

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: :

JR-F67-25

Version: 1.0

	n of the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixtures
Product name	: 1,2,3,4,6,7-HEXACDF UNLABELED ~25 NG/ML IN NONANE
Product code	: JR-F67-25
1.2. Relevant identified us	ses of the substance or mixture and uses advised against
1.2.1. Relevant identified us	Ses
Main use category	: Professional use
ndustrial/Professional use spec	: For professional use only
1.2.2. Uses advised agains	t
No additional information availab	
1.3. Details of the supplie	er of the safety data sheet
Cambridge Isotope Laboratories	
50 Frontage Road	
Andover, MA 01810 JSA	
JSA: 1-800-322-1174 Int: 1-9	78-749-8000
	otope.com
Emergency telephon	e number
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24	hours)
International: 1-703-741-5970 ((24 hours)
SECTION 2: Hazards ide	ntification
2.1. Classification of the	substance or mixture
Classification according to Re	gulation (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	I-statements : see section 16
Classification according to Dir	rective 67/548/EEC [DSD] or 1999/45/EC [DPD]
Xn; R20	
Xi; R36/38	
R10	
Xn; R65 R67	
Full text of R-phrases: see section	on 16
GHS-US classification	1999
Flam. Liq. 3 Acute Tox. 4 (Inhalation:vapour)	H226 H332
Skin Irrit. 2	H315
vo Irrit 2A	H210

Asp. Tox. 1 H304

Full text of H statements : see section 16

H319

H336

Eye Irrit. 2A

STOT SE 3

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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.

2.2. Label elements	
Labeling according to Regulation (EC) N	lo. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS02 GHS08 GHS07
Signal word (CLP)	: Danger
Hazardous ingredients	: N-NONANE UNLABELED
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 protective gloves/protective clothing/eye protection/face protection.
GHS-US labeling	
Hazard pictograms (GHS-US)	
Signal word (GHS-US)	GHS02 GHS08 GHS07 : Danger
Hazard statements (GHS-US)	: H226 - Flammable liquid and vapour
	H3204 - 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 heat, hot surfaces, open flames, sparks 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 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 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) P332+P313 - If skin irritation occurs: Get medical advice/attention.
	P337+P313 - If eye irritation persists: Get medical advice/attention.
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		P362+P364 - Take off contaminate P370+P378 - In case of fire: Use al extinguishing powder to extinguish. P403+P233 - Store in a well-ventila P403+P235 - Store in a well-ventila P405 - Store locked up. P501 - Dispose of contents/contain accordance with local, regional, nat	cohol resistant foam, carb ited place. Keep containe ited place. Keep cool. er to hazardous or specia	oon dioxide (CO2), dry r tightly closed. I waste collection point, in
2.3.	Other hazards			
No add	litional information available			
SECT	ION 3: Composition/Inforr	nation on ingredients		
3.1.	Substances			
Not ap	plicable			
3.2.	Mixtures			
Nam	9	Product identifier	%	Classification according to Directive 67/548/EEC
N-NO	NANE UNLABELED	(CAS-No.) 111-84-2	99.9999965	R10

			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-HEXACDF UNLABELED	(CAS-No.) 79060-60-9 (EC Index-No.)	0.0000035	Xn; R22 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-HEXACDF UNLABELED	(CAS-No.) 79060-60-9 (EC Index-No.)	0.0000035	Acute Tox. 4 (Oral), H302 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-HEXACDF UNLABELED	(CAS-No.) 79060-60-9	0.0000035	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell. Give oxygen or artificial respiration if necessary.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If ski irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.
4.2. Most important symptoms and effect	cts, 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 conta	act : Causes serious eye ir	ritation.
Symptoms/effects after ingestion	: May be fatal if swallow	ved and enters airways. Risk of lung edema.
4.3. Indication of any immediate medical attention and special treatment needed		
Treat symptomatically.		
SECTION 5: Firefighting	measures	
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray. Dry pow	der. Foam. Carbon dioxide. Alcohol resistant foam.
5.2. Special hazards arisin	ng from the substance or mixture	
Fire hazard	: Flammable liquid and	vapour.
Reactivity	: Flammable liquid and	vapour. Vapors may form flammable mixture with air.
5.3. Advice for firefighters	3	
Firefighting instructions	: Do not enter fire area	without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take apparatus. Complete	e action without suitable protective equipment. Self-contained breathing protective clothing.
SECTION 6: Accidental r	elease measures	
6.1. Personal precautions	, protective equipment and emergency	procedures
6.1.1. For non-emergency p	ersonnel	
Emergency procedures		tive equipment. Ventilate spillage area. No open flames, no sparks, and eathing fume, gas, mist, spray, vapors. Avoid contact with skin and eyes.
6.1.2. For emergency respo	nders	
Protective equipment		e action without suitable protective equipment. For further information
		posure controls/personal protection".
6.2. Environmental preca	utions	
Prevent entry to sewers and pub	lic waters. Avoid release to the environme	ent.
6.3. Methods and materia	I for containment and cleaning up	
For containment	: Dike and contain spill	Dispose as hazardous waste. Comply with local regulations for disposal
Methods for cleaning up	aning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.	
Other information	: Dispose of materials of	or solid residues at an authorized site.
6.4. Reference to other se	ctions	
For further information refer to se	ection 13.	
SECTION 7: Handling an	d storage	
7.1. Precautions for safe	handling	
Additional hazards when process	Do not breathe gas/fu	skin, eyes, or clothing. Keep away from sources of ignition - No smoking. mes/vapor/spray (appropriate wording to be specified by the precautionary measures against static discharges.
Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources smoking. Ground/bond container and receiving equipment. Use only non-sparking t precautionary measures against static discharge. Flammable vapors may accumula container. Use explosion-proof equipment. Wear personal protective equipment. Us outdoors or in a well-ventilated area. Avoid breathing fume, gas, mist, spray, vapors contact with skin and eyes.		, hot surfaces, sparks, open flames and other ignition sources. No d container and receiving equipment. Use only non-sparking tools. Take res against static discharge. Flammable vapors may accumulate in the ion-proof equipment. Wear personal protective equipment. Use only rentilated area. Avoid breathing fume, gas, mist, spray, vapors. Avoid
Hygiene measures		lothing before reuse. Do not eat, drink or smoke when using this product. fter handling the product.
7.2. Conditions for safe s	torage, including any incompatibilities	
echnical measures : Store in a well-ventilated place. Keep container tightly closed.		
Storage conditions	: Store at room tempera	ature away from light and moisture.
7.3. Specific end use(s)		
No additional information availab	le	
SECTION 8: Exposure co	ontrols/personal protection	
8.1. Control parameters		
1,2,3,4,6,7-HEXACDF UNLAB	ELED ~25 NG/ML IN NONANE	
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Pomork (ACCIH)	

Italy - Portugal - USA ACGIH Remark (ACGIH)

CNS impair

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1,2,3,4,6,7-HEXACDF UNLAB	BELED ~25 NG/ML IN NONANE	
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1050 mg/m ³ 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/m ³ 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/m ³)	1050 mg/m ³ 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/m ³ 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 Personal protective equipment

- : Ensure good ventilation of the work station.
- : 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.Skin and body protection: Wear suitable protective clothing, gloves and eye/face 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	
pН	: No data available	
Relative evaporation rate (butyl acetate=1)	: No data available	

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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-HEXACDF UNLABELED ~25 NG/ML IN NONANE		
LC50 inhalation rat (mg/l)	23760 mg/m ³ 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/m ³ 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-HEXACDF UNLABELED (79060-60-9)		
ATE CLP (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	

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Carcinogenicity	: Not classified
Reproductive toxicity Specific target organ toxicity – single exposure	: Not classified : May cause drowsiness or dizziness.
Specific target organ toxicity – single exposure	: Not classified
exposure	
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 40.0

12.3. Bioaccumulative potential				
1,2,3,4,6,7-HEXACDF 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	t de la constante de			
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	5			
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 / ADI	Ν			
14.1. UN number				
UN-No.(DOT)	: 1920			
DOT NA no.	UN1920			
14.2. UN proper shipping name				
	: Nonanes			
	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120			

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Hazard labels (DOT)	: 3 - Flammable liquid
	FLAMMABLE LIQUID
	3
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
	 b) I a the material has a hash point at of above 36 C (100 F) and below 35 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, 31HD2, 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
	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.
	. No supplementary mormation available.
Overland transport	
Packing group (ADR)	: 111
Class (ADR)	: 3 - Flammable liquid
Hazard identification number (Kemler No.)	: 30
Classification code (ADR)	: F1
Hazard labels (ADR)	: 3 - Flammable liquids
	3
Orange plates	20
	30
	1920
Tunnel restriction code (ADR)	: D/E
Limited quantities (ADR)	51
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
Der Vessel elemage zoeallen	passenger vessel.
MFAG-No	: 128
Air transport	
DOT Quantity Limitations Passenger aircraft/rail	601
(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-HEXACDF UNLABELED ~25 NG/ML	IN NONANE		
Listed on the United States TSCA (Toxic Substan	ces Control Act) inventory		
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.		
N-NONANE UNLABELED (111-84-2)			
Listed on the United States TSCA (Toxic Substan	ces 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-HEXACDF UNLABELED (79060-60-9)			
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-HEXACDF 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

1,2,3,4,6,7-HEXACDF U	NLABELED ~25 NG/ML IN NO	DNANE		
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 UNLABELE	ED (111-84-2)			
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)
No	No	No	No	

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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

1,2,3,4,6,7-HEXACDF UNLABELED (79060-60-9)					
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	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-HEXACDF UNLABELED (79060-60-9)					
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

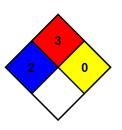
Other information

: 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. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) 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
H302	Harmful 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
R22	Harmful 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
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.



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 RatingHealth: 2 Moderate Hazard - Temporary or minor injury may occurFlammability: 3 Serious HazardPhysical: 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