## 1. Identification

Product identifier
Other means of identification
Recommended use
Recommended restrictions

Carbamate Pesticides Mixture \#2-531.1,8318

M-CP83182A4
For Laboratory Use Only
None known.

Manufacturer/Importer/Supplier/Distributor information
Manufacturer

| Company name | Chem Service, Inc. |  |
| :---: | :---: | :---: |
| Address | 660 Tower Lane |  |
|  | West Chester, PA 19380 |  |
|  | United States |  |
| Telephone | Toll Free | 800-452-9994 |
|  | Direct | 610-692-3026 |
| Website | www.chemservice.com |  |
| E-mail | info@chemservice.com |  |
| Emergency phone number | Chemtrec US | 800-424-9300 |
|  | Chemtrec outside US | +1 703-527-3887 |

## 2. Hazard(s) identification

| Physical hazards | Flammable liquids | Category 2 |
| :---: | :---: | :---: |
| Health hazards | Acute toxicity, oral | Category 3 |
|  | Acute toxicity, dermal | Category 3 |
|  | Acute toxicity, inhalation | Category 3 |
|  | Serious eye damage/eye irritation | Category 2A |
|  | Carcinogenicity | Category 2 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 1 |
|  | Hazardous to the aquatic environment, long-term hazard | Category 1 |
| OSHA defined hazards | Not classified. |  |

Label elements

## Signal word

Hazard statement

## Precautionary statement

 Prevention

Danger
Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes serious eye irritation. Toxic if inhaled. Suspected of causing cancer. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response

If swallowed: Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor. Specific treatment (see this label). Rinse mouth. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.

| Storage | $\begin{array}{l}\text { Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. } \\ \text { Keep cool. Store locked up. }\end{array}$ |
| :--- | :--- |
| Disposal | $\begin{array}{l}\text { Dispose of contents/container in accordance with local/regional/national/international regulations. }\end{array}$ |
| Hazard(s) not otherwise | $\begin{array}{l}\text { Static accumulating flammable liquid can become electrostatically charged even in bonded and } \\ \text { classified (HNOC) }\end{array}$ |
| grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. |  |$\}$

## 3. Composition/information on ingredients

| Mixtures <br> Chemical name | Common name and synonyms | CAS number | $\%$ |
| :--- | :---: | :---: | :---: |
| Acetonitrile | $75-05-8$ | 99 |  |
| 3-Hydroxycarbofuran | $16655-82-6$ | 0.1 |  |
| Aldicarb | $116-06-3$ | 0.1 |  |
| Aldicarb sulfone | $1646-88-4$ | 0.1 |  |
| Carbaryl | $63-25-2$ | 0.1 |  |
| Carbofuran | $1563-66-2$ | 0.1 |  |
| Dioxacarb | $6988-21-2$ | 0.1 |  |
| Methiocarb | $2032-65-7$ | 0.1 |  |
| Methomyl | $16752-77-5$ | 0.1 |  |
| Promecarb | $2631-37-0$ | 0.1 |  |
| Propoxur | $114-26-1$ | 0.1 |  |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

## Skin contact

Eye contact

Ingestion

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.
Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell. Get medical attention if irritation develops and persists.
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Most important
symptoms/effects, acute and delayed
Indication of immediate medical attention and special treatment needed

General information

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Alcohol resistant foam. Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters
Fire-fighting
equipment/instructions
Specific methods
General fire hazards

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Use standard firefighting procedures and consider the hazards of other involved materials. Highly flammable liquid and vapor.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

## Methods and materials for containment and cleaning up

Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions
Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

Precautions for safe handling
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not taste or swallow. Avoid breathing vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Avoid spark promoters. Eliminate sources of ignition. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

## 8. Exposure controls/personal protection

## Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value |  |
| :---: | :---: | :---: | :---: |
| Acetonitrile (CAS 75-05-8) | PEL | $70 \mathrm{mg} / \mathrm{m} 3$ |  |
|  |  | 40 ppm |  |
| Carbaryl (CAS 63-25-2) | PEL | $5 \mathrm{mg} / \mathrm{m} 3$ |  |
| US. ACGIH Threshold Limit Values Components | Type | Value | Form |
| Acetonitrile (CAS 75-05-8) | TWA | 20 ppm |  |
| Carbaryl (CAS 63-25-2) | TWA | $0.5 \mathrm{mg} / \mathrm{m} 3$ | Inhalable fraction and vapor. |
| $\begin{aligned} & \text { Carbofuran (CAS } \\ & 1563-66-2) \end{aligned}$ | TWA | 0.1 mg/m3 | Inhalable fraction and vapor. |
| Methomyl (CAS <br> 16752-77-5) | TWA | $2.5 \mathrm{mg} / \mathrm{m} 3$ |  |
| Propoxur (CAS 114-26-1) | TWA | $0.5 \mathrm{mg} / \mathrm{m} 3$ |  |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
| :--- | :--- | :--- |
| Acetonitrile (CAS 75-05-8) | TWA | $34 \mathrm{mg} / \mathrm{m} 3$ |
| Carbaryl (CAS 63-25-2) | TWA | 20 ppm |
| Carbofuran (CAS <br> 1563-66-2) | $5 \mathrm{mg} / \mathrm{m} 3$ |  |
| Methomyl (CAS <br> 16752-77-5) | TWA | $0.1 \mathrm{mg} / \mathrm{m} 3$ |
| Propoxur (CAS 114-26-1) | TWA | $2.5 \mathrm{mg} / \mathrm{m} 3$ |
| CWA | TWA | $0.5 \mathrm{mg} / \mathrm{m} 3$ |

US. Workplace Environmental Exposure Level (WEEL) Guides
Components
Type
Aldicarb (CAS 116-06-3) TWA 0.001 ppm

## Biological limit values

No biological exposure limits noted for the ingredient(s).
Exposure guidelines
US - California OELs: Skin designation
Acetonitrile (CAS 75-05-8) Can be absorbed through the skin.
Methomyl (CAS 16752-77-5) Can be absorbed through the skin.
US - Minnesota Haz Subs: Skin designation applies
Acetonitrile (CAS 75-05-8)
Methomyl (CAS 16752-77-5)
US ACGIH Threshold Limit Values: Skin designation
Acetonitrile (CAS 75-05-8)
Skin designation applies.
Skin designation applies.

Carbaryl (CAS 63-25-2)
Can be absorbed through the skin.
Can be absorbed through the skin.

## US WEEL Guides: Skin designation

Aldicarb (CAS 116-06-3)
Can be absorbed through the skin.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.
Individual protection measures, such as personal protective equipment
Eye/face protection Wear eye/face protection. Wear safety glasses with side shields (or goggles).
Skin protection
Hand protection Wear protective gloves.
Other Wear appropriate chemical resistant clothing.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

## General hygiene

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such considerations as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

| Appearance |  |
| :---: | :---: |
| Physical state | Liquid. |
| Form | Liquid |
| Color | Not available. |
| Odor | Not available. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | $-49^{\circ} \mathrm{F}\left(-45^{\circ} \mathrm{C}\right)$ estimated |
| Initial boiling point and boiling range | $178.88{ }^{\circ} \mathrm{F}\left(81.6^{\circ} \mathrm{C}\right)$ estimated |
| Flash point | $42.0{ }^{\circ} \mathrm{F}\left(5.6{ }^{\circ} \mathrm{C}\right)$ estimated |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits |  |
| Flammability limit - lower (\%) | $3 \%$ estimated |
| Flammability limit - upper (\%) | 16 \% estimated |
| Explosive limit - lower (\%) | Not available. |
| Explosive limit - upper (\%) | Not available. |
| Vapor pressure | 118.39 hPa estimated |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) |  |
| Solubility (water) | Not available. |
| Partition coefficient ( n -octanol/water) | Not available. |
| Auto-ignition temperature | $975.2{ }^{\circ} \mathrm{F}\left(524{ }^{\circ} \mathrm{C}\right)$ estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information |  |
| Density | $0.789395 \mathrm{~g} / \mathrm{cm} 3$ estimated |
| Flammability class | Flammable IB estimated |
| Percent volatile | 99 \% estimated |
| Specific gravity | 0.79 estimated |
| VOC (Weight \%) | 99 \% estimated |

## 10. Stability and reactivity

Reactivity
Chemical stability
Possibility of hazardous reactions

Conditions to avoid
Incompatible materials
Hazardous decomposition products

The product is stable and non-reactive under normal conditions of use, storage and transport. Material is stable under normal conditions.
Hazardous polymerization does not occur.
Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Strong oxidizing agents.
No hazardous decomposition products are known.

## 11. Toxicological information

Information on likely routes of exposure

| Ingestion | To |
| :--- | :--- |
| Inhalation | To |
| Skin contact | Ca |
| Eye contact | Sy |
| mptoms related to the |  |
| ysical, chemical and |  |
| icological characteristics |  |
| ormation on toxicological effects |  |

Toxic if swallowed.
Toxic by inhalation.
Toxic in contact with skin.
Causes serious eye irritation.
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

## physical, chemical and

toxicological characteristics
Information on toxicological effects
Acute toxicity
Toxic by inhalation. Toxic if swallowed. Toxic in contact with skin. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.
Components
Acetonitrile (CAS 75-05-8)
Acute

| Dermal | Rabbit | $390 \mathrm{mg} / \mathrm{kg}$ |
| :--- | :--- | :--- |
| LD50 |  | $0.5 \mathrm{ml} / \mathrm{kg}$ |


| Inhalation |  |  |
| :--- | :--- | :--- |
| LC100 | Dog | $16000 \mathrm{ppm}, 4$ Hours |
| LC50 | Guinea pig | $5655 \mathrm{ppm}, 4$ Hours |
|  | Mouse | $3587 \mathrm{ppm}, 4$ Hours |
|  |  | $2693 \mathrm{ppm}, 1$ Hours |
|  | Rabbit | $2825 \mathrm{ppm}, 4$ Hours |
|  | Rat | $17100 \mathrm{ppm}, 4$ Hours |
|  |  | $7500 \mathrm{ppm}, 8$ Hours |
|  |  | $330 \mathrm{ppm}, 90$ Days |
|  |  | $75 \mathrm{mg} / \mathrm{l}$ |


| Oral |  |  |
| :--- | :--- | :--- |
| LD50 | Guinea pig | $140 \mathrm{mg} / \mathrm{kg}$ |
|  |  | $0.177 \mathrm{ml} / \mathrm{kg}$ |
|  | Mouse | $269 \mathrm{mg} / \mathrm{kg}$ |
|  | Rat | $158 \mathrm{mg} / \mathrm{kg}$ |
|  |  | $1.68-4.49 \mathrm{ml} / \mathrm{kg}$ |

Other
LD50 Mouse $0.25 \mathrm{~g} / \mathrm{kg}$
Rat
$1100 \mathrm{mg} / \mathrm{kg}$
$0.85 \mathrm{ml} / \mathrm{kg}$
Aldicarb (CAS 116-06-3)

## Acute

| Dermal |  |  |
| :--- | :--- | :--- |
| LD50 | Guinea pig | $2400 \mathrm{mg} / \mathrm{kg}$ |
|  | Rabbit | $>5 \mathrm{mg} / \mathrm{kg}$ |
|  | Rat | $2.5 \mathrm{mg} / \mathrm{kg}$ |
| Inhalation |  |  |
| LC50 | Rat | $0.2 \mathrm{mg} / \mathrm{l}, 5 \mathrm{Hours}$ |
| Oral |  |  |
| LD50 | Chicken | $8 \mathrm{mg} / \mathrm{kg}$ |
|  | Guinea pig | $1 \mathrm{mg} / \mathrm{kg}$ |
|  | Mouse | $0.3 \mathrm{mg} / \mathrm{kg}$ |
|  | Rabbit | $1.3 \mathrm{mg} / \mathrm{kg}$ |
|  | Rat | $0.65 \mathrm{mg} / \mathrm{kg}$ |

Carbaryl (CAS 63-25-2)

## Acute

| Dermal | Rabbit | $2000 \mathrm{mg} / \mathrm{kg}$ |
| :--- | :--- | :--- |
| LD50 | Rat | $4000 \mathrm{mg} / \mathrm{kg}$ |
| Oral | Mouse |  |
| LD50 | Rat | $128 \mathrm{mg} / \mathrm{kg}$ |
|  |  | $230 \mathrm{mg} / \mathrm{kg}$ |
| Other | Mouse |  |
| LD50 | Rat | $25 \mathrm{mg} / \mathrm{kg}$ |
|  |  | $41.9 \mathrm{mg} / \mathrm{kg}$ |

Carbofuran (CAS 1563-66-2)
Acute
Dermal
LD50
Rabbit
Rat
Inhalation
LC50 Do
Guinea pig
Rat

Oral
D50

| LD50 | Dog |
| :--- | :--- |
|  | Guinea pig |
|  | Mouse |
| Rat |  |
| MLD | Rat |
| Other |  |
| LD50 | Rabbit |
|  | Rat |

Methiocarb (CAS 2032-65-7)

## Acute

Dermal

| LD50 | Rat | $350 \mathrm{mg} / \mathrm{kg}$ |
| :--- | :--- | :--- |
| Inhalation |  |  |
| LC50 | Rat | $>0.322 \mathrm{mg} / \mathrm{kg}, 4$ Hours |
| Oral | Dog | $25 \mathrm{mg} / \mathrm{kg}$ |
| LD50 | Guinea pig | $40 \mathrm{mg} / \mathrm{kg}$ |
|  | Mouse | $52-58 \mathrm{mg} / \mathrm{kg}$ |
|  | Rat | $10-35 \mathrm{mg} / \mathrm{kg}$ |
|  |  |  |
| Other | Mouse | $16 \mathrm{mg} / \mathrm{kg}$ |
| LD50 | Rabbit | $>2000 \mathrm{mg} / \mathrm{kg}$ |
|  | Rat | $>5000 \mathrm{mg} / \mathrm{kg}$ |

Methomyl (CAS 16752-77-5)

## Acute

Dermal
LD50
Inhalation
LD50 Rat
$>1000 \mathrm{mg} / \mathrm{kg}$
$0.258 \mathrm{mg} / \mathrm{l}, 4$ Hours

| LD50 | Mouse | $10 \mathrm{mg} / \mathrm{kg}$ |
| :--- | :--- | :--- |
|  | Rat | $17 \mathrm{mg} / \mathrm{kg}$ |
| Other |  |  |
| LD50 | Rabbit | $>5000 \mathrm{mg} / \mathrm{kg}$ |
|  | Rat | $9 \mathrm{mg} / \mathrm{kg}$ |

Promecarb (CAS 2631-37-0)

## Acute

Dermal

| LD50 | Rat | $688 \mathrm{mg} / \mathrm{kg}$ |
| :--- | :--- | :--- |
| Inhalation <br> LC50 | Rat |  |
| Oral <br> LD50 | Mouse |  |
|  | Quail | $39.5 \mathrm{mg} / \mathrm{kg}$ |
|  | Rat | $78 \mathrm{mg} / \mathrm{kg}$ |
|  | Rabbit | $60-90 \mathrm{mg} / \mathrm{kg}$ |
| Other | Rat |  |
| LD50 | Rats |  |
|  |  | $>1000 \mathrm{mg} / \mathrm{kg}$ |
|  |  |  |

Propoxur (CAS 114-26-1)
Acute

| Dermal |  |  |
| :---: | :---: | :---: |
| LD50 | Rat | > $1000 \mathrm{mg} / \mathrm{kg}$ |
| Inhalation |  |  |
| LC50 | Rat | > $0.5 \mathrm{mg} / \mathrm{l}, 4$ Hours |
|  |  | 1.44 mg/l, 1 Hours |
| Oral |  |  |
| LD50 | Goat | > $800 \mathrm{mg} / \mathrm{kg}$ |
|  | Mouse | 23.5 mg/kg |
|  | Rat | $83 \mathrm{mg} / \mathrm{kg}$ |
| Other |  |  |
| LD50 | Rat | $11 \mathrm{mg} / \mathrm{kg}$ |

* Estimates for product may be based on additional component data not shown.

| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. |
| :--- | :--- |
| Serious eye damage/eye <br> irritation | Causes serious eye irritation. |
| Respiratory or skin sensitization |  |
| Respiratory sensitization | Not available. |
| Skin sensitization | This product is not expected to cause skin sensitization. |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than $0.1 \%$ are <br> mutagenic or genotoxic. |
| Carcinogenicity | Suspected of causing cancer. |

IARC Monographs. Overall Evaluation of Carcinogenicity

| Aldicarb (CAS 116-06-3) | 3 Not classifiable as to carcinogenicity to humans. |
| :--- | :--- |
| Carbaryl (CAS 63-25-2) | 3 Not classifiable as to carcinogenicity to humans. |

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |
| :--- | :--- |
| Specific target organ toxicity - <br> single exposure | Not classified. |
| Specific target organ toxicity - <br> repeated exposure | Not classified. |
| Aspiration hazard | Not available. |

## 12. Ecological information

Ecotoxicity
Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.
Components
Species
Test Results
Acetonitrile (CAS 75-05-8)

## Aquatic

 Fish LC50 Fathead minnow (Pimephales promelas) $>100 \mathrm{mg} / \mathrm{l}, 96$ hoursAldicarb (CAS 116-06-3)

## Aquatic

| Crustacea | EC50 | Water flea (Daphnia laevis) | $0.045-0.059 \mathrm{mg} / \mathrm{l}, 48$ hours |
| :--- | :--- | :--- | :--- |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | $0.05 \mathrm{mg} / \mathrm{l}, 96$ hours |

Aldicarb sulfone (CAS 1646-88-4)

## Aquatic

Crustacea
Carbaryl (CAS 63-25-2)

## Aquatic

| Crustacea | EC50 |
| :--- | :--- |
| Fish | LC50 |

Carbofuran (CAS 1563-66-2)

## Aquatic

| Crustacea | EC50 |
| :--- | :--- |
| Fish | LC50 |

Dioxacarb (CAS 6988-21-2)

## Aquatic

Fish LC50

Methiocarb (CAS 2032-65-7)
Aquatic
Fish LC50
Methomyl (CAS 16752-77-5)
Aquatic

| Crustacea | EC50 |
| :--- | :--- |
| Fish | LC50 |

Propoxur (CAS 114-26-1)

## Aquatic

| Crustacea | EC50 |
| :--- | :--- |
| Fish | LC50 |

Crucian carp (Carassius carassius)
$18.9-29.1 \mathrm{mg} / \mathrm{l}, 96$ hours
Water flea (Daphnia laevis)
uegill (Lepomis macrochirus)

Water flea (Daphnia laevis)
$0.32-0.43 \mathrm{mg} / \mathrm{l}, 48$ hours

Water flea (Daphnia magna) $0.0027-0.012 \mathrm{mg} / \mathrm{l}, 48$ hours
Atlantic salmon (Salmo salar)
$0.704-1.42 \mathrm{mg} / \mathrm{l}, 96$ hours

Water flea (Ceriodaphnia dubia)
Striped bass (Morone saxatilis)
$0.002 \mathrm{mg} / \mathrm{l}, 48$ hours
$0.11-0.15 \mathrm{mg} / \mathrm{l}, 96$ hours

Bluegill (Lepomis macrochirus)
$0.11 \mathrm{mg} / \mathrm{l}, 96$ hours

Water flea (Daphnia magna)
Bluegill (Lepomis macrochirus)
$0.0041-0.019 \mathrm{mg} / \mathrm{l}, 48$ hours
$0.37-1.04 \mathrm{mg} / \mathrm{l}, 96$ hours

Water flea (Daphnia magna)
Brown Trout (Salmo trutta fario)
$0.0209-0.0365 \mathrm{mg} / \mathrm{l}, 48$ hours
$1.84-2.42 \mathrm{mg} / \mathrm{l}, 96$ hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.
Bioaccumulative potential No data available.

## Partition coefficient n -octanol / water (log Kow)

Acetonitrile -0.34

Aldicarb 1.13
Carbaryl 2.36
Carbofuran 2.32
Methiocarb 2.92
Methomyl 0.6
Promecarb 3.1
Propoxur
1.52

## Mobility in soil <br> Other adverse effects

No data available.
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

| Disposal instructions | Collect and reclaim or dispose in seale <br> and its container must be disposed of <br> sewers/water supplies. Do not contami <br> container. Dispose of contents/contain <br> regulations. |
| :--- | :--- |
| Local disposal regulations | Dispose in accordance with all applica <br> Hazardous waste code <br> The waste code should be assigned in <br> disposal company. |
| US RCRA Hazardous Waste P List: Reference |  |


| Waste from residues / unused | Dispose of in accordance with local regulations. Empty containers or liners may retain some <br> product residues. This material and its container must be disposed of in a safe manner (see: |
| :--- | :--- |
| products | Disposal instructions). |

## 14. Transport information

DOT

| UN number | UN1648 |
| :--- | :--- |
| UN proper shipping name | Acetonitrile, solution, MARINE POLLUTANT |

Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
Packing group II
Environmental hazards
Marine pollutant Yes
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions IB2, T7, TP2
Packaging exceptions 150
Packaging non bulk 202
Packaging bulk 242
IATA
UN number UN1648
UN proper shipping name Acetonitrile solution
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards No.
ERG Code 3L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo Allowed.
aircraft
Cargo aircraft only Allowed.
IMDG
UN number UN1648
UN proper shipping name ACETONITRILE SOLUTION, MARINE POLLUTANT
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II

## Environmental hazards

Marine pollutant
Yes
F-E, S-D

EmS
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Not available.
Annex II of MARPOL 73/78 and the IBC Code
DOT


IATA; IMDG


Marine pollutant


## 15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. One or more components are not listed on TSCA.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)

Acetonitrile (CAS 75-05-8)
Aldicarb (CAS 116-06-3)
Aldicarb sulfone (CAS 1646-88-4)
Carbaryl (CAS 63-25-2)
Carbofuran (CAS 1563-66-2)
Methiocarb (CAS 2032-65-7)
Methomyl (CAS 16752-77-5)
Promecarb (CAS 2631-37-0)
Propoxur (CAS 114-26-1)
SARA 304 Emergency release notification
Aldicarb (CAS 116-06-3)
Carbofuran (CAS 1563-66-2)
Methiocarb (CAS 2032-65-7)
Methomyl (CAS 16752-77-5)
Promecarb (CAS 2631-37-0)

Listed.
Listed.
Listed.
Listed.
Listed.
Listed.
Listed.
Listed.
Listed.

1 LBS
10 LBS
10 LBS
100 LBS
1000 LBS

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No
SARA 302 Extremely hazardous substance

| Chemical name | CAS number | Reportable quantity | Threshold planning quantity | Threshold planning quantity, lower value | Threshold planning quantity, upper value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Aldicarb | 116-06-3 | 1 |  | 100 lbs | 10000 lbs |
| Carbofuran | 1563-66-2 | 10 |  | 10 lbs | 10000 lbs |
| Methiocarb | 2032-65-7 | 10 |  | 500 lbs | 10000 lbs |
| Methomyl | 16752-77-5 | 100 |  | 500 lbs | 10000 lbs |
| Promecarb | 2631-37-0 | 1000 |  | 500 lbs | 10000 lbs |
| SARA 311/312 chemical | No |  |  |  |  |

SARA 313 (TRI reporting)

| Chemical name | CAS number | \% by wt. |
| :--- | :--- | :--- |
| Acetonitrile | $75-05-8$ | 99 |

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Acetonitrile (CAS 75-05-8)
Carbaryl (CAS 63-25-2)
Propoxur (CAS 114-26-1)
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.
Safe Drinking Water Act Not regulated.
(SDWA)
US state regulations
US. Massachusetts RTK - Substance List
Acetonitrile (CAS 75-05-8)
Aldicarb (CAS 116-06-3)
Carbaryl (CAS 63-25-2)
Carbofuran (CAS 1563-66-2)
Methiocarb (CAS 2032-65-7)
Methomyl (CAS 16752-77-5)
Promecarb (CAS 2631-37-0)
Propoxur (CAS 114-26-1)
US. New Jersey Worker and Community Right-to-Know Act
Acetonitrile (CAS 75-05-8) 500 LBS
Aldicarb (CAS 116-06-3) 100 LBS
Carbaryl (CAS 63-25-2) 500 LBS
Carbofuran (CAS 1563-66-2) 10 LBS
Methiocarb (CAS 2032-65-7) 500 LBS
Methomyl (CAS 16752-77-5) 500 LBS
Promecarb (CAS 2631-37-0) 500 LBS
Propoxur (CAS 114-26-1)
500 LBS
US. Pennsylvania RTK - Hazardous Substances
Acetonitrile (CAS 75-05-8)
Aldicarb (CAS 116-06-3)
Carbaryl (CAS 63-25-2)
Carbofuran (CAS 1563-66-2)
Methiocarb (CAS 2032-65-7)
Methomyl (CAS 16752-77-5)
Promecarb (CAS 2631-37-0)
Propoxur (CAS 114-26-1)
US. Rhode Island RTK
Acetonitrile (CAS 75-05-8)
Aldicarb (CAS 116-06-3)
Aldicarb sulfone (CAS 1646-88-4)
Carbaryl (CAS 63-25-2)
Carbofuran (CAS 1563-66-2)
Methiocarb (CAS 2032-65-7)
Methomyl (CAS 16752-77-5)

## US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

# US - California Proposition 65 - CRT: Listed date/Carcinogenic substance Carbaryl (CAS 63-25-2) <br> Listed: February 5, 2010 <br> Propoxur (CAS 114-26-1) <br> Listed: August 11, 2006 

## US - California Proposition 65 - CRT: Listed date/Developmental toxin Carbaryl (CAS 63-25-2) <br> Listed: August 7, 2009 <br> US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Carbaryl (CAS 63-25-2) Listed: August 7, 2009

## International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
| :---: | :---: | :---: |
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States \& Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |
| *A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s). |  |  |

## 16. Other information, including date of preparation or last revision

## Issue date

Version \#
NFPA ratings

Disclaimer

10-10-2014

## 01

Health: 2
Flammability: 3
Instability: 0
The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

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This Safety Data Sheet (SDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an SDS for a solution or mixture the user should refer to the SDS for every component of the solution or mixture. Chem Service warrants that this SDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This SDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.

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