

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: 19/09/2014 Revision date: 14/11/2019 Supersedes: 19/09/2014 Version: 2.0

EC-4900

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

1.1. Product identifier

Product form : Mixtures

Product name : 2,2',3,3',4,4',5,5',6-NONACB (PCB-206) (13C12, 99%) 40+/-2 UG/ML IN NONANE

Product code : EC-4900

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:dust,mist) 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 Xn; R65 R10

Full text of R-phrases: see section 16

GHS-US classification

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
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Central Nervous System.

14/11/2019 EN (English US) 1/10

NONANE EC-4900 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

2.2. Label elements

Labeling according to Regulation (EC) No. 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 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 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

Hazard pictograms (GHS-US)







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 hot surfaces, heat, 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 vapors, mist, spray, gas, fume, dust.
P264 - Wash Both hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.

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

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 poison center or doctor if you feel unwell

P321 - Specific treatment (see Hazard pictograms (CLP) 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 - Take off contaminated clothing and wash before reuse.

P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide, Dry chemical, Water spray to extinguish.

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

14/11/2019 EN (English US) 2/10

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

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

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 (EC-No.) 203-913-4 | 99.9944 | R10 Xn; R20 Xn; R65 Xi; R36/38 R67 |
| 2,2',3,3',4,4',5,5',6-NONACB (PCB-206) (13C12, 99%) | (CAS-No.) 208263-75-6 (EC Index-No.) 602-039-00-4 | 0.0056 | Xn; R48/20/21/22 N; R50/53 |
| 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 | 99.9944 | 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 |
| 2,2',3,3',4,4',5,5',6-NONACB (PCB-206) (13C12, 99%) | (CAS-No.) 208263-75-6 (EC Index-No.) 602-039-00-4 | 0.0056 | Carc. 1B, H350 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |
| Name | Product identifier | % | GHS-US classification |
| N-NONANE UNLABELED | (CAS-No.) 111-84-2 | 99.9944 | 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 R- and H- phrases: see section 16

SECTION 4: First aid measures

| 4.1. | Description | of first aid | mageurae |
|------|-------------|--------------|----------|

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 skin

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 to

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 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.

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.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

14/11/2019 EN (English US) 3/10

NONANE EC-4900

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor.

Reactivity : Flammable liquid and vapor. 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

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. 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.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

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

6.3. Methods and material 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 : 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.

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignit

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

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

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

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

and receiving equipment.

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| 2,2',3,3',4,4',5,5',6-NONACB | (PCB-206) (13C12, 99%) 40+/-2 UG/ML IN NONANE | |
|------------------------------|---|--|
| 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 |

14/11/2019 EN (English US) 4/10

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

| 2,2',3,3',4,4',5,5',6-NONACB | (PCB-206) (13C12, 99%) 40+/-2 UG/ML IN NONANE | |
|------------------------------|---|---|
| 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. 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
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available

14/11/2019 EN (English US) 5/10

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

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) : No data available

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 vapor. Vapors may form flammable mixture with air.

10.2. Chemical stability

See storage and expiration date on CoA.

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:dust,mist: Harmful if inhaled.

| 2,2',3,3',4,4',5,5',6-NONACB (PCB-206) (13C12, 99%) 40+/-2 UG/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) | | |

| 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 |

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

14/11/2019 EN (English US) 6/10

NONANE FC-4900

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

: May be fatal if swallowed and enters airways.

Specific target organ toxicity - single exposure

: May cause drowsiness or dizziness.

Specific target organ toxicity - repeated : Not classified exposure

Aspiration hazard

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.

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

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

Toxicity

No additional information available

Persistence and degradability

| 2,2',3,3',4,4',5,5',6-NONACB (PCB-206) (13C12, 99%) 40+/-2 UG/ML IN NONANE | | |
|--|--|--|
| Persistence and degradability Not established. | | |

Bioaccumulative potential

| 2,2 ⁻ ,3,3 ⁻ ,4,4 ⁻ ,5,5 ⁻ ,6-NONACB (PCB-206) (13C12, 99%) 40+/-2 UG/ML IN NONANE | | |
|--|--------------------------------|--|
| Log Pow | 5.65 | |
| Bioaccumulative potential | Not established. | |
| N-NONANE UNLABELED (111-84-2) | | |
| Log Pow 5.65 | | |
| Bioaccumulative potential | Indication of bioaccumulation. | |

12.4. **Mobility in soil**

No additional information available

Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

: Waste materials should be disposed of under conditions which meet Federal, State, and local Regional legislation (waste)

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.

: Dispose of as unused product. Ecology - waste materials

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. **UN** number

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

UN proper shipping name

Proper Shipping Name (DOT) : Nonanes

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

Hazard labels (DOT) : 3 - Flammable liquid



14/11/2019 EN (English US) 7/10

NONANE EC-4900

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

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
Marine pollutant : No

14.3. Additional information

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

30 1920

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

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

14/11/2019 EN (English US) 8/10

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

SECTION 15: Regulatory information

15.1. US Federal regulations

| 2,2',3,3',4,4',5,5',6-NONACB (PCB-206) (13C12, 99 %) 40+/-2 UG/ML IN NONANE | | | |
|--|--|--|--|
| Listed on the United States TSCA (Toxic Substar | nces 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 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. | |

15.2. International regulations

CANADA

2,2',3,3',4,4',5,5',6-NONACB (PCB-206) (13C12, 99%) 40+/-2 UG/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

| 2,2',3,3',4,4',5,5',6-NONACB (PCB-206) (13C12, 99%) | 40+/-2 UG/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)

| 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 | |

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

14/11/2019 EN (English US) 9/10

NONANE EC-4900

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

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:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 4 |
|-------------------------------------|---|
| Acute Tox. 4 (Inhalation:vapour) | Acute toxicity (inhalation:vapour) 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 |
| Carc. 1B | Carcinogenicity Category 1B |
| 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 |
| 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 |
| H350 | May cause cancer |
| H373 | 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 |
| R36/38 | Irritating to eyes and skin |
| R48/20/21/22 | Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed |
| 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 |
| N | Dangerous for the environment |
| 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.

temperature conditio

NFPA reactivity

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



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

14/11/2019 EN (English US) 10/10