

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 4/8/2011 Revision date: 1/19/2023 Supersedes: 4/8/2011 Version: 2.0

SECTION 1: Identification		
1.1. Identification		
Product form Substance name CAS-No. Product code Formula Synonyms	 Substance N-HEXADECANOL (2,2,3,3,16,16,16-D31, 98%) 36653-82-4 DLM-2331 CD3(CD2)14CH2OH Hexadecyl-d33 alcohol / Cetyl-d33 alcohol 	
1.2. Recommended use and restrictions on use		
No additional information available		
1.3. Supplier		
Cambridge Isotope Laboratories, Inc. 50 Frontage Rd 01810 ANDOVER, MA, 01810 USA T 1-800-322-1174 <u>cilsales@isotope.com</u> - <u>www.isotope.com</u>		

1.4. Emergency telephone number Emergency number : 1-703-741-5970

2.1. Classification of the substance or mixture		
GHS US classification		
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Specific target organ toxicity – Single exposure, Category 3,	H335	May cause respiratory irritation
Respiratory tract irritation Full text of H statements : see section 16		
Full text of H statements : see section 16		
2.2. GHS Label elements, including precautionary sta	atements	
GHS US labeling		
Hazard pictograms (GHS US) :	^	
	!>	
Signal word (GHS US) : Warning		

Chemtrec 1-800-424-9300 24 hours

Precautionary statements (GHS US)

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

: P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P271 - Use only outdoors or in a well-ventilated area.

P264 - Wash hands, forearms and face thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a doctor, a POISON CENTER if you feel unwell.
P321 - Specific treatment (see Hazardous component(s) for labeling on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%	GHS US classification
N-HEXADECANOL (2,2,3,3,16,16,16-D31, 98%) (Main constituent)	CAS-No.: 36653-82-4		Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general First-aid measures after inhalation	 If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area. When symptoms occur: go into open air and ventilate suspected area. If not breathing give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 Wash with plenty of soap and water. and soap. Get immediate medical advice/attention. Rinse cautiously with water for several minutes. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.
4.2. Most important symptoms and effect	ts (acute and delayed)
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	 May be harmful if inhaled. May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation. May be harmful if swallowed.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures			
5.1. Suitable (and unsuitable) extinguishing	media		
Suitable extinguishing media	: Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).		
5.2. Specific hazards arising from the chem	ical		
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO2).		
5.3. Special protective equipment and precautions for fire-fighters			
Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.		
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.		

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equi	pment and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	: Avoid breathing vapors, mist, gas. Avoid dust formation.		
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up		
For containment Methods for cleaning up	Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.This material and its container must be disposed of in a safe way, and as per local legislation.	

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	 Provide adequate ventilation to minimize dust and/or vapor concentrations. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety practice. 	
7.2. Conditions for safe storage, including any incompatibilities		
Technical measures Storage conditions	Store in a well-ventilated place. Keep container tightly closed.Store at room temperature away from light and moisture.	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
N-HEXADECANOL (2,2,3,3,16,16,16,16	, 98%) (36653-82-4)	
No additional information available		
8.2. Appropriate engineering controls		
Appropriate engineering controls Environmental exposure controls	 Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid release to the environment. 	
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8.3. Individual protection measures/Perso	nal protective equipment	
Personal protective equipment: Gloves. Protective clothing. Protective goggles. Se	If-contained breathing apparatus.	
Materials for protective clothing:		
Wear suitable protective clothing and gloves		
Hand protection:		
Wear suitable protective clothing and gloves		
Eye protection:		
Wear eye protection. Chemical goggles or face sh	ield with safety glasses	
Skin and body protection:		
Wear suitable protective clothing, gloves and eye/	face protection	
Respiratory protection:		
In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator		
Personal protective equipment symbol(s):		



SECTION 9: Physical and chemical properties			
9.1. Information on basic physic	ical and chemical properties		
Physical state	: Solid		
Appearance	: Solid.		
Color	: White		
Odor	: No data available		
Odor threshold	: No data available		
рН	: No data available		
Melting point	: 54 – 56 °C (129 - 133 °F) - lit.		
Freezing point	: No data available		
Boiling point	: 179 – 181 °C (354 - 358 °F) at 13 hPa (10 mmHg) - lit.		

- : No data available
- Relative evaporation rate (butyl acetate=1)
 - : No data available
 - : No data available

Flammability (solid, gas)

Flash point

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Vapor pressure Relative vapor density at 20°C Relative density Density Molecular mass Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature Viscosity, kinematic Viscosity, dynamic Explosion limits Explosive properties	 No data available No data available No data available No data available 0.818 g/ml at 25 °C (77 °F) 273.63 g/mol (Labeled) No data available
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Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Moisture.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

: Not classified
: Not classified
: Not classified
: Causes skin irritation.
: Causes serious eye irritation.
: Not classified
: May cause respiratory irritation.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential Adverse human health effects and	: This information is based on our current knowledge and is intended to describe the product for
symptoms	the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations		
13.1. Disposal methods		
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.	
Product/Packaging disposal recommendations	 Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. 	
Ecology - waste materials	Dispose of as unused product.	

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number		
Not regulated for transport		
14.2. UN proper shipping name		
Proper Shipping Name (DOT) Proper Shipping Name (TDG)	: Not applicable : Not applicable	
Proper Shipping Name (IMDG)	: Not applicable	
Proper Shipping Name (IATA)	: Not applicable	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

14.3. Transport hazard class(es)				
DOT Transport hazard class(es) (DOT) :	Not applicable			
TDG Transport hazard class(es) (TDG):	Not applicable			
IMDG Transport hazard class(es) (IMDG) :	Not applicable			
IATA Transport hazard class(es) (IATA) :	Not applicable			
14.4. Packing group				
Packing group (TDG) : Packing group (IMDG) :	Not applicable Not applicable Not applicable Not applicable			
14.5. Environmental hazards				
Other information :	No supplementary information	ation available.		
14.6. Special precautions for user				
DOT No data available				
TDG No data available				
IMDG No data available				
IATA No data available				
14.7. Transport in bulk according to Annex II of	of MARPOL 73/78 and	the IBC Code		
Not applicable				
SECTION 15: Regulatory information				
15.1. US Federal regulations				
N-HEXADECANOL (2,2,3,3,16,16,16-D31, 98	%) (36653-82-4)			
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.			
SARA Section 311/312 Hazard Classes	Immediate (acute) health	hazard		
Commercial status of components according to the Unit				
Name	CAS-No.	Listing	Commercial status	Flags
N-HEXADECANOL (2,2,3,3,16,16,16-D31, 98%)	36653-82-4	Not present	-	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.2. International regulations

CANADA

N-HEXADECANOL (2,2,3,3,...16,16,16-D31, 98%) (36653-82-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

N-HEXADECANOL (2,2,3,3,...16,16,16-D31, 98%) (36653-82-4)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States.

15.3. US State regulations

No additional information available

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date Other information 01/19/2023
 This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the

corresponding unlabeled compound.

Full text of H-phrases	
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.