



KEPONE (CHLORDECONE) UNLABELED

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: 07/03/2011
ULM-2301

Revision date: 21/03/2017

Supersedes: 04/12/2014

Version: 4.0

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

1.1. Product identifier

Product form : Substance
Substance name : KEPONE (CHLORDECONE) UNLABELED
EC Index No : 606-019-00-6
EC No : 205-601-3
CAS No : 143-50-0
Product code : ULM-2301
Formula : C10Cl10O

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
cilsales@isotope.com 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]

Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Carc. 2 H351
Aquatic Acute 1 H400 (M=1000)
Aquatic Chronic 1 H410

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

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

T; R24/25
Carc.Cat.3; R40
N; R50/53

Full text of R-phrases: see section 16

GHS-US classification

Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Carc. 2 H351
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Liver, Central nervous system, Testes, Endocrine system.

KEPONE (CHLORDECONE) UNLABELED

ULM-2301

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

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

H301+H311 - Toxic if swallowed or in contact with skin
H351 - Suspected of causing cancer (in contact with skin, if inhaled, if swallowed)
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P264 - Wash Both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P310 - IF SWALLOWED: Immediately call a doctor
P302+P352 - IF ON SKIN: Wash with plenty of water
P308+P313 - IF exposed or concerned: Get medical advice/attention
P312 - Call a doctor if you feel unwell

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H301+H311 - Toxic if swallowed or in contact with skin
H351 - Suspected of causing cancer (Dermal, oral, Inhalation)
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P264 - Wash Both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P310 - If swallowed: Immediately call a doctor
P302+P352 - If on skin: Wash with plenty of water
P308+P313 - If exposed or concerned: Get medical advice/attention
P312 - Call a doctor if you feel unwell
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)
P330 - Rinse mouth
P361 - Take off immediately all contaminated clothing
P363 - Wash contaminated clothing before reuse
P391 - Collect spillage
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

Name	Product identifier	%	Classification according to Directive 67/548/EEC
KEPONE (CHLORDECONE) UNLABELED	(CAS No) 143-50-0 (EC No) 205-601-3 (EC Index No) 606-019-00-6	100	T; R24/25 Carc.Cat.3; R40 N; R50/53

KEPONE (CHLORDECONE) UNLABELED

ULM-2301

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
KEPONE (CHLORDECONE) UNLABELED	(CAS No) 143-50-0 (EC No) 205-601-3 (EC Index No) 606-019-00-6	100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Carc. 2, H351 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410

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

Name	Product identifier	%	GHS-US classification
KEPONE (CHLORDECONE) UNLABELED (Main constituent)	(CAS No) 143-50-0	100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash skin with plenty of water. Get medical advice/attention if you feel unwell.
First-aid measures after eye contact	: Rinse immediately with plenty of water.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Harmful by inhalation. May be harmful if inhaled.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. Causes skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed.

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

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Reactivity : Not available.

5.3. Advice for firefighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.

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. Avoid breathing vapours, mist, gas, dust. Ensure adequate air ventilation. Evacuate danger area.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not discharge the product into the environment.

6.3. Methods and material for containment and cleaning up

For containment : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

KEPONE (CHLORDECONE) UNLABELED

ULM-2301

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

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 : Provide appropriate exhaust ventilation at places of dust forming. Avoid all contact with skin, eyes, or clothing.

Hygiene measures : Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep container tightly closed. Keep in a cool, well-ventilated place away from heat.

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

KEPONE (CHLORDECONE) UNLABELED (143-50-0)

USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.001 mg/m ³ Remarks: Potential Occupational Carcinogen ; USA. NIOSH Recommended Exposure Limits
-----------	--------------------------------------	---

8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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



Materials for protective clothing : Wear suitable protective clothing and gloves.

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 : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Solid.

Molecular mass : 490.64 g/mol

Colour : Colourless.

Odour : No data available.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : > 100 °C (> 212.00 °F)

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : 19.65

Relative density : No data available

Solubility : Water: insoluble

Log Pow : No data available

KEPONE (CHLORDECONE) UNLABELED

ULM-2301

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

Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not available.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Formed under fire conditions: carbon oxides, Hydrogen chloride gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin.

KEPONE (CHLORDECONE) UNLABELED (143-50-0)	
LD50 oral rat	91.3 mg/kg
LD50 dermal rabbit	345 mg/kg
ATE CLP (oral)	91.300 mg/kg bodyweight
ATE CLP (dermal)	345.000 mg/kg bodyweight

Skin corrosion/irritation	: Not classified No data available
Serious eye damage/irritation	: Not classified No data available
Respiratory or skin sensitisation	: Not available No data available
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified No data available
STOT-repeated exposure	: Not classified No data available
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Tremors. Ataxia. Liver injury may occur. Stomach - Irregularities - Based on Human Evidence. 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.
IARC group	: 2B
Symptoms/injuries after inhalation	: Harmful by inhalation. May be harmful if inhaled.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. Causes skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed.

KEPONE (CHLORDECONE) UNLABELED

ULM-2301

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 12: Ecological information

12.1. Toxicity

KEPONE (CHLORDECONE) UNLABELED (143-50-0)	
LC50 fish 1	0.03 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	0.26 mg/l Daphnia magna (Water flea) - 48 h
ErC50 (algae)	0.35 µg/l Chlorococcum sp. - 7 d

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

Product/Packaging disposal recommendations: : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

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

14.1. UN number

UN-No.(DOT) : 2811
DOT NA no. : UN2811

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Toxic solids, organic, n.o.s.
Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Hazard labels (DOT) : 6.1 - Poison



DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT) : I - Great Danger

DOT Special Provisions (49 CFR 172.102) : IB7 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Wooden (11C, 11D and 11F). Additional Requirement: Liners of wooden IBCs must be sift- proof.
T6 - 4 178.274(d)(2) Normal..... 178.275(d)(2)
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : None

DOT Packaging Non Bulk (49 CFR 173.xxx) : 211

KEPONE (CHLORDECONE) UNLABELED

ULM-2301

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

DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT RQ : 1 lbs
Marine pollutant : Yes



14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : I
Class (ADR) : 6.1 - Toxic substances
Hazard identification number (Kemler No.) : 66
Classification code (ADR) : T2
Danger labels (ADR) : 6.1 - Toxic substances



Orange plates :



Tunnel restriction code (ADR) : C/E
Limited quantities (ADR) : 0
EAC code : 2X
Excepted quantities (ADR) : E5

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
MFAG-No : 154

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 50 kg
Civil Aeronautics Law : Toxic and infectious substances/Toxic substances(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement Regulations)

14.4. Environmental hazards

Dangerous for the environment :



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

KEPONE (CHLORDECONE) UNLABELED

ULM-2301

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

KEPONE (CHLORDECONE) UNLABELED (143-50-0)

SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations

CANADA

KEPONE (CHLORDECONE) UNLABELED (143-50-0)

Not listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

KEPONE (CHLORDECONE) UNLABELED(143-50-0)

U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Yes
State or local regulations	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 WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or 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-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
H301	Toxic if swallowed
H311	Toxic in contact with skin
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R24/25	Toxic in contact with skin and if swallowed
R40	Limited evidence of a carcinogenic effect
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
T	Toxic

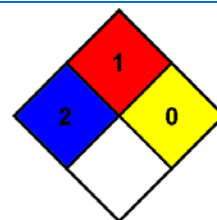
KEPONE (CHLORDECONE) UNLABELED

ULM-2301

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

NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS III Rating

Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 1 Slight Hazard
Physical	: 0 Minimal Hazard

CIL Multi-Solvent 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