spectrum®



SAFETY DATA SHEET

Preparation Date: 01/23/2015	Revision Date: 6/27/2018	Revision Number: G2
	1. IDENTIFICATION	
Product identifier		
Product code:	D2323	
Product Name:	DIETHYLENETRIAMINEPENTAACETIC ACI	ID
Other means of identification		
Synonyms:	(Carboxymethylimino)bis(ethylenenitrilo)tetraa (((Carboxymethyl)imino(bis(ethylenenitrilo))te 1,1,4,7,7-Diethylenetriamiepentaacetic acid; 3,6,9-tris(carboxymethyl)-; Acetic acid, ((carboxymethylimino)bis(ethylenenitrilo))tetra	etraacetic acid; 3,6,9-Triazaundecfanedioic acid,
CAS #:	67-43-6	
RTECS # CI#:	MB8205000 Not available	
Recommended use of the che	mical and restrictions on use	
Recommended use:	No information available.	
Uses advised against	No information available	
<u>Supplier:</u>	Spectrum Chemical Mfg. Corp 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000	
Order Online At: Emergency telephone number Contact Person: Contact Person:	https://www.spectrumchemical.com Chemtrec 1-800-424-9300 Martin LaBenz (West Coast) Ibad Tirmiz (East Coast)	
	2. HAZARDS IDENTIFICATION	

Classification

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

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

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3

Label elements

Warning

Hazard statements

Causes skin irritation Causes serious eye irritation Suspected of damaging fertility or the unborn child May cause respiratory irritation. May cause drowsiness or dizziness



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards Not available

Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Diethylenetriaminepentaacetic Acid	67-43-6	100

4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assista have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.	nce if you
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated shoes. Get medical attention. If skin irritation persists, call a physician.	clothing and
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Eye Contact:	Flush eyes with water for	15 minutes. Get medical attention.	
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.		
Ingestion:	Do not induce vomiting w unconscious person. Obt	vithout medical advice. Never give anything by mouth to an a an a	
Most important symptoms and effe	cts, both acute and delay	red	
Symptoms	Causes eye irritation Eye contact may result in redness or pain Causes skin irritation Skin contact may result in redness, pain, inflammation, itching, scaling Irritating to respiratory system		
Indication of any immediate medica	l attention and special tr	eatment 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-FIGHT	ING MEASURES	
Extinguishing Media Suitable Extinguishing Media:		Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.	
Unsuitable Extinguishing Media	:	No information available.	
Specific hazards arising from			
Hazardous Combustion Products:		Carbon Monoxide, Carbon Dioxide. Nitrogen Oxides.	
Specific hazards:		May be combustible at high temperatures.	
Special Protective Actions fo	r 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. Dike fire-control water for later disposal; do not scatter the material.	
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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition.
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.
Methods and material for contai	nment and cleaning up
Methods for containment	Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. 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. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe dust. 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.

Incompatible Materials:

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Diethylenetriaminepenta acetic Acid	67-43-6	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Diethylenetriaminepenta	67-43-6	None	None	None	None

	acetic Acid					
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Australia and Mexico

Components	CAS-No.	Australia	Mexico
Diethylenetriaminepentaacetic Acid	67-43-6	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Safety glasses with side-shields or Goggles
Skin and body protection:	Long sleeved clothing Chemical resistant apron Gloves
Respiratory protection:	Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

9. г	9. PHISICAL AND CHEMICAL PROPERTIES						
Physical state:	Appearance:	Color:					
Solid	Powder.	White. Off-white.					
Odor:	Taste	Formula:					
Odorless.	No information available.	C14H23N3O10					
Molecular/Formula weight:	Flammability:	Flashpoint (°C/°F):					
393.35	No information available	No information available.					
Flash Point Tested according to:	Autoignition Temperature (°C/°F):	Lower Explosion Limit (%):					
Not available	No information available	No information available					
Upper Explosion Limit (%):	Melting point/range(°C/°F):	Decomposition temperature(°C/°F):					
No information available	220°C/428°F	235°C/455°F					
Boiling point/range(°C/°F):	Bulk density:	Density (g/cm3):					
No information available	No information available	No information available					
Specific gravity:	pH:	Vapor pressure @ 20°C (kPa):					
No information available	2.5	No information available					
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Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available Vapor density: No information available

Partition coefficient (n-octanol/water): -2.95

Solubility: Solubility in Water: 5 g/l @ 20 °C Partially soluble in hot water Very slightly soluble in cold water **VOC content (g/L):** No information available

Viscosity: No information available

10. STABILITY AND REACTIVITY

<u>Reactivity</u> Reactive with oxidizing agents

Chemical stability				
Stability:	Stable under recommended storage conditions.			
Possibility of Hazardous Reactions: Hazardous polymerization does not occur				
Conditions to avoid:	Heat. Avoid dust formation. Incompatible materials.			
Incompatible Materials:	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. Inhalation. Skin.

Acute Toxicity

Component Information

Diethylenetriaminepentaacetic Acid				
CAS-No.	67-43-6			
LD50/oral/rat = No information available				
LD50/oral/mouse = 4840 mg	/kg			
LD50/dermal/rabbit = No information available				
LD50/dermal/rat = No information	ation available			
LC50/inhalation/rat = No information available				
LC50/inhalation/mouse = No information available				
Other LD50 or LC50informat	ion = No information available			

Product code: D2323

Product Information

LD50/oral/rat =	
VALUE- Acute Tox Oral =	No information available

LD50/oral/mouse = Value - Acute Tox Oral = 4840 mg/kg

LD50/dermal/rabbit VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat VALUE -Acute Tox Dermal = 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

Skin Contact:	Causes skin irritation.			
Eye Contact:	Causes serious eye irritation.			
Inhalation	Irritating to respiratory system.			
Ingestion	May cause digestive (gastointestinal) tract irritation.			
Aspiration hazard	No information available.			
Delayed and immediate effects as well as chronic effects from short and long-term exposure				

Chronic Toxicity No information available.

- Sensitization: No information available.
- Mutagenic Effects: No information available

Carcinogenic effects:

Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Diethylenetriaminepentaacet ic Acid	67-43-6	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)

Product code: D2323

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

Reproductive toxicity	No data is available
Reproductive Effects: Developmental Effects: Teratogenic Effects:	No information available No information available 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:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available.
Mobility:	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

Components CA	AS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Diethylenetriaminepentaacetic 67-	-43-6	None	None	None	None
Acid					

14. TRANSPORT INFORMATION

DOT

-	-	
	UN-No:	Not Regulated
	Proper Shipping Name:	No information available
	Hazard Class:	No information available
	Subsidiary Class	No information available
	Packing group:	No information available
	Emergency Response Guide	No information available
	Number	
	Marine Pollutant	No data available
	DOT RQ (lbs):	No information available
	Special Provisions	No Information available

Product code: D2323

Symbol(s): Description:

- TDG (Canada)
 - UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant Description:

No information available

No information available No information available No information available No information available

Not Regulated

Not Regulated

Not Regulated

Not Regulated

ADR

UN-No: Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk:

IMO / IMDG

UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant

RID

UN-No:	
Proper Shipping Name:	
Hazard Class:	
Subsidiary Risk:	
Packing Group:	

ICAO

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available

IATA

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
ERG Code:	No information available
Special Provisions	No information available

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Diethylenetriaminepent	67-43-6	PresentACTIV	Present	Present	Present	Present	Present	Present
aacetic Acid		E	KE-02934		(2)-1273			200-652-8

Product code: D2323

U.S. Regulations

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)

Components	CAS-No.	Carcinogen	Developmental Toxicity		Female Reproductive
				Toxicity	Toxicity:
Diethylenetriaminepentaacetic Acid	67-43-6	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	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
Diethylenetriaminep entaacetic Acid	67-43-6	None	None	None	None	None

U.S. TSCA

Components		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Diethylenetriaminepentaacetic Acid	67-43-6	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Not a dangerous product according to HPR classification criteria.

Component Diethylenetriaminepentaacetic Acid 67-43-6 (100) WHMIS 2015 Hazard Classification Not a dangerous product according to HPR classification criteria

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

WHMIS 1988 Hazard Class

Non-controlled

Components Diethylenetriaminepentaacetic Acid WHMIS 1988 Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Product code: D2323

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Diethylenetriaminepentaacetic Acid	67-43-6	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Diethylenetriaminepentaacetic Acid	67-43-6	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
Diethylenetriaminepentaacetic Acid	67-43-6	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Diethylenetriaminepentaacetic Acid	67-43-6	No information

EU - CLP (1272/2008)

R-phrase(s)

Not determined

S -phrase(s)

none

Components	CAS-No.	 Concentration Limits:	Safety Phrases
Diethylenetriaminepentaa cetic Acid	67-43-6	No information	

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

Indication of danger:

not determined

16. OTHER INFORMATION

Preparation Date:	01/23/2015
Revision Date:	6/27/2018
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