Transport hazard class(es)** 8  
**Packing group** III  
**Subsidiary Risk:** 6.1  
**Special Provisions** 274  
**Description:** UN2922, Corrosive liquid, toxic, n.o.s., 8 (6.1), III

### IMDG

**UN-No:** UN2922  
**Proper Shipping Name:** Corrosive liquids, toxic, n.o.s.  
**Hazard Class:** 8  
**Subsidiary Risk:** 6.1  
**Packing Group:** III  
**Marine Pollutant** No information available  
**EMS:** F-A  
**Special Provisions** 223, 274  
**Description** UN2922, Corrosive liquid, toxic, n.o.s. (DECYLAMINE), 8 (6.1), III

### RID

**UN Number** UN2922  
**Proper Shipping Name:** Corrosive liquid, toxic, n.o.s.  
**Transport hazard class(es)** 8  
**Subsidiary Risk:** 6.1  
**Packing group** III  
**Special Provisions** 274  
**Description:** UN2922, Corrosive liquid, toxic, n.o.s., 8 (6.1), III

### ICAO (air)

**UN-No:** UN2922

**Proper Shipping Name:** Corrosive liquid, toxic, n.o.s.  
**Hazard Class** 8  
**Subsidiary Risk:** 6.1  
**Packing Group:** III  
**Description:** UN2922, Corrosive liquid, toxic, n.o.s., 8 (6.1), III  
**Special Provisions** A3

**IATA**

**UN Number** UN2922  
**Proper Shipping Name:** Corrosive liquid, toxic, n.o.s.  
**Transport hazard class(es)** 8  
**Subsidiary Risk:** 6.1  
**Packing group** III  
**Precautionary Statements - Response** 8P  
**Special Provisions** No information available  
**Description:** UN2922, Corrosive liquid, toxic, n.o.s., 8 (6.1), III

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
<i>Decylamine</i>	2016-57-1	PresentACTIVE	Present KE-09538	Present	Present (2)-133	Present	Present	Present 217-957-7

**U.S. Regulations**

*Decylamine*

**Massachusetts RTK:** Present  
**Pennsylvania RTK:** 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:
<i>Decylamine</i>	2016-57-1	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
<i>Decylamine</i>	2016-57-1	None	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
<i>Decylamine</i>	2016-57-1	Not Applicable	Not Applicable

## Canada

### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component  
Decylamine  
2016-57-1 ( 100 )

WHMIS 2015 Hazard Classification  
Flammable liquids - Category 4: H227 Combustible liquid.; Acute toxicity - Oral - Category 3: H301 Toxic if swallowed.; Acute toxicity - Dermal - Category 3: H311 Toxic in contact with skin.; 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)
Decylamine	2016-57-1	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Decylamine	2016-57-1	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Decylamine	2016-57-1	Not listed

### EU Classification

#### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Decylamine	2016-57-1	

#### EU - CLP (1272/2008)

#### **R-phrase(s)**

R34 - Causes burns

R24/25 - Toxic in contact with skin and if swallowed

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

#### **S-phrase(s)**

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

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

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
Decylamine	2016-57-1		No information	

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

**Indication of danger:**

C - Corrosive

T - Toxic

**16. OTHER INFORMATION**

**Preparation Date:** 08/01/2019  
**Revision date** 08/01/2019  
**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**