

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 29/01/2019 Revision date: : Version: 1.0

JR-F84-25

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures

Product name : 1,2,3,4,6,7,9-HEPTACDF UNLABELED ~25 NG/ML IN NONANE

Product code : JR-F84-25

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use

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 the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

USA: 1-800-322-1174 Int: 1-978-749-8000 <u>cilsales@isotope.com</u> www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R20 Xi; R36/38 R10 Xn; R65

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 3 H226
Acute Tox. 4 (Inhalation:vapour) H332
Skin Irrit. 2 H315
Eye Irrit. 2A H319
STOT SE 3 H336
Asp. Tox. 1 H304
Full text of H statements : see section 16

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Adverse physicochemical, human health and environmental effects

Central Nervous System, Flammable liquid and vapour, May cause drowsiness or dizziness, Harmful if inhaled, Causes skin irritation, Causes serious eye irritation. May be fatal if swallowed and enters airways.

Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)







GHS02

Signal word (CLP) : Danger

Hazard statements (CLP) : H226 - Flammable liquid and vapour

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 electrical, lighting, ventilating equipment

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

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

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

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

GHS-US labeling

Hazard pictograms (GHS-US)







GHS02

GHS08

GHS07

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H226 - Flammable liquid and vapour

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, open flames, sparks. - No smoking. Precautionary statements (GHS-US)

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 fume, mist, spray, vapors.

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

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

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

P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER

P302+P352 - If on skin: Wash with plenty of water

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

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)

P331 - 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+P364 - Take off contaminated clothing and wash it before reuse.

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> P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder to extinguish.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

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

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

Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

Substances

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	99.9999965	R10 Xn; R20 Xn; R65 Xi; R36/38 R67
1,2,3,4,6,7,9-HEPTACDF UNLABELED	(CAS-No.) 70648-25-8 (EC Index-No.)	0.0000035	T; R25 Xi; R36 R53
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	99.9999965	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304
1,2,3,4,6,7,9-HEPTACDF UNLABELED	(CAS-No.) 70648-25-8 (EC Index-No.)	0.0000035	Acute Tox. 3 (Oral), H301 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
Name	Product identifier	%	GHS-US classification
N-NONANE UNLABELED	(CAS-No.) 111-84-2	99.9999965	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Asp. Tox. 1, H304
1,2,3,4,6,7,9-HEPTACDF UNLABELED	(CAS-No.) 70648-25-8	0.0000035	Acute Tox. 3 (Oral), H301 Eye Irrit. 2, H319

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

SECTION 4: First aid measures

First-aid measures general : Call a physician immediately.

: Remove person to fresh air and keep comfortable for breathing. Call a poison First-aid measures after inhalation

center/doctor/physician if you feel unwell. Give oxygen or artificial respiration if necessary.

Aquatic Chronic 4, H413

Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin First-aid measures after skin contact

irritation occurs: Get medical advice/attention.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to First-aid measures after eye contact

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

: Do not induce vomiting. Call a physician immediately. First-aid measures after ingestion

Most important symptoms and effects, both acute and delayed

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after inhalation : Harmful if inhaled. May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation. May be harmful in contact with skin.

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Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. Risk of lung edema.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide. Alcohol resistant foam.

Special hazards arising from the substance or mixture 5.2.

: Flammable liquid and vapour. Fire hazard

Reactivity : Flammable liquid and vapour, Vapors may form flammable mixture with air.

5.3. Advice for firefighters

Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection. Protection during firefighting

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Wear personal protective equipment. Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing fume, gas, mist, spray, vapors. Avoid contact with skin and eyes.

For emergency responders

: Do not attempt to take action without suitable protective equipment. For further information Protective equipment

refer to section 8: "Exposure controls/personal protection".

6.2. **Environmental precautions**

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and material for containment and cleaning up

: Dike and contain spill. Dispose as hazardous waste. Comply with local regulations for disposal. For containment

Methods for cleaning up Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4 Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid all contact with skin, eyes, or clothing. Keep away from sources of ignition - No smoking.

Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the

manufacturer). Take precautionary measures against static discharges.

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Precautions for safe handling

smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing fume, gas, mist, spray, vapors. Avoid

contact with skin and eyes.

Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Hygiene measures

Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

: Store in a well-ventilated place. Keep container tightly closed. Keep dry. Ground/bond container Technical measures

and receiving equipment.

Storage conditions : Store at room temperature away from light and moisture.

Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

Control parameters

1,2,3,4,6,7,9-HEPTACDF UNLABELED ~25 NG/ML IN NONANE			
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit	
		Values (TLV)	

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1,2,3,4,6,7,9-HEPTACDF UNL	1,2,3,4,6,7,9-HEPTACDF UNLABELED ~25 NG/ML IN NONANE				
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair			
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1050 mg/m³ USA. NIOSH Recommended Exposure Limits			
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm USA. NIOSH Recommended Exposure Limits			
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment			
USA OSHA	OSHA PEL (TWA) (mg/m³)	1050 mg/m³ USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000			
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000			
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	1050 California permissible exposure limits for chemical contaminants.			
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.			
N-NONANE UNLABELED (11	1-84-2)				
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)			
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair			
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1050 mg/m³ USA. NIOSH Recommended Exposure Limits			
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm USA. NIOSH Recommended Exposure Limits			
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment			
USA OSHA	OSHA PEL (TWA) (mg/m³)	1050 mg/m³ USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000			
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000			
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	1050 California permissible exposure limits for chemical contaminants.			
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.			

8.2. Exposure controls

Appropriate engineering controls

: Ensure good ventilation of the work station.

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









Materials for protective clothing

: Wear suitable protective clothing and gloves.

Hand protection

: protective gloves.

Eye protection

: Chemical goggles or face shield. Chemical goggles or safety glasses.: Wear suitable protective clothing, gloves and eye/face protection.

Skin and body protection Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. Approved respirator.

Environmental exposure controls : Avoid release to the environment.

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 component of this mixture. Physical state : Liquid

Appearance : Liquid

Molecular mass : 128.3 g/mol

Color : Colorless
Odor : No data available
Odor threshold : No data available
pH : No data available

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

Melting point : Not applicable

Freezing point : -53 °C (- 63 °F) - lit

Boiling point : 151 °C (304 °F) - lit

Flash point : 31 °C (87.8 °F) - closed cup

Auto-ignition temperature : 205 °C (401 °F)

Decomposition temperature : No data available

Flammability (solid, gas) : Not applicable

Vapor pressure : 5.69 hPa (4.27 mmHg) at 25 °C (77 °F)

Relative vapor density at 20 °C : No data available Relative density : No data available

Specific gravity / density : 0.718 g/ml at 25 °C (77 °F)

Solubility : Water: 0.0002 % at 25 °C (77 °F) - slightly soluble

Log Pow : 5.65

Log Kow : No data available

Viscosity, kinematic : <= 1.008 mm²/s at 20 °C (68 °F)

Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : 0.87 - 2.9 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour. Vapors may form flammable mixture with air.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation: Harmful if inhaled.

1,2,3,4,6,7,9-HEPTACDF UNLABELED ~25 NG/ML IN NONANE		
LC50 inhalation rat (mg/l)	23760 mg/m³ male - 4 h	
ATE CLP (vapors)	11.000 mg/l/4h	
Skin corrosion/irritation, Dermal, rat	Result: Skin Irritation (Draize Test)	
Additional information : S. Typhimurium Result: negative		
N-NONANE UNLABELED (111-84-2)		
LC50 inhalation rat (mg/l) 23760 mg/m³ male - 4 h		
ATE CLP (vapors)	11.000 mg/l/4h	
Skin corrosion/irritation, Dermal, rat Result: Skin Irritation (Draize Test)		
Additional information : S. Typhimurium Result: negative		

1,2,3,4,6,7,9-HEPTACDF UNLABELED (70648-25-8)

ATE CLP (oral) 100.000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified

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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

: 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 : Harmful if inhaled. May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation. May be harmful in contact with skin.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. Risk of lung edema.

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

1,2,3,4,6,7,9-HEPTACDF UNLABELED ~25 NG/ML IN NONANE		
Log Pow 5.65		
Bioaccumulative potential	Indication of bioaccumulation.	
N-NONANE UNLABELED (111-84-2)		
Log Pow 5.65		
Bioaccumulative potential	Indication of bioaccumulation.	

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects

: Disposal must be done according to official regulations. Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

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.

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 ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : 1920 DOT NA no. UN1920

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Nonane

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

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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 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..... 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 temperature 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

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : III

Class (ADR) : 3 - Flammable liquid

Hazard identification number (Kemler No.) : 30 Classification code (ADR) : F1

Hazard labels (ADR) : 3 - Flammable liquids



Orange plates



Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) 5I
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 : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

Civil Aeronautics Law : Flammable liquids

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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

1,2,3,4,6,7,9-HEPTACDF UNLABELED ~25 NG/ML IN NONANE			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.			
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	Fire hazard Immediate (acute) health hazard		
SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.			

N-NONANE UNLABELED (111-84-2)			
Listed on the United States TSCA (Toxic Substar	Listed on the United States TSCA (Toxic Substances Control Act) inventory		
EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.			
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	Fire hazard Immediate (acute) health hazard		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.		

1,2,3,4,6,7,9-HEPTACDF UNLABELED (70648-25-8)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.	

15.2. International regulations

CANADA

1,2,3,4,6,7,9-HEPTACDF UNLABELED ~25 NG/ML IN NONANE

Listed on the Canadian DSL (Domestic Substances List)

N-NONANE UNLABELED (111-84-2)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

Total of the control			
1,2,3,4,6,7,9-HEPTACDF UNLABELED ~25 NG/ML IN NONANE			
U.S California - Proposition 65 - Carcinogens List	No		
U.S California - Proposition 65 - Developmental Toxicity	No		
U.S California - Proposition 65 - Reproductive Toxicity - Female	No		
U.S California - Proposition 65 - Reproductive Toxicity - Male	No		
State or local regulations	U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S New Jersey - Right to Know Hazardous Substance List U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances		
N-NONANE UNLABELED (111-84-2)			

N-NONANE UNLABELED (111-84-2)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity -	U.S California - Proposition 65 - Reproductive Toxicity -	No significant risk level (NSRL)	
No	No	Female	Male		
INU	INU	No	No		

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1,2,3,4,6,7,9-HEPTACDF UNLABELED (70648-25-8)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

N-NONANE UNLABELED (111-84-2)

State or local regulations

- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances

1,2,3,4,6,7,9-HEPTACDF UNLABELED (70648-25-8)

State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard 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 vapour
H301	Toxic if swallowed
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
H413	May cause long lasting harmful effects to aquatic life
R10	Flammable
R20	Harmful by inhalation
R25	Toxic if swallowed
R36	Irritating to eyes
R36/38	Irritating to eyes and skin
R53	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
Т	Toxic
Xi	Irritant
Xn	Harmful

NFPA health hazard

: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.

2 0

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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard 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

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