

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

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Version: 1.0

ECN-2643

ures 6,7-TETRACN (PCN-48) UNLABELED 100 UG/ML IN NONANE 4-2643 r mixture and uses advised against professional use only.
6,7-TETRACN (PCN-48) UNLABELED 100 UG/ML IN NONANE N-2643 r mixture and uses advised against professional use only.
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/2008 [CLP]
1226
1332
H315
H319
1336
1304
999/45/EC
H226 H332 H315 H319 H336 H304

Central Nervous System.

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according to Regulation (EC) No. 453/2010 and acc	cording to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
2.2. Label elements	
Labeling according to Regulation (EC) N	o. 1272/2008 [CLP]
Hazard pictograms (CLP)	HS02 GHS07 GHS08
Signal word (CLP)	: Danger
Hazardous ingredients	: N-NONANE UNLABELED
Hazard statements (CLP)	 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
Precautionary statements (CLP)	 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 ventilating, lighting, electrical equipment P261 - Avoid breathing vapors, spray, mist, gas, fume, dust P264 - Wash Both hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves, protective clothing
GHS-US labeling	
Hazard pictograms (GHS-US)	HS02 GHS07 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	 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
Precautionary statements (GHS-US)	 P210 - Keep away from sparks, open flames, hot surfaces, heat No smoking 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 vapors, spray, mist, gas, fume, dust 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+P351+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 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 P332+P313 - If sey irritation persists: Get medical advice/attention P332+P313 - If sey and parsitis: Get medical advice/attention P337+P378 - In case of fire: Use Alcohol resistant foam., Carbon dioxide., Dry chemical., Water spray for extinction

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P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

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

2.3. **Other hazards**

No additional information available

SECTION 3: Composition/information on ingredients

Substances 3.1.

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	Classification according to Directive 67/548/EEC
N-NONANE UNLABELED	(CAS No)111-84-2 (EC no)203-913-4	99.9861	R10 Xn; R20 Xn; R65 R67
2,3,6,7-TETRACN UNLABELED	(CAS No)34588-40-4 (Unlabeled)	0.0139	Xn; R22 Xi; R41 Xi; R38 N; R50/53 R48
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
N-NONANE UNLABELED	(CAS No)111-84-2 (EC no)203-913-4	99.9861	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
2,3,6,7-TETRACN UNLABELED	(CAS No)34588-40-4 (Unlabeled)	0.0139	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Name	Product identifier	%	Classification (GHS-US)
N-NONANE UNLABELED	(CAS No)111-84-2	99.9861	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 measure	25
First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
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 plenty of soap and water. 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	effects, 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.

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4.2 Indication of any immediate mod	ical attention and special treatment peopled	
4.3. Indication of any immediate medical attention and special treatment needed No additional information available		
SECTION 5: Firefighting measures		
5.1. Extinguishing media	. The surface energy also had an electron for an also show include a surface distribution	
suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.	
5.2. Special hazards arising from the		
Fire hazard	: Flammable liquid and vapor.	
Explosion hazard	: May form flammable/explosive vapor-air mixture.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.	
SECTION 6: Accidental release me	easures	
6.1. Personal precautions, protective	equipment and emergency procedures	
General 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 additional information available		
6.1.2. For emergency responders		
Protective equipment	: Avoid breathing dust, mist or spray.	
6.2. Environmental precautions		
Prevent further leakage or spillage if safe to d	lo so. Do not let product enter drains. Discharge into the environment must be avoided.	
6.3. Methods and material for contain	ment and cleaning up	
No additional information available		
6.4. Reference to other sections		
No additional information available		
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.	
Precautions 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.	
Hygiene measures	: Wash Both hands thoroughly after handling.	
7.2. Conditions for safe storage, inclu	Iding any incompatibilities	
Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.	
Storage conditions	: Store at room temperature away from light and moisture.	
Incompatible materials	: Heat sources.	
7.3. Specific end use(s)		
No additional information available		
SECTION 8: Exposure controls/pe	rsonal protection	
8.1 Control parameters		

Control parameters 8.1.

N-NONANE UNLABELED (111-84-2)		
Italy - Portugal- USA ACGIH	ACGIH TWA (ppm)	200.0000000000 ppm Central Nervous System
		impairment.

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8.2. Exposure controls

- Personal protective equipment
- : Gloves. Protective goggles. Protective clothing. Self-contained breathing apparatus.



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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main compo	onent of this mixture.
Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 128.3
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

SECT	ION 10: Stability and reactivity		
10.1.	Reactivity		
No addi	No additional information available		
10.2.	Chemical stability		
See sto	rage and expiration date on CoA.		
10.3.	Possibility of hazardous reactions		
No additional information available			
10.4.	Conditions to avoid		
Open fla	ame. Overheating. Direct sunlight. Heat. Sp		
10.5.	Incompatible materials		
No additional information available			

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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.		
2,3,6,7-TETRACN (PCN-48) UNLABELED 100 UG/ML IN NONANE			
ATE (dust, mist)	1.500 mg/l/4h		
N-NONANE UNLABELED (111-84-2)			
LC50 inhalation rat (ppm)	3200 ppm/4h		
ATE (dust, mist)	1.500 mg/l/4h		
2,3,6,7-TETRACN UNLABELED (34588-40-4 (Unlabeled))		
ATE (oral)	500.000 mg/kg body weight		
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.		
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.		

No additional information available

2.2. Persistence and degradability			
N-NONANE UNLABELED (111-84-2)			
Persistence and degradability	Not available.		
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2,3,6,7-TETRACN UNLABELED (34588-40-4 (U			
Persistence and degradability	Not available.		
12.3. Bioaccumulative potential			
2,3,6,7-TETRACN (PCN-48) UNLABELED 100 U	JG/ML IN NONANE		
Log Pow	5.65		
N-NONANE UNLABELED (111-84-2)	N-NONANE UNLABELED (111-84-2)		
Log Pow	5.65		
Bioaccumulative potential	Indication of bioaccumulation.		
2,3,6,7-TETRACN UNLABELED (34588-40-4 (U	nlabeled))		
Bioaccumulative potential	Not available.		
12.4. Mobility in soil			
N-NONANE UNLABELED (111-84-2)			
Ecology - soil	Not available.		
2,3,6,7-TETRACN UNLABELED (34588-40-4 (U	nlabeled))		
07/11/2014	EN (English US) 6/10		

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Ecology - soil	Not available.
2.5. Results of PBT and vPvB assessn	nent de la company de la co
No additional information available	
2.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	
I3.1. Waste treatment methods Regional legislation (waste) Image: Comparison of the second	: Waste materials should be disposed of under conditions which meet Federal, State, and Local
	environmental control regulations.
Vaste 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	n
n accordance with ADR / RID / ADNR / IMDG	
I4.1. UN number	
JN-No.(DOT)	: 1920
DOT NA no.	UN1920
4.2. UN proper shipping name	
OOT Proper Shipping Name	: Nonanes
Department of Transportation (DOT) Hazard Classes	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
lazard 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 a 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, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx)	: 203 : 242
4.3. Additional information	

Other information

: No supplementary information available.

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Overland transport		
Packing group (ADR)	: III	
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		
Other information	: No supplementary information available.	
14.5. Special precautions for user		
14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		
Not applicable		
SECTION 15: Regulatory information		
15.1. US Federal regulations		
2,3,6,7-TETRACN (PCN-48) UNLABELED 100 UG/ML IN NONANE		
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard	
N-NONANE UNLABELED (111-84-2)		
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard	

15.2. International regulations

CANADA

2,3,6,7-TETRACN (PCN-48) UNLABELED 100 UG/ML IN NONANE	
Listed on the Canadian DSL (Domestic Substances List) inventory.	

15.2.1. National regulations

No additional information available

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15.3. US State regulations		
2,3,6,7-TETRACN (PCN-48) UNLABELED 100 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)

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
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Asp. Tox. 1	Aspiration hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation 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 RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
Н373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R10	Flammable
R20	Harmful by inhalation
R22	Harmful if swallowed
R38	Irritating to skin
R41	Risk of serious damage to eyes
R48	Danger of serious damage to health by prolonged exposure
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause drowsiness and dizziness
Ν	Dangerous for the environment
Xi	Irritant
Xn	Harmful

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NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 3 - Liquids and solids that can be ignited under almost all ambient conditions.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
HMIS III Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 3 Serious Hazard
Physical	: 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