



4,4'-DICOFOL UNLABELED 100 UG/ML IN NONANE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 11/11/2019 Revision date: 1/13/2023 Supersedes: 11/11/2019 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : 4,4'-DICOFOL UNLABELED 100 UG/ML IN NONANE
Product code : ULM-6136-S

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Cambridge Isotope Laboratories, Inc.
50 Frontage Rd
01810
ANDOVER, MA, 01810
USA
T 1-800-322-1174
cilsales@isotope.com - www.isotope.com

1.4. Emergency telephone number

Emergency number : 1-703-741-5970
Chemtrec 1-800-424-9300 24 hours

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

| | | |
|--|------|--|
| Flammable liquids Category 3 | H226 | Flammable liquid and vapor |
| Acute toxicity (inhalation) Category 4 | H332 | Harmful if inhaled |
| Skin corrosion/irritation Category 2 | H315 | Causes skin irritation |
| Serious eye damage/eye irritation Category 2 | H319 | Causes serious eye irritation |
| Specific target organ toxicity – Single exposure, Category 3, Narcosis | H336 | May cause drowsiness or dizziness |
| Aspiration hazard Category 1 | H304 | May be fatal if swallowed and enters airways |

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

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 heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
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.
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 supplemental first aid instruction 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.
P370+P378 - In case of fire: Use media other than water 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.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|--------------------|--------------------|--------|--|
| N-NONANE UNLABELED | CAS-No.: 111-84-2 | 99.986 | 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 |

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| Name | Product identifier | % | GHS US classification |
|------------------------|--------------------|-------|---|
| 4,4'-DICOFOL UNLABELED | CAS-No.: 115-32-2 | 0.014 | Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Full text of hazard classes and H-statements : 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 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 (acute and delayed)

| | |
|---|---|
| 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 | : 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. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

| | |
|--|--------------------------------|
| Fire hazard | : Flammable liquid and vapor. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Special protective equipment and precautions for fire-fighters

| | |
|--------------------------------|--|
| 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. |

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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. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container 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 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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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|---|--|
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Nonane |
| ACGIH OEL TWA [ppm] | 200 ppm USA. ACGIH Threshold Limit Values (TLV) |
| Remark (ACGIH) | CNS impair |
| ACGIH chemical category | No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH. |
| USA - OSHA - Occupational Exposure Limits | |
| OSHA PEL TWA [1] | 1050 mg/m ³ USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000 |
| OSHA PEL TWA [2] | 200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000 |
| OSHA PEL C | 1050 California permissible exposure limits for chemical contaminants. |
| OSHA PEL C [ppm] | 200 ppm California permissible exposure limits for chemical contaminants. |
| USA - NIOSH - Occupational Exposure Limits | |
| NIOSH REL TWA | 1050 mg/m ³ USA. NIOSH Recommended Exposure Limits |
| NIOSH REL TWA [ppm] | 200 ppm USA. NIOSH Recommended Exposure Limits |
| Remark (NIOSH) | Central Nervous System impairment |
| N-NONANE UNLABELED (111-84-2) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Nonane |
| ACGIH OEL TWA [ppm] | 200 ppm USA. ACGIH Threshold Limit Values (TLV) |
| Remark (ACGIH) | CNS impair |
| ACGIH chemical category | No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH. |
| USA - OSHA - Occupational Exposure Limits | |
| OSHA PEL TWA [1] | 1050 mg/m ³ USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000 |
| OSHA PEL TWA [2] | 200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000 |
| OSHA PEL C | 1050 California permissible exposure limits for chemical contaminants. |
| OSHA PEL C [ppm] | 200 ppm California permissible exposure limits for chemical contaminants. |
| USA - NIOSH - Occupational Exposure Limits | |
| NIOSH REL TWA | 1050 mg/m ³ USA. NIOSH Recommended Exposure Limits |
| NIOSH REL TWA [ppm] | 200 ppm USA. NIOSH Recommended Exposure Limits |
| Remark (NIOSH) | Central Nervous System impairment |
| 4,4'-DICOFOL UNLABELED (115-32-2) | |
| No additional information available | |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

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8.3. Individual protection measures/Personal protective equipment

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 |

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | : Liquid |
| Appearance | : Liquid. |
| Color | : Colorless |
| Odor | : Mixture contains one or more component(s) which have the following odour: |
| Odor threshold | : No data available |
| pH | : 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 |
| Relative evaporation rate (butyl acetate=1) | : 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 |
| Density | : 0.718 g/ml at 25 °C (77 °F) |
| Molecular mass | : 128.3 g/mol |
| Solubility | : Water: 0.0002 % |
| Partition coefficient n-octanol/water (Log Pow) | : 5.65 |
| Auto-ignition temperature | : 205 °C (401 °F) |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : ≤ 1.008 mm ² /s at 20 °C (68 °F) |
| Viscosity, dynamic | : No data available |
| Explosion limits | : 0.87 – 2.9 % (V) |
| Explosive properties | : No data available |

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Oxidizing properties : No data available

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 (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

| 4,4'-DICOFOL UNLABELED 100 UG/ML IN NONANE | |
|--|---|
| LC50 Inhalation - Rat | 23760 mg/m ³ male - 4 h |
| ATE US (gases) | 4500 ppmV/4h |
| ATE US (vapors) | 11 mg/l/4h |
| ATE US (dust, mist) | 1.5 mg/l/4h |
| Additional data | Skin corrosion/irritation, Dermal, rat: Result: Skin Irritation (Draize Test) S. Typhimurium Result negative |

| N-NONANE UNLABELED (111-84-2) | |
|--|---------------------------------------|
| LC50 Inhalation - Rat | 23760 mg/m ³ male - 4 h |
| ATE US (gases) | 4500 ppmV/4h |
| ATE US (vapors) | 11 mg/l/4h |
| ATE US (dust, mist) | 1.5 mg/l/4h |
| Skin corrosion/irritation, Dermal, rat | Result: Skin Irritation (Draize Test) |
| Additional information | : S. Typhimurium Result: negative |

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| 4,4'-DICOFOL UNLABELED (115-32-2) | |
|-----------------------------------|--------------------------|
| LD50 oral rat | 575 mg/kg |
| LD50 dermal rabbit | 1870 mg/kg |
| LC50 Inhalation - Rat | > 5000 mg/m ³ |
| ATE US (oral) | 575 mg/kg body weight |
| ATE US (dermal) | 1870 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 |

| 4,4'-DICOFOL UNLABELED (115-32-2) | |
|-----------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

| | |
|-----------------------|--------------------------------------|
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : May cause drowsiness or dizziness. |

| N-NONANE UNLABELED (111-84-2) | |
|-------------------------------|------------------------------------|
| STOT-single exposure | May cause drowsiness or dizziness. |

| | |
|------------------------|---|
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : May be fatal if swallowed and enters airways. |
| Viscosity, kinematic | : ≤ 1.008 mm ² /s at 20 °C (68 °F) |

| N-NONANE UNLABELED (111-84-2) | |
|-------------------------------|---|
| Viscosity, kinematic | ≤ 1.008 mm ² /s at 20 °C (68 °F) |

| | |
|---|---|
| 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 | : 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. |

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. |
|-------------------|--|

| 4,4'-DICOFOL UNLABELED (115-32-2) | |
|-----------------------------------|---|
| LC50 - Fish [1] | 0.21 mg/l <i>Oncorhynchus mykiss</i> (rainbow trout) - 96 h |
| EC50 - Crustacea [1] | 0.08 mg/l <i>Daphnia magna</i> (Water flea) - 24 h |

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

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| | |
|---|--------------------------------|
| Partition coefficient n-octanol/water (Log Pow) | 5.65 |
| Bioaccumulative potential | Indication of bioaccumulation. |

N-NONANE UNLABELED (111-84-2)

| | |
|---|--------------------------------|
| Partition coefficient n-octanol/water (Log Pow) | 5.65 |
| Bioaccumulative potential | Indication of bioaccumulation. |

4,4'-DICOFOL UNLABELED (115-32-2)

| | |
|-------------------------------------|---------------------------|
| Bioconcentration factor (BCF REACH) | 10000 Lepomis macrochirus |
|-------------------------------------|---------------------------|

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : Disposal must be done according to official regulations.

SECTION 13: Disposal considerations

13.1. Disposal 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 DOT / TDG / IMDG / IATA

14.1. UN number

| | |
|---------------|----------|
| DOT NA No | : UN1920 |
| UN-No. (TDG) | : UN1920 |
| UN-No. (IMDG) | : 1920 |
| UN-No. (IATA) | : 1920 |

14.2. UN proper shipping name

| | |
|-----------------------------|-----------|
| Proper Shipping Name (DOT) | : Nonanes |
| Proper Shipping Name (TDG) | : NONANES |
| Proper Shipping Name (IMDG) | : NONANES |
| Proper Shipping Name (IATA) | : Nonanes |

14.3. Transport hazard class(es)

DOT

| | |
|----------------------------------|-----|
| Transport hazard class(es) (DOT) | : 3 |
| Hazard labels (DOT) | : 3 |

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TDG

Transport hazard class(es) (TDG) : 3

Hazard labels (TDG) : 3



IMDG

Transport hazard class(es) (IMDG) : 3

Hazard labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3

Hazard labels (IATA) : 3



14.4. Packing group

Packing group (DOT) : III

Packing group (TDG) : III

Packing group (IMDG) : III

Packing group (IATA) : III

14.5. Environmental hazards

Marine pollutant : Yes (IMDG only)



Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1920

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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)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

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
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

TDG

UN-No. (TDG) : UN1920
Explosive Limit and Limited Quantity Index : 5 L
Excepted quantities (TDG) : E1
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 60 L
Emergency Response Guide (ERG) Number : 128

IMDG

Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T2
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage) : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER
Stowage category (IMDG) : A
Flash point (IMDG) : '
Properties and observations (IMDG) : Colourless liquids. Explosive limits: 0.8% to 2.9% normal-NONANE: flashpoint 31°C c.c. Immiscible with water. Irritating to skin, eyes and mucous membranes.
MFAG-No : 128

IATA

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y344
PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L

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ERG code (IATA) : 3L

14.7. 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

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| | |
|--|--|
| 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 |

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

| Name | CAS-No. | Listing | Commercial status | Flags |
|------------------------|----------|-------------|-------------------|-------|
| N-NONANE UNLABELED | 111-84-2 | Present | Active | T |
| 4,4'-DICOFOL UNLABELED | 115-32-2 | Not present | - | |

N-NONANE UNLABELED (111-84-2)

| | |
|--|--|
| 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 |

4,4'-DICOFOL UNLABELED (115-32-2)

| | |
|---|--|
| Subject to reporting requirements of United States SARA Section 313 | |
| CERCLA RQ | 10 lb |
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Delayed (chronic) health hazard |

15.2. International regulations

CANADA

N-NONANE UNLABELED (111-84-2)

Listed on the Canadian DSL (Domestic Substances List)

4,4'-DICOFOL UNLABELED (115-32-2)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

4,4'-DICOFOL UNLABELED 100 UG/ML IN NONANE

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National regulations

4,4'-DICOFOL UNLABELED (115-32-2)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States.

Listed on TECI (Thailand Existing Chemicals Inventory)

15.3. US State regulations

4,4'-DICOFOL UNLABELED 100 UG/ML IN NONANE

| | |
|----------------------------|---|
| State or local regulations | 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 |
|----------------------------|---|

| Component | State or local regulations |
|----------------------------------|---|
| N-NONANE UNLABELED(111-84-2) | 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 |
| 4,4'-DICOFOL UNLABELED(115-32-2) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 01/13/2023

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 H-phrases

| | |
|------|--|
| H226 | Flammable liquid and vapor |
| H302 | Harmful if swallowed |
| H304 | May be fatal if swallowed and enters airways |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H336 | May cause drowsiness or dizziness |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |

Safety Data Sheet (SDS), USA

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.