

METHOXYCHLOR UNLABELED 100 UG/ML IN NONANE

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 16/04/2015

Revision date:

Version: 1.0

ULM-7440-S

| | tification of the sub | ostance/mixture and of the company/undertaking |
|--|---------------------------|--|
| 1.1. Product ide | | |
| Product form | | : Mixtures |
| Product name. | | : METHOXYCHLOR UNLABELED 100 UG/ML IN NONANE |
| Product code | | : ULM-7440-S |
| 1.2. Relevant ic | entified uses of the subs | stance or mixture and uses advised against |
| 1.2.1. Relevant ic | entified uses | |
| ndustrial/Professiona | l use spec | : For professional use only. |
| 1.2.2. Uses advis | ed against | |
| No additional informa | ion available | |
| 1.3. Details of t | he supplier of the safety | data sheet |
| Cambridge Isotope La 50 Frontage Road Andover, MA 01810 USA USA: 1-800-322-117 cilsales@isotope.com | 4 Int: 1-978-749-8000 | |
| Emergency | telephone number | |
| Emergency numbers: | | |
| Chemtrec: 1-800-424 International: 1-703-7 | | |
| SECTION 2: Haz | ards identification | |
| 2.1. Classificat | on of the substance or n | nixture |
| Classification accor | ding to Regulation (EC) I | No. 1272/2008 [CLP] |
| Flam. Liq. 3 | H226 | |
| Acute Tox. 4 (Inhalati | on) H332 | |
| Skin Irrit. 2 | H315 | |
| Eye Irrit. 2 | H319 | |
| STOT SE 3 | H336 | |
| Asp. Tox. 1 | H304 | |
| Full text of H-phrases | see section 16 | |
| Classification accor Xn; R20 | ding to Directive 67/548/ | EEC or 1999/45/EC |
| Xn; R65 R10 | | |
| Full text of R-phrases | see section 16 | |
| Classification (GHS- | US) | |
| Flam. Liq. 3 | H226 | |
| Acute Tox. 4 (Inhalati | | |
| Skin Irrit. 2 Eye Irrit. 2A | H315 H319 | |
| | | |
| STOT SE 3 Asp. Tox. 1 | H336 H304 | |

Adverse physicochemical, human health and environmental effects

Central Nervous System.

Safety Data Sheet

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P405 - Store locked up P501 - Dispose of contents/container to Comply with applicable regulations.

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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 | 99.9861 | R10 Xn; R20 Xn; R65 R67 |
| METHOXYCHLOR UNLABELED | (CAS No) 72-43-5 (EC no) 200-779-9 | 0.0139 | Carc.Cat.3; R40 Xn; R20/21/22 Xi; R36/37/38 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 | 99.9861 | Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304 |
| METHOXYCHLOR UNLABELED | (CAS No) 72-43-5 (EC no) 200-779-9 | 0.0139 | Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 2, H351 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 |
| Name | Product identifier | % | Classification (GHS-US) |
| N-NONANE UNLABELED | (CAS No) 111-84-2 | 99.9861 | Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Asp. Tox. 1, H304 |

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

| SECTION 4: First aid measures | |
|--|---|
| 4.1. Description of first aid measures | |
| First-aid measures general | : Move out of dangerous area. Consult a physician and show this safety data sheet. |
| First-aid measures after inhalation | : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell. |
| First-aid measures after skin contact | : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. |
| First-aid measures after eye contact | : Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention. |
| First-aid measures after ingestion | : Immediately call a POISON CENTER or doctor/physician. |
| 4.2. Most important symptoms and eff | fects, both acute and delayed |
| Symptoms/injuries after inhalation | : May cause drowsiness or dizziness. |
| Symptoms/injuries after skin contact | : Causes skin irritation. |
| Symptoms/injuries after eye contact | : Causes eye irritation. |
| Symptoms/injuries after ingestion | : May be fatal if swallowed and enters airways. |
| 4.3. Indication of any immediate medi | cal attention and special treatment needed |

No additional information available

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| SECTION 5: Firefighting measures 5.1. Extinguishing media suitable extinguishing media | : For small fires, use media such as "alcoh | hol" foam, dry chemical, or carbon diovide. For large |
|--|--|---|
| | | hol" foam, dry chemical, or carbon dioxide. For large |
| | | e. Use very large quantities (flooding) of water applied as hay be ineffective. Cool all affected containers with |
| 5.2. Special hazards arising from the sub- | stance or mixture | |
| Fire hazard | : Flammable liquid and vapor. | |
| • | : May form flammable/explosive vapor-air | |
| Reactivity | : Vapors may form explosive mixture with | air. |
| 5.3. Advice for firefighters | | |
| Firefighting instructions | : Use water spray to cool unopened conta | ainers. |
| Protection during firefighting | : Do not enter fire area without proper pro- | tective equipment, including respiratory protection. |
| SECTION 6: Accidental release meas | ures | |
| 6.1. Personal precautions, protective equ | ipment and emergency procedures | |
| General measures | : Remove ignition sources. Use special ca smoking. | are to avoid static electric charges. No naked lights. No |
| 6.1.1. For non-emergency personnel | | |
| Emergency procedures | ventilation. Remove all sources of ignitio | id breathing vapors, mist or gas. Ensure adequate on. Evacuate personnel to safe areas. Beware of vapours rations. Vapours can accumulate in low areas. |
| 6.1.2. For emergency responders No additional information available | | |
| 6.2. Environmental precautions | | |
| Prevent entry to sewers and public waters. | | |
| 6.3. Methods and material for containment | nt and cleaning up | |
| For containment | : Contain spillage, then collect with non-co accordance with applicable Federal, Stat | ombustible absorbent material. Disposal should be in te and local regulations. |
| 6.4. Reference to other sections | | |
| No additional information available | | |
| SECTION 7: Handling and storage | | |
| 7.1. Precautions for safe handling | | |
| Additional hazards when processed | : Handle empty containers with care beca | use residual vapors are flammable. |
| Precautions for safe handling | : No naked lights. No smoking. Take precanon-sparking tools. Use only outdoors or | autionary measures against static discharge. Use only r in a well-ventilated area. |
| Hygiene measures | | al hygiene and safety practice. Wash hands before |
| 7.2. Conditions for safe storage, including | g any incompatibilities | |
| Technical measures | : Proper grounding procedures to avoid st container and receiving equipment. | tatic electricity should be followed. Ground/bond |
| Storage conditions | : Store at room temperature away from lig | ght and moisture. |
| Incompatible materials | : Heat sources. | |
| 7.3. Specific end use(s) No additional information available | | |
| SECTION 8: Exposure controls/perso | nal protection | |
| 8.1. Control parameters | | |
| METHOXYCHLOR UNLABELED 100 UG/ML IN | NONANE | |
| Italy - Portugal - USA ACGIH ACGIH TWA (pp | om) 2 | 200.0000000000 ppm Central Nervous System mpairment. |
| N-NONANE UNLABELED (111-84-2) | | |
| Italy - Portugal - USA ACGIH ACGIH TWA (pp | | 200.0000000000 ppm Central Nervous System mpairment. |
| METHOXYCHLOR UNLABELED (72-43-5) | | |
| | g/m³) 1 | 10.000000000 mg/m ³ Central nervous system |

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Respiratory protection

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| | 8.2. Exposure controls | |
|-------------------------------|--------------------------|--|
| Personal protective equipment | | : Protective clothing. Protective goggles. Self-contained breathing apparatus. Gloves. |
| | | R C R M |
| | Hand protection | : Wear suitable protective clothing and gloves. |
| | Eye protection | : Wear safety glasses with side shields (or goggles) and a face shield. |
| | Skin and body protection | : Wear suitable protective clothing. |

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

SECTION 9: Physical and chemical properties

| 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 | | |
| Color | : No data available. | | |
| Odor | : No data available | | |
| Odor threshold | : No data available | | |
| рН | : No data available | | |
| Relative evaporation rate (butyl acetate=1) | : No data available | | |
| Melting point | : No data available | | |
| Freezing point | : -53 °C (- 63 °F) - lit | | |
| Boiling point | : 151 °C (304 °F) - lit | | |
| Flash point | : 31.0 °C (87.8 °F) - closed cup | | |
| Self ignition temperature | : 205 °C (401 °F) | | |
| Decomposition temperature | : No data available | | |
| Flammability (solid, gas) | : Flammable liquid and vapor | | |
| Vapor pressure | : 12.4 hPa (9.3 mmHg) at 37.7 °C (99.9 °F) | | |
| Relative vapor density at 20 °C | : No data available | | |
| Relative density | : No data available | | |
| Solubility | : Water: 0 % | | |
| Log Pow | : 5.65 | | |
| Log Kow | : No data available | | |
| Viscosity, kinematic | : No data available | | |
| Viscosity, dynamic | : No data available | | |
| Explosive properties | : No data available | | |
| Oxidizing properties | : No data available | | |
| Explosive limits | : 0.87 - 2.9 % (V) | | |
| 9.2. Other information | | | |
| | | | |

No additional information available

| SECT | ION 10: Stability and reactivity | | | |
|--------------------------|--|--|--|--|
| 10.1. | Reactivity | | | |
| Vapors | Vapors may form explosive mixture with air. | | | |
| 10.2. | Chemical stability | | | |
| See sto | rage and expiration date on CoA. | | | |
| 10.3. | Possibility of hazardous reactions | | | |
| No addi | No additional information available | | | |
| 10.4. | Conditions to avoid | | | |
| Open fl | ame. Overheating. Direct sunlight. Heat. Sparks. | | | |
| 10.5. | Incompatible materials | | | |
| Strong oxidizing agents. | | | | |

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| 10.6. Hazardous decomposition products | | |
|---|---|--|
| May release flammable gases. | | |
| SECTION 11: Toxicological information | | |
| 11.1. Information on toxicological effects | | |
| Acute toxicity | : Harmful if inhaled. | |
| METHOXYCHLOR UNLABELED 100 UG/ML IN | INONANE | |
| LC50 inhalation rat (ppm) | 3200 ppm/4h | |
| ATE (gases) | 4500.000 ppmV/4h | |
| ATE (vapors) | 11.000 mg/l/4h | |
| ATE (dust, mist) | 1.500 mg/l/4h | |
| N-NONANE UNLABELED (111-84-2) | | |
| LC50 inhalation rat (ppm) | 3200 ppm/4h | |
| ATE (dust, mist) | 1.500 mg/l/4h | |
| METHOXYCHLOR UNLABELED (72-43-5) | | |
| LD50 oral rat | 1855 mg/kg | |
| ATE (oral) | 1855.000 mg/kg body weight | |
| ATE (dermal) | 1100.000 mg/kg body weight | |
| ATE (dust, mist) | 1.500 mg/l/4h | |
| Skin corrosion/irritation | : Causes skin irritation. | |
| | Skin - rat - Skin irritation - Draize test | |
| Serious eye damage/irritation | : Causes serious eye irritation. | |
| | No data available | |
| Respiratory or skin sensitization | : Not available | |
| | No data available | |
| Germ cell mutagenicity | : Not available | |
| Carcinogenicity | : Not classified | |
| Reproductive toxicity | : Not available | |
| Specific target organ toxicity (single exposure) | : May cause drowsiness or dizziness. | |
| | May cause drowsiness or dizziness. | |
| Specific target organ toxicity (repeated | : Not classified | |
| exposure) | No data available | |
| Aspiration hazard | : May be fatal if swallowed and enters airways. | |
| Potential Adverse human health effects and symptoms | : The chemical, physical, and toxicological properties have not been thoroughly investigated. | |
| Symptoms/injuries after inhalation | : May cause drowsiness or dizziness. | |
| Symptoms/injuries after skin contact | : Causes skin irritation. | |
| Symptoms/injuries after eye contact | : Causes eye irritation. | |
| Symptoms/injuries after ingestion | : May be fatal if swallowed and enters airways. | |

SECTION 12: Ecological information

12.1. Toxicity

| METHOXYCHLOR UNLABELED (72-43-5) | |
|----------------------------------|--|
| LC50 fish 1 | 0.03 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h |
| EC50 Daphnia 1 | 0.016 mg/l Daphnia magna (Water flea) - 48 h |

| 12.2. Persistence and degradability | | |
|--|----------------|--|
| METHOXYCHLOR UNLABELED 100 UG/ML IN NONANE | | |
| Persistence and degradability | Not available. | |
| N-NONANE UNLABELED (111-84-2) | | |
| Persistence and degradability | Not available. | |
| METHOXYCHLOR UNLABELED (72-43-5) | | |
| Persistence and degradability Not available. | | |

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| according to Regulation (EC) No. 453/2010 and accordin | ng to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations |
|---|--|
| 12.3. Bioaccumulative potential | |
| METHOXYCHLOR UNLABELED 100 UG/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. |
| METHOXYCHLOR UNLABELED (72-43-5) | |
| Bioconcentration factor (BCF REACH) | 8300 |
| 12.4. Mobility in soil | |
| METHOXYCHLOR UNLABELED 100 UG/ML | |
| Ecology - soil | Not available. |
| | |
| N-NONANE UNLABELED (111-84-2) | Aller as which to |
| Ecology - soil | Not available. |
| METHOXYCHLOR UNLABELED (72-43-5) | |
| Ecology - soil | Not available. |
| 12.5. Results of PBT and vPvB assessme | ent |
| No additional information available | |
| 12.6. Other adverse effects | |
| Other adverse effects | : An environmental hazard cannot be excluded in the event of unprofessional handling or dispose Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| SECTION 13: Disposal consideratio | ns |
| 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. |
| Waste disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| Additional information | : Handle empty containers with care because residual vapors are flammable. |
| Ecology - waste materials | : Hazardous waste due to toxicity. |
| SECTION 14: Transport information In accordance with ADR / RID / ADNR / IMDG / | |
| 14.1. UN number | |
| UN-No.(DOT) | : 1920 |
| DOT NA no. | UN1920 |
| 14.2. UN proper shipping name | |
| DOT Proper Shipping Name | : Nonanes |
| Department of Transportation (DOT) Hazard Classes | : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 |
| Hazard labels (DOT) | : 3 - Flammable liquid |
| | |
| | 3 |

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| | ig to Federal Register / Vol. //, No. 58 / Monday, March 26, 2012 / Rules and Regulations |
|--|---|
| DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) | : 150 : 203 |
| DOT Packaging Bulk (49 CFR 173.xxx) | : 242 |
| | |
| 14.3. Additional information | |
| Other information | : No supplementary information available. |
| | |
| Overland transport | |
| Packing group (ADR) | : 111 |
| Class (ADR) | : 3 - Flammable liquid |
| Hazard identification number (Kemler No.) | : 30 |
| Classification code (ADR) | : F1 |
| Danger labels (ADR) | : 3 - Flammable liquids |
| | 3 |
| Orange plates | 30 1920 |
| Tunnel restriction code | : D/E |
| Limited quantities (ADR) | 5L |
| EAC | : 3Y |
| Excepted quantities (ADR) | : E1 |
| Transport by sea | |
| DOT Vessel Stowage Location | : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a |
| | passenger vessel. |
| MFAG-No | : 128 |
| Air transport | |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : 60 L |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) | : 220 L |
| Civil Aeronautics Law | : Flammable liquids |
| 14.4. Environmental hazards | |
| Other information | : No supplementary information available. |
| 14.5. Special precautions for user | |
| | ex II of MARPOL 73/78 and the IBC Code |
| Not applicable | |
| SECTION 15: Regulatory information | n |
| 15.1. US Federal regulations | |
| METHOXYCHLOR UNLABELED 100 UG/ML | IN NONANE |
| SARA Section 311/312 Hazard Classes | Fire hazard |

| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard |
|-------------------------------------|--|
| N-NONANE UNLABELED (111-84-2) | |
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard |

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15.2. International regulations

CANADA

METHOXYCHLOR UNLABELED 100 UG/ML IN NONANE

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. **National regulations**

No additional information available

| 15.3. US State regulations METHOXYCHLOR UNLABELED 100 UG/ML IN NONANE() | |
|---|--|
| | |

N-NONANE UNLABELED (111-84-2)

U.S. - Massachusetts - Right To Know List

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

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-. H- and EUH-phrases::

| text of R-, H- and EUH-phrases:: | | |
|-------------------------------------|---|--|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal) Category 4 | |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhalation) Category 4 | |
| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 4 | |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 | |
| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute Hazard Category 1 | |
| Aquatic Chronic 1 | Hazardous to the aquatic environment - Chronic Hazard Category 1 | |
| Asp. Tox. 1 | Aspiration hazard Category 1 | |
| Carc. 2 | Carcinogenicity Category 2 | |
| 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 vapor | |
| H302 | Harmful if swallowed | |
| H304 | May be fatal if swallowed and enters airways | |
| H312 | Harmful in contact with skin | |
| H315 | Causes skin irritation | |
| H319 | Causes serious eye irritation | |
| H332 | Harmful if inhaled | |
| H336 | May cause drowsiness or dizziness | |
| H351 | Suspected of causing cancer | |
| H400 | Very toxic to aquatic life | |
| H410 | Very toxic to aquatic life with long lasting effects | |
| R10 | Flammable | |
| R20 | Harmful by inhalation | |
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed | |
| R36/37/38 | Irritating to eyes, respiratory system and skin | |
| R40 | Limited evidence of a carcinogenic effect | |
| 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 | |

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| N | Dangerous for the environment |
|--------------------|--|
| Xi | Irritant |
| Xn | Harmful |
| | Hummu |
| NFPA health hazard | : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given. |
| NFPA fire hazard | : 3 - Liquids and solids that can be ignited under almost all ambient conditions. |
| NFPA reactivity | : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. |
| HMIS III Rating | |
| Health | : 2 Moderate Hazard - Temporary or minor injury may occur |
| Flammability | : 3 Serious Hazard |
| Physical | : 0 Minimal Hazard |
| <i>.</i> | |

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