

PARLAR 40 UNLABELED 10 UG/ML IN NONANE

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 29/07/2014

Revision date:

Version: 1.0

ULM-9430-S

SECTION 1: Identification of t	the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixtures
Product name.	: PARLAR 40 UNLABELED 10 UG/ML IN NONANE
Product code	: ULM-9430-S
1.2. Relevant identified uses of	the substance or mixture and uses advised against
1.2.1. Relevant identified uses	
Industrial/Professional use spec	: For professional use only.
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of th	ne safety data sheet
Cambridge Isotope Laboratories, Inc.	
50 Frontage Road	
Andover, MA 01810 USA	
USA: 1-800-322-1174 Int: 1-978-749	3-8000
<u>cilsales@isotope.com</u> www.isotope.d	
Emergency telephone num	ber
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24 hours))
International: 1-202-483-7616 (24 hou	urs)
SECTION 2: Hazards identific	ation
2.1. Classification of the substa	ance or mixture
Classification according to Regulation	on (EC) No. 1272/2008 [CLP]
Flam. Liq. 3 H2	26
Acute Tox. 4 (Inhalation:dust,mist) H3	32
Skin Irrit. 2 H3	
Eye Irrit. 2 H3	
STOT SE 3 H3	
Asp. Tox. 1 H30	04
Full text of H-phrases: see section 16	
Classification according to Directive	e 67/548/EEC or 1999/45/EC
Xn; R20	
Yn: R65	

Xn; R65 R10 Full text of R-phrases: see section 16

Classification (GHS-US)

Flam. Liq. 3	H226
Acute Tox. 4 (Inhalation:dust,mist)	H332
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
STOT SE 3	H336
Asp. Tox. 1	H304

Adverse physicochemical, human health and environmental effects Central Nervous System.

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. Label elements





Signal word (CLP) Hazardous ingredients Hazard statements (CLP)

Precautionary statements (CLP)

- : Danger
- : N-NONANE UNLABELED
- : H226 Flammable liquid and vapor
 - H304 May be fatal if swallowed and enters airways
 - H315 Causes skin irritation
 - H319 Causes serious eye irritation
 - H332 Harmful if inhaled
 - H336 May cause drowsiness or dizziness
- : P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 - P233 Keep container tightly closed
 - P240 Ground/bond container and receiving equipment
 - P241 Use explosion-proof electrical, lighting, ventilating equipment
 - P261 Avoid breathing dust, fume, gas, mist, spray, vapors
 - P264 Wash Both hands thoroughly after handling
 - P271 Use only outdoors or in a well-ventilated area
 - P280 Wear protective clothing, protective gloves

GHS-US labeling

Signal word (GHS-US)

Hazard pictograms (GHS-US)

Hazard statements (GHS-US)

Precautionary statements (GHS-US)

:		\wedge	
	<u>C</u> 3	•	

GHS02

: Danger

- : H226 Flammable liquid and vapor
- H304 May be fatal if swallowed and enters airways

GHS07

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H336 May cause drowsiness or dizziness
- : P210 Keep away from heat, hot surfaces, open flames, sparks. No smoking

GHS08

- P233 Keep container tightly closed
- P240 Ground/bond container and receiving equipment
- P241 Use explosion-proof electrical, lighting, ventilating equipment
- P242 Use only non-sparking tools
- P243 Take precautionary measures against static discharge
- P261 Avoid breathing dust, fume, gas, mist, spray, vapors
- P264 Wash Both hands thoroughly after handling
- P271 Use only outdoors or in a well-ventilated area
- P280 Wear protective gloves, protective clothing
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P302+P352 IF ON SKIN: Wash with plenty of soap and water
 - P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated
 - clothing. Rinse skin with water/shower P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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 POISON CENTER/doctor/physician if you feel unwell
 - P321 Specific treatment (see Hazard pictograms (CLP) on this label)
- P331 If swallowed, do NOT induce vomiting
- P332+P313 If skin irritation occurs: Get medical advice/attention
- P337+P313 If eye irritation persists: Get medical advice/attention
- P362 Take off contaminated clothing and wash before reuse
- P370+P378 In case of fire: Use Alcohol resistant foam., Carbon dioxide., Dry chemical., Water spray for extinction
- P403+P233 Store in a well-ventilated place. Keep container tightly closed
- P403+P235 Store in a well-ventilated place. Keep cool

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P501 - Dispose of contents/container to Comply with applicable regulations.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2	Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
N-NONANE UNLABELED	(CAS No) 111-84-2 (Unlabeled) (EC no) 203-913-4	99.9986	R10 Xn; R20 Xn; R65 R67
2,3,5,6,8,9,10,10-OCTACHLOROBORNANE UNLABELED PARLAR 40	(CAS No) 166021-27-8 (Unlabeled)	0.0014	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
N-NONANE UNLABELED	(CAS No) 111-84-2 (Unlabeled) (EC no) 203-913-4	99.9986	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304
2,3,5,6,8,9,10,10-OCTACHLOROBORNANE UNLABELED PARLAR 40	(CAS No) 166021-27-8 (Unlabeled)	0.0014	Not classified
Name	Product identifier	%	Classification (GHS-US)
N-NONANE UNLABELED	(CAS No) 111-84-2 (Unlabeled)	99.9986	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Asp. Tox. 1, H304

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: First aid measures			
4.1. Description of first aid measures			
First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance.		
First-aid measures after inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.		
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs. Wash with soap and plenty of water. Consult a physician. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label).		
First-aid measures after eye contact	: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.		
First-aid measures after ingestion	: Immediately call a POISON CENTER or doctor/physician.		
4.2. Most important symptoms and ef	fects, both acute and delayed		
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause drowsiness or dizziness.		
Symptoms/injuries after skin contact	: Causes skin irritation.		
Symptoms/injuries after eye contact	: Causes eye irritation.		
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways.		
4.3. Indication of any immediate medical attention and special treatment needed			
No additional information available			
SECTION 5: Firefighting measures			
5.1. Extinguishing media			
suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.		
5.2. Special hazards arising from the	substance or mixture		
—	<u></u>		

Fire hazard : Flammable liquid and vapor.

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	° ()	ig to rederal Register / vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Explos	ion hazard	: May form flammable/explosive vapor-air mixture.
5.3.	Advice for firefighters	
Protect	ion during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECT	ION 6: Accidental release mea	sures
6.1.	Personal precautions, protective ec	uipment and emergency procedures
Genera	al measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
6.1.1.	For non-emergency personnel	
No add	litional information available	
6.1.2.	For emergency responders	
Protect	ive equipment	: Avoid breathing dust, mist or spray.
6.2.	Environmental precautions	
Prever	t further leakage or spillage if safe to do	so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3.	Methods and material for containm	ent and cleaning up
No add	litional information available	
6.4.	Reference to other sections	
No add	litional information available	
SEC1	ION 7: Handling and storage	
7.1.	Precautions for safe handling	
Additio	nal hazards when processed	: Handle empty containers with care because residual vapors are flammable.
Precau	tions for safe handling	: No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist or spray.
Hygien	e measures	: Wash Both hands thoroughly after handling.
7.2.	Conditions for safe storage, includi	ing any incompatibilities
Techni	cal measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.
Storag	e conditions	: Store at room temperature away from light and moisture.
Incomp	patible materials	: Heat sources.
7.3.	Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

N-NONANE UNLABELED (11	1-84-2 (Unlabeled))	
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.0000000000 ppm Central Nervous System impairment.

8.2. Exposure controls

Personal protective equipment

: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Hand protection
Eye protection
Skin and body protection
Respiratory protection

- : Wear suitable protective clothing and gloves.
- : Wear safety glasses with side shields (or goggles) and a face shield.
- : Wear suitable protective clothing.
 - : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1.	9.1. Information on basic physical and chemical properties		
The prope	The properties listed below are for the solvent, the main component of this mixture.		
Physica	l state	: Liquid	
Appear	ance	: Liquid.	
Molecul	ar mass	: 128.3	

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Color	: No data available.
Odor	: No data available
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -53 °C (- 63 °F) - lit
Freezing point	: No data available
Boiling point	: 151 °C (304 °F) - lit
Flash point	: 31.0 °C (87.8 °F) - closed cup
Self ignition temperature	: 205 °C (401 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable liquid and vapor
Vapor pressure	: 12.4 hPa (9.3 mmHg) at 37.7 °C (99.9 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: 0 %
Log Pow	: 5.65
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 0.87 - 2.9 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity			
10.1. Reactivity			
No additional information available			
10.2. Chemical stability			
See storage and expiration date on CoA.			
10.3. Possibility of hazardous reactions			
No additional information available			
10.4. Conditions to avoid			
Open flame. Overheating. Direct sunlight. Heat. S	Sparks.		
10.5. Incompatible materials			
No additional information available			
10.6. Hazardous decomposition products			
May release flammable gases.			
SECTION 11: Toxicological informati	on		
11.1. Information on toxicological effects			
Acute toxicity	: Harmful if inhaled.		
PARLAR 40 UNLABELED 10 UG/ML IN NON	ANE		
ATE (dust, mist)	1.500 mg/l/4h		
N-NONANE UNLABELED (111-84-2 (Unlabele	ed))		
LC50 inhalation rat (ppm)	3200 ppm/4h		
ATE (dust, mist)	1.500 mg/l/4h		
Skin corrosion/irritation : Causes skin irritation.			
Serious eye damage/irritation : Causes serious eye irritation.			
Respiratory or skin sensitization : Not classified			
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.		
00/07/00//			

OTION

Safety Data Sheet according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: Harmful if inhaled.
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information	
12.1. Toxicity	
No additional information available	
12.2. Persistence and degradability	
2,3,5,6,8,9,10,10-OCTACHLOROBORNANE (Persistence and degradability	UNLABELED PARLAR 40 (166021-27-8 (Unlabeled)) Not available.
• •	
N-NONANE UNLABELED (111-84-2 (Unlabele	
Persistence and degradability	Not available.
12.3. Bioaccumulative potential	
PARLAR 40 UNLABELED 10 UG/ML IN NON	ANE
Log Pow	5.65
2,3,5,6,8,9,10,10-OCTACHLOROBORNANE	UNLABELED PARLAR 40 (166021-27-8 (Unlabeled))
Bioaccumulative potential	Not available.
N-NONANE UNLABELED (111-84-2 (Unlabele	ed))
Log Pow	5.65
Bioaccumulative potential	Indication of bioaccumulation.
12.4. Mobility in soil	
2,3,5,6,8,9,10,10-OCTACHLOROBORNANE	UNLABELED PARLAR 40 (166021-27-8 (Unlabeled))
Ecology - soil	Not available.
N-NONANE UNLABELED (111-84-2 (Unlabele	ed))
Ecology - soil	Not available.
12.5. Results of PBT and vPvB assessme	nt
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	IS
13.1. Waste treatment methods	
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.
Waste disposal recommendations	: Dispose of contents/container to Comply with applicable regulations.
Additional information	: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	: Hazardous waste due to toxicity.
SECTION 14: Transport information	
In accordance with ADR / RID / ADNR / IMDG / I	CAO / IATA
14.1. UN number	
UN-No.(DOT)	: 1920
DOT NA no.	UN1920
14.2. UN proper shipping name	
DOT Proper Shipping Name	: Nonanes
Department of Transportation (DOT) Hazard Classes	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

EN (English US)

Safety Data Sheet

Hazard labels (DOT)	: 3 - Flammable liquid
Packing group (DOT)	: III - Minor Danger
DOT Special Provisions (49 CFR 172.102)	 B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HD2, 31HD2 and 31HH2). Additional Requirement: Only liqui with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Tat 2 for UN2672).
	T2 - 1.5 178.274(d)(2) Normal 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a$ (tr - tf) Where: tr is the maximum mean bulk temperatu during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
14.3. Additional information	
Other information	: No supplementary information available.
Overland transport	
Overland transport Packing group (ADR)	: 111
Class (ADR)	: 3 - Flammable liquid
Hazard identification number (Kemler No.)	: 30
Classification code (ADR)	: F1
Danger labels (ADR)	: 3 - Flammable liquids
Orange plates	30 1920
Tunnel restriction code	: D/E
Limited quantities (ADR)	5L
EAC	: 3Y
Excepted quantities (ADR)	: E1
Transport by sea	
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
MFAG-No	: 128
Air transport DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
Civil Aeronautics Law	: Flammable liquids
14.4. Environmental hazards	

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

14.5. Special precautions for user

14.6.	Transport in bulk according to	Annex II of MARPOL	73/78 and the IBC Cod

Not applicable

SECTION 15: Regulatory information			
15.1. US Federal regulations			
PARLAR 40 UNLABELED 10 UG/ML IN NONANE			
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard		
N-NONANE UNLABELED (111-84-2 (Unlabeled))			
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard		

15.2. International regulations

CANADA

PARLAR 40 UNLABELED 10 UG/ML IN NONANE

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

PARLAR 40 UNLABELED 10 UG/ML IN NONANE()	
State or local regulations	U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

N-NONANE UNLABELED (111-84-2 (Unlabeled))
U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Other information

: 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 R-, H- and EUH-phrases::

Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
R10	Flammable

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	R20	Harmful by inhalation	
	R65	Harmful: may cause lung damage if swallowed	
	R67	Vapors may cause drowsiness and dizziness	
	Xn	Harmful	
NFP	A health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.	
NFP	A fire hazard	: 3 - Liquids and solids that can be ignited under almost all ambient conditions.	
NFP	A reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.	
нмі	S III Rating		
Heal	th	: 2 Moderate Hazard - Temporary or minor injury may occur	
Flam	nmability	: 3 Serious Hazard	
Phys	•	: 0 Minimal Hazard	

CIL Mixture SDS

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