

1. Identification

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|---------------------------------------------------------------|------------------------------------------------------------------|-----------------|
| Product identifier | Massachusetts EPH Aliphatic Hydrocarbon Standards Mixture | |
| Other means of identification | | |
| Item | M-USTALMA1J4 | |
| Recommended use | For Laboratory Use Only | |
| Recommended restrictions | 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 2 |
| | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2A |
| | Reproductive toxicity (fertility) | Category 2 |
| | Specific target organ toxicity, single exposure | Category 3 narcotic effects |
| | Specific target organ toxicity, repeated exposure | Category 1 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 2 |
| | Hazardous to the aquatic environment, long-term hazard | Category 2 |
| OSHA defined hazards | Not classified. | |
| Label elements | | |



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| Signal word | Danger |
| Hazard statement | Highly flammable liquid and vapor. Fatal if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects. |
| Precautionary statement | |
| Prevention | 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. Do not breathe the mist or vapor. 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. |

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| 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. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage. |
| Storage | Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Hazard(s) not otherwise classified (HNOC) | Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. |
| Supplemental information | 1% of the mixture consists of component(s) of unknown acute oral toxicity. 1.4% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 1.4% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-----------------|--------------------------|------------|----------|
| n-Hexane | | 110-54-3 | 90 - 100 |
| 4-Methyl octane | | 2216-34-4 | 0.1 |
| n-Decane | | 124-18-5 | 0.1 |
| n-Docosane | | 629-97-0 | 0.1 |
| n-Dodecane | | 112-40-3 | 0.1 |
| n-Eicosane | | 112-95-8 | 0.1 |
| n-Hexacosane | | 630-01-3 | 0.1 |
| n-Hexadecane | | 544-76-3 | 0.1 |
| n-Nonadecane | | 629-92-5 | 0.1 |
| n-Nonane | | 111-84-2 | 0.1 |
| n-Octacosane | | 630-02-4 | 0.1 |
| n-Octadecane | | 593-45-3 | 0.1 |
| n-Tetracosane | | 646-31-1 | 0.1 |
| n-Tetradecane | | 629-59-4 | 0.1 |
| n-Triacontane | | 638-68-6 | 0.1 |

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

4. First-aid measures

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| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. |
| Skin contact | Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. |
| Eye contact | 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. |
| Ingestion | 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. |
| Most important symptoms/effects, acute and delayed | Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause redness and pain. Prolonged exposure may cause chronic effects. |
| Indication of immediate medical attention and special treatment needed | 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. |
| General information | Take off all contaminated clothing immediately. 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

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| Suitable extinguishing media | Water fog. Foam. Carbon dioxide (CO ₂). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | 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. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire-fighting equipment/instructions | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | Highly flammable liquid and vapor. |

6. Accidental release measures

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| Personal precautions, protective equipment and emergency procedures | 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. Do not breathe mist or vapor. 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. |
| Methods and materials for containment and cleaning up | <p>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.</p> <p>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.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> |
| Environmental precautions | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. 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 breathe mist or vapor. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. 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 |
|-------------------------|------|-----------------------------------|
| n-Hexane (CAS 110-54-3) | PEL | 1800 mg/m ³ 500 ppm |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|---------------------------------|------|---------|
| 4-Methyl octane (CAS 2216-34-4) | TWA | 200 ppm |
| n-Hexane (CAS 110-54-3) | TWA | 50 ppm |
| n-Nonane (CAS 111-84-2) | TWA | 200 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|---------------------------------|------|-----------------------------------|
| 4-Methyl octane (CAS 2216-34-4) | TWA | 1050 mg/m ³ 200 ppm |
| n-Hexane (CAS 110-54-3) | TWA | 180 mg/m ³ 50 ppm |
| n-Nonane (CAS 111-84-2) | TWA | 1050 mg/m ³ 200 ppm |

Biological limit values

ACGIH Biological Exposure Indices

| Components | Value | Determinant | Specimen | Sampling Time |
|-------------------------|----------|-------------------------------------------|----------|---------------|
| n-Hexane (CAS 110-54-3) | 0.4 mg/l | 2,5-Hexanedio n, without hydrolysis | Urine | * |

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

n-Hexane (CAS 110-54-3) 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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such 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 -137.74 °F (-94.3 °C) estimated

Initial boiling point and boiling range 155.66 °F (68.7 °C) estimated

Flash point -7.0 °F (-21.7 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 202.64 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 437 °F (225 °C) estimated

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 0.655325 g/cm³ estimated

Flammability class Flammable IB estimated

Specific gravity 0.66 estimated

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

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|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Conditions to avoid | Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

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|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ingestion | Fatal if swallowed. |
| Inhalation | Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful. May cause damage to organs by inhalation. |
| Skin contact | Causes skin irritation. |
| Eye contact | Causes serious eye irritation. |

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity Fatal if swallowed. Narcotic effects. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

| Components | Species | Test Results |
|---------------------------------|---------|-----------------------|
| 4-Methyl octane (CAS 2216-34-4) | | |
| Acute | | |
| <i>Inhalation</i> | | |
| LC50 | Rat | 3200 ppm, 4 Hours |
| <i>Other</i> | | |
| LD50 | Mouse | 218 mg/kg |
| n-Decane (CAS 124-18-5) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | >= 3160 mg/kg |
| | Rat | > 2000 mg/kg |
| <i>Inhalation</i> | | |
| LC50 | Monkey | >= 11160 mg/m3 |
| | Mouse | 72.3 mg/l, 2 Hours |
| | Rat | > 5000 mg/m3, 8 Hours |
| | | > 4951 mg/m3, 4 Hours |
| | | > 41 ppm, 8 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| n-Dodecane (CAS 112-40-3) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | >= 3160 mg/kg |
| | Rat | > 2000 mg/kg |
| <i>Inhalation</i> | | |
| LC50 | Monkey | >= 11160 mg/m3 |
| | Rat | > 5000 mg/m3, 8 Hours |
| | | > 4951 mg/m3, 4 Hours |
| | | > 41 ppm, 8 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | > 5000 mg/kg |

| Components | Species | Test Results |
|------------------------------|------------|---------------------------------------------------------------------|
| n-Hexane (CAS 110-54-3) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 2000 mg/kg > 5 ml/kg |
| <i>Inhalation</i> | | |
| LC50 | Mouse | 48000 ppm, 4 Hours |
| | Rat | > 5000 ppm, 24 Hours > 31.86 mg/l 73860 ppm, 4 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | 24 ml/kg 24 mg/kg |
| | Wistar rat | 49 mg/kg |
| n-Nonane (CAS 111-84-2) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 2000 mg/kg |
| <i>Inhalation</i> | | |
| LC50 | Rat | 3200 ppm, 4 Hours 23.76 mg/l, 8 Hours 17 mg/l, 4 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| <i>Other</i> | | |
| LD50 | Mouse | 218 mg/kg |
| n-Tetradecane (CAS 629-59-4) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | >= 3160 mg/kg |
| | Rat | > 2000 mg/kg |
| <i>Inhalation</i> | | |
| LC50 | Monkey | >= 11160 mg/m3 |
| | Rat | > 5000 mg/m3, 8 Hours > 4951 mg/m3, 4 Hours > 41 ppm, 8 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | > 5000 mg/kg |

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

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|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Skin corrosion/irritation | Causes skin irritation. |
| Serious eye damage/eye 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 mutagenic or genotoxic. |
| Carcinogenicity | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
| US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | |
| | Not listed. |
| Reproductive toxicity | Suspected of damaging fertility. |
| Specific target organ toxicity - single exposure | Narcotic effects. |

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|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Specific target organ toxicity - repeated exposure | Causes damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | Not available. |
| Chronic effects | Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. |

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

| Components | Species | Test Results |
|---------------------------|---------|-------------------------------------------------------------------|
| n-Decane (CAS 124-18-5) | | |
| Aquatic | | |
| Fish | LC50 | Sheepshead minnow (Cyprinodon variegatus) > 500 mg/l, 96 hours |
| n-Docosane (CAS 629-97-0) | | |
| Aquatic | | |
| Fish | LC50 | Sheepshead minnow (Cyprinodon variegatus) > 500 mg/l, 96 hours |
| n-Hexane (CAS 110-54-3) | | |
| Aquatic | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) 2.101 - 2.981 mg/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)

| | |
|-----------------|------|
| 4-Methyl octane | 5.46 |
| n-Decane | 5.01 |
| n-Hexadecane | 8.25 |
| n-Hexane | 3.9 |
| n-Nonane | 5.46 |
| n-Tetradecane | 7.2 |

Mobility in soil No data available.

Other adverse effects 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 sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

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

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

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|-------------------------------------|-------------------------------------------------------------------------|
| UN number | UN1208 |
| UN proper shipping name | Hexanes, 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. |

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| Special provisions | IB2, T4, TP1 |
| Packaging exceptions | 150 |
| Packaging non bulk | 202 |
| Packaging bulk | 242 |

IATA

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|-------------------------------------|-------------------------------------------------------------------------|
| UN number | UN1208 |
| UN proper shipping name | Hexanes solution |
| Transport hazard class(es) | |
| Class | 3 |
| Subsidiary risk | - |
| Packing group | II |
| Environmental hazards | No. |
| ERG Code | 3H |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

Other information

| | |
|-------------------------------------|----------|
| Passenger and cargo aircraft | Allowed. |
| Cargo aircraft only | Allowed. |

IMDG

| | |
|-------------------------------------|-------------------------------------------------------------------------|
| UN number | UN1208 |
| UN proper shipping name | HEXANES SOLUTION, MARINE POLLUTANT |
| Transport hazard class(es) | |
| Class | 3 |
| Subsidiary risk | - |
| Packing group | II |
| Environmental hazards | |
| Marine pollutant | Yes |
| EmS | F-E, S-D |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

DOT



IATA; IMDG





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)

4-Methyl octane (CAS 2216-34-4) 1.0 % One-Time Export Notification only.
n-Nonane (CAS 111-84-2) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

4-Methyl octane (CAS 2216-34-4) Listed.
n-Hexane (CAS 110-54-3) Listed.
n-Nonane (CAS 111-84-2) Listed.

SARA 304 Emergency release notification

Not regulated.

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

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|---------------|------------|----------|
| n-Hexane | 110-54-3 | 90 - 100 |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

n-Hexane (CAS 110-54-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

4-Methyl octane (CAS 2216-34-4)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)

US. New Jersey Worker and Community Right-to-Know Act

n-Hexane (CAS 110-54-3) 500 LBS

US. Pennsylvania RTK - Hazardous Substances

4-Methyl octane (CAS 2216-34-4)
n-Decane (CAS 124-18-5)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)

US. Rhode Island RTK

n-Hexane (CAS 110-54-3)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| 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 | 11-06-2014 |
| Version # | 01 |
| NFPA ratings | Health: 2 Flammability: 3 Instability: 0 |

Disclaimer

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