

SAFETY DATA SHEET

ASTM D3710 Quantitative Calibration Mix - Testmix, Part Number CP741032

Section 1. Identification

1.1 Product identifier

Product name : ASTM D3710 Quantitative Calibration Mix - Testmix, Part Number CP741032
Part no. : CP741032
Validation date : 2/28/2018

1.2 Relevant identified uses of the substance or mixture and uses advised against

Material uses : Reagents and Standards for Analytical Chemistry Laboratory Use
 1 ml vials

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Agilent Technologies, Inc.
 5301 Stevens Creek Blvd
 Santa Clara, CA 95051, USA
 800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

H225 FLAMMABLE LIQUIDS - Category 2
 H315 SKIN IRRITATION - Category 2
 H319 EYE IRRITATION - Category 2A
 H361 TOXIC TO REPRODUCTION (Fertility) - Category 2
 H361 TOXIC TO REPRODUCTION (Unborn child) - Category 2
 H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
 H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
 H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys, liver, nervous system, peripheral nervous system) - Category 2
 H304 ASPIRATION HAZARD - Category 1

Ingredients of unknown toxicity : Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 30 - 60%
 Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
 Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 30 - 60%

2.2 GHS label elements

Hazard pictograms :



Signal word : Danger

Section 2. Hazards identification

Hazard statements : H225 - Highly flammable liquid and vapor.
 H319 - Causes serious eye irritation.
 H315 - Causes skin irritation.
 H361 - Suspected of damaging fertility or the unborn child.
 H304 - May be fatal if swallowed and enters airways.
 H335 - May cause respiratory irritation.
 H336 - May cause drowsiness or dizziness.
 H373 - May cause damage to organs through prolonged or repeated exposure. (kidneys, liver, nervous system, peripheral nervous system)

Precautionary statements

Prevention

: P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
 P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P233 - Keep container tightly closed.
 P271 - Use only outdoors or in a well-ventilated area.
 P260 - Do not breathe vapor.
 P264 - Wash hands thoroughly after handling.

Response

: P314 - Get medical attention if you feel unwell.
 P308 + P313 - IF exposed or concerned: Get medical attention.
 P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
 P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P302 + P352 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.
 P332 + P313 - If skin irritation occurs: Get medical attention.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 - If eye irritation persists: Get medical attention.

Storage

: P405 - Store locked up.
 P403 - Store in a well-ventilated place.
 P235 - Keep cool.

Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Section 3. Composition/information on ingredients

| Ingredient name | % | CAS number |
|---------------------|-----------|------------|
| p-Xylene | ≥10 - ≤25 | 106-42-3 |
| Toluene | ≥10 - ≤23 | 108-88-3 |
| Heptane | ≥10 - ≤25 | 142-82-5 |
| pentane | ≥10 - ≤25 | 109-66-0 |
| Isopentane | ≥10 - ≤25 | 78-78-4 |
| Propylbenzene | ≤10 | 103-65-1 |
| Octane | ≤10 | 111-65-9 |
| Butylbenzene | ≤10 | 104-51-8 |
| 2,4-Dimethylpentane | ≤10 | 108-08-7 |
| 2-Methylpentane | ≤10 | 107-83-5 |
| n-Hexane | ≤10 | 110-54-3 |
| Decane | ≤5 | 124-18-5 |
| dodecane | ≤5 | 112-40-3 |
| Tridecane | ≤5 | 629-50-5 |
| Tetradecane | ≤5 | 629-59-4 |
| Pentadecane | ≤5 | 629-62-9 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.

Section 4. First aid measures

- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

4.3 Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

- Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- 7.2 Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
- 7.3 Specific end use(s)**
- Recommendations** : Industrial applications, Professional applications.
- Industrial sector specific solutions** : Not applicable.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|--|
| p-Xylene | <p>ACGIH TLV (United States, 3/2017). TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 655 mg/m³ 15 minutes.</p> <p>NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 655 mg/m³ 15 minutes.</p> <p>OSHA PEL (United States, 6/2016). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.</p> |
| Toluene | <p>OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hours. TWA: 375 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m³ 15 minutes.</p> <p>OSHA PEL Z2 (United States, 2/2013). TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes.</p> <p>NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 375 mg/m³ 10 hours.</p> |

Section 8. Exposure controls/personal protection

| | |
|---------------------|--|
| Heptane | STEL: 150 ppm 15 minutes. STEL: 560 mg/m ³ 15 minutes. ACGIH TLV (United States, 3/2017). TWA: 20 ppm 8 hours. ACGIH TLV (United States, 3/2017). TWA: 400 ppm 8 hours. TWA: 1640 mg/m ³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m ³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 400 ppm 8 hours. TWA: 1600 mg/m ³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2000 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2016). TWA: 85 ppm 10 hours. TWA: 350 mg/m ³ 10 hours. CEIL: 440 ppm 15 minutes. CEIL: 1800 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 500 ppm 8 hours. TWA: 2000 mg/m ³ 8 hours. |
| pentane | ACGIH TLV (United States, 3/2017). TWA: 1000 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 600 ppm 8 hours. TWA: 1800 mg/m ³ 8 hours. STEL: 750 ppm 15 minutes. STEL: 2250 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2016). TWA: 120 ppm 10 hours. TWA: 350 mg/m ³ 10 hours. CEIL: 610 ppm 15 minutes. CEIL: 1800 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 1000 ppm 8 hours. TWA: 2950 mg/m ³ 8 hours. |
| Isopentane | ACGIH TLV (United States, 3/2017). TWA: 1000 ppm 8 hours. |
| Propylbenzene | None. |
| Octane | OSHA PEL 1989 (United States, 3/1989). TWA: 300 ppm 8 hours. TWA: 1450 mg/m ³ 8 hours. STEL: 375 ppm 15 minutes. STEL: 1800 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2016). TWA: 75 ppm 10 hours. TWA: 350 mg/m ³ 10 hours. CEIL: 385 ppm 15 minutes. CEIL: 1800 mg/m ³ 15 minutes. ACGIH TLV (United States, 3/2017). TWA: 300 ppm 8 hours. OSHA PEL (United States, 6/2016). TWA: 500 ppm 8 hours. TWA: 2350 mg/m ³ 8 hours. |
| Butylbenzene | None. |
| 2,4-Dimethylpentane | ACGIH TLV (United States, 3/2017). |

Section 8. Exposure controls/personal protection

| | |
|-----------------|--|
| 2-Methylpentane | <p>TWA: 400 ppm 8 hours. TWA: 1640 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m³ 15 minutes.</p> <p>ACGIH TLV (United States, 3/2017). TWA: 500 ppm 8 hours. TWA: 1760 mg/m³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 3500 mg/m³ 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 500 ppm 8 hours. TWA: 1800 mg/m³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 3600 mg/m³ 15 minutes.</p> <p>NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 350 mg/m³ 10 hours. CEIL: 510 ppm 15 minutes. CEIL: 1800 mg/m³ 15 minutes.</p> |
| n-Hexane | <p>ACGIH TLV (United States, 3/2017). Absorbed through skin. TWA: 50 ppm 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 50 ppm 8 hours. TWA: 180 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2016). TWA: 50 ppm 10 hours. TWA: 180 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 6/2016). TWA: 500 ppm 8 hours. TWA: 1800 mg/m³ 8 hours.</p> |
| Decane | None. |
| dodecane | None. |
| Tridecane | None. |
| Tetradecane | None. |
| Pentadecane | None. |

8.2 Exposure controls

Appropriate engineering controls

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Colorless to light yellow.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: <-73°C (<-99.4°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Lower: 1%
Upper: 83%
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : Not available.
- Solubility** : Insoluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.

Section 10. Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- 10.5 Incompatible materials** : Reactive or incompatible with the following materials:
oxidizing materials
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|---------------------------------|--------------------------|--------------------------|----------|
| p-Xylene | LC50 Inhalation Vapor | Rat | 4550 ppm | 4 hours |
| | LD50 Oral | Rat | 3910 mg/kg | - |
| Toluene | LC50 Inhalation Gas. | Rat | 8000 ppm | 4 hours |
| | LC50 Inhalation Vapor | Rat | 49 g/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | 12400 mg/kg | - |
| | LD50 Dermal | Rat | 12000 mg/kg | - |
| Heptane | LD50 Oral | Rat | 636 mg/kg | - |
| | LC50 Inhalation Vapor | Rat | 103 g/m ³ | 4 hours |
| | LC50 Inhalation Vapor | Rat | 48000 ppm | 4 hours |
| pentane | LC50 Inhalation Vapor | Rat | 364 g/m ³ | 4 hours |
| Isopentane | LC50 Inhalation Vapor | Rat | 280000 mg/m ³ | 4 hours |
| Propylbenzene | LD50 Oral | Rat | 6040 mg/kg | - |
| Octane | LC50 Inhalation Vapor | Rat | 118 g/m ³ | 4 hours |
| | LC50 Inhalation Vapor | Rat | 25260 ppm | 4 hours |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| | LC50 Inhalation Vapor | Rat - Male, Female | >31.86 mg/l | 4 hours |
| Decane | LC50 Inhalation Vapor | Rat | 48000 ppm | 4 hours |
| | LD50 Oral | Rat | 15840 mg/kg | - |
| | LD50 Dermal | Rabbit - Male, Female | >5000 mg/kg | - |
| | LD50 Oral | Rat - Male, Female | >5000 mg/kg | - |
| dodecane | LC50 Inhalation Dusts and mists | Rat - Male, Female | 5.6 mg/l | 4 hours |
| | LD50 Dermal | Rabbit - Male, Female | >5000 mg/kg | - |
| | LD50 Oral | Rat - Male, Female | >5000 mg/kg | - |
| | LC50 Inhalation Vapor | Rat - Male, Female | ≥6100 mg/l | 4 hours |
| Tridecane | LD50 Dermal | Rabbit - Male, Female | >5000 mg/kg | - |
| | LD50 Dermal | Rat - Male, | >2000 mg/kg | - |

Section 11. Toxicological information

| | | | | |
|-------------|---------------------------------|---------------------------------|-------------------------|---------|
| Tetradecane | LD50 Oral | Female Rat - Male, Female | >5000 mg/kg | - |
| | LC50 Inhalation Dusts and mists | Rat | 9.3 mg/l | 4 hours |
| | LD50 Dermal | Rabbit - Male, Female | >5000 mg/kg | - |
| Pentadecane | LD50 Oral | Rat - Male, Female | >5000 mg/kg | - |
| | LC50 Inhalation Dusts and mists | Rat | >5266 mg/m ³ | 4 hours |
| | LD50 Oral | Rat - Male, Female | >5000 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|---------------------------|-------------|
| Toluene | Eyes - Mild irritant | Rabbit | - | 0.5 minutes | - |
| | Eyes - Mild irritant | Rabbit | - | 100 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 870 Micrograms | - |
| | Skin - Moderate irritant | Rabbit | - | 435 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| n-Hexane dodecane | Skin - Moderate irritant | Rabbit | - | 500 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 10 milligrams | - |
| | Skin - Moderate irritant | Rat | - | 96 hours 300 microliters | - |
| Tridecane | Skin - Moderate irritant | Rabbit | - | 24 hours 0.05 Milliliters | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 0.05 Milliliters | - |
| Tetradecane | Skin - Moderate irritant | Rabbit | - | 24 hours 0.05 Milliliters | - |

Conclusion/Summary

Skin : Repeated exposure may cause skin dryness or cracking.

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| p-Xylene | - | 3 | - |
| Toluene | - | 3 | - |

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|---------------------|------------|-------------------|---|
| p-Xylene | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| Toluene | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| Heptane | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| pentane | Category 3 | Not applicable. | Narcotic effects |
| Isopentane | Category 3 | Not applicable. | Narcotic effects |
| Propylbenzene | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| Octane | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| Butylbenzene | Category 3 | Not applicable. | Respiratory tract irritation |
| 2,4-Dimethylpentane | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| 2-Methylpentane | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| n-Hexane | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| Decane | Category 3 | Not applicable. | Narcotic effects |
| dodecane | Category 3 | Not applicable. | Respiratory tract irritation |
| Tridecane | Category 3 | Not applicable. | Respiratory tract irritation |
| Tetradecane | Category 3 | Not applicable. | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|----------|------------|-------------------|--|
| p-Xylene | Category 2 | Not determined | kidneys, liver and nervous system |
| Toluene | Category 2 | Inhalation | nervous system |
| n-Hexane | Category 2 | Not determined | nervous system and peripheral nervous system |

Aspiration hazard

Section 11. Toxicological information

| Name | Result |
|---|--------------------------------|
| ASTM D3710 Quantitative Calibration Mix - Testmix, Part Number CP741032 | ASPIRATION HAZARD - Category 1 |
| p-Xylene | ASPIRATION HAZARD - Category 1 |
| Toluene | ASPIRATION HAZARD - Category 1 |
| Heptane | ASPIRATION HAZARD - Category 1 |
| pentane | ASPIRATION HAZARD - Category 1 |
| Isopentane | ASPIRATION HAZARD - Category 1 |
| Propylbenzene | ASPIRATION HAZARD - Category 1 |
| Octane | ASPIRATION HAZARD - Category 1 |
| 2,4-Dimethylpentane | ASPIRATION HAZARD - Category 1 |
| 2-Methylpentane | ASPIRATION HAZARD - Category 1 |
| n-Hexane | ASPIRATION HAZARD - Category 1 |
| Decane | ASPIRATION HAZARD - Category 1 |
| dodecane | ASPIRATION HAZARD - Category 1 |
| Tridecane | ASPIRATION HAZARD - Category 1 |
| Tetradecane | ASPIRATION HAZARD - Category 1 |
| Pentadecane | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
 - pain or irritation
 - watering
 - redness
- Inhalation** : Adverse symptoms may include the following:
 - respiratory tract irritation
 - coughing
 - nausea or vomiting
 - headache
 - drowsiness/fatigue
 - dizziness/vertigo
 - unconsciousness
 - reduced fetal weight
 - increase in fetal deaths
 - skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
 - irritation
 - redness
 - reduced fetal weight
 - increase in fetal deaths
 - skeletal malformations

Section 11. Toxicological information

Ingestion : Adverse symptoms may include the following:
 nausea or vomiting
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|--------------------|--------------|
| Oral | 3192.8 mg/kg |
| Dermal | 5133.3 mg/kg |
| Inhalation (gases) | 43733.3 ppm |

Section 12. Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|-----------------------------------|---|----------|
| p-Xylene | Acute EC50 3200 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 4730 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| Toluene | Acute LC50 2 ul/L Marine water | Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| | Acute EC50 433 ppm Marine water | Algae - Skeletonema costatum | 96 hours |
| | Acute EC50 12500 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 11600 µg/l Fresh water | Crustaceans - Gammarus pseudolimnaeus - Adult | 48 hours |
| | Acute EC50 6000 µg/l Fresh water | Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours |
| | Acute LC50 5500 µg/l Fresh water | Fish - Oncorhynchus kisutch - Fry | 96 hours |

Section 12. Ecological information

| | | | |
|---------------|------------------------------------|--|----------|
| Heptane | Chronic NOEC 0.74 mg/l | Daphnia - Ceriodaphnia dubia | 7 days |
| Isopentane | Acute LC50 375000 µg/l Fresh water | Fish - Oreochromis mossambicus | 96 hours |
| Propylbenzene | Acute EC50 2.3 mg/l | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 3.1 mg/l | Fish - Oncorhynchus mykiss | 96 hours |
| Butylbenzene | Acute EC50 1800 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute LC50 1550 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| n-Hexane | Acute EC50 340 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 2500 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| Decane | Acute EC50 89 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
| | Acute LC50 18000 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| Tridecane | Acute LC50 >500 ppm Marine water | Fish - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| | Acute EC50 >1000 mg/l | Algae | 72 hours |
| Tetradecane | Acute EC50 >1000 mg/l | Algae | 72 hours |

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|-------------------------|---|----------------------------|------|----------|
| dodecane | OECD 301F Ready Biodegradability - Manometric Respirometry Test | 76.6 % - Readily - 28 days | - | - |
| Tridecane | OECD 301F Ready Biodegradability - Manometric Respirometry Test | 79 % - Readily - 28 days | - | - |
| Tetradecane | OECD 301F Ready Biodegradability - Manometric Respirometry Test | 80 % - Readily - 28 days | - | - |
| Pentadecane | OECD 306 Biodegradability in Seawater | 74 % - Readily - 28 days | - | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Toluene | - | - | Readily |
| Octane | - | - | Readily |
| dodecane | - | - | Readily |
| Tridecane | - | - | Readily |
| Tetradecane | - | - | Readily |
| Pentadecane | - | - | Readily |

12.3 Bioaccumulative potential

Section 12. Ecological information

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-------------|-----------|
| p-Xylene | 3.15 | 8.1 to 25.9 | low |
| Toluene | 2.73 | 90 | low |
| Heptane | 4.66 | 552 | high |
| pentane | 3.45 | 171 | low |
| Isopentane | 3 | 171 | low |
| Propylbenzene | 3.69 | - | low |
| Octane | 5.18 | 198.7 | low |
| Butylbenzene | 4.38 | - | high |
| 2,4-Dimethylpentane | 3.9 | - | low |
| 2-Methylpentane | 3.74 | - | low |
| n-Hexane | 4 | 501.187 | high |
| Decane | 5.86 | - | high |
| dodecane | 6.98 | 239.88 | low |
| Tridecane | 7.54 | - | high |
| Tetradecane | 8.11 | - | high |
| Pentadecane | 7.71 | - | high |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

| Ingredient | CAS # | Status | Reference number |
|---------------------------------|----------------------|------------------|------------------|
| Toluene; Benzene, methyl-Xylene | 108-88-3 106-42-3 | Listed Listed | U220 U239 |

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Section 13. Disposal considerations

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / IMDG / IATA : Not regulated.

Additional information

Remarks: De minimis quantities

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations : **TSCA 8(a) PAIR:** p-Xylene; Heptane; pentane
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
Clean Water Act (CWA) 307: Toluene
Clean Water Act (CWA) 311: Toluene; p-Xylene
Clean Air Act (CAA) 112 regulated flammable substances: Isopentane; pentane; Butane; Propane; Isobutane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : **FLAMMABLE LIQUIDS** - Category 2
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Section 15. Regulatory information

Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys, liver,
 nervous system, peripheral nervous system) - Category 2
 ASPIRATION HAZARD - Category 1

Composition/information on ingredients

| Name | % | Classification |
|---------------|-----------|--|
| p-Xylene | ≥10 - ≤25 | FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys, liver, nervous system) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant |
| Toluene | ≥10 - ≤23 | FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (nervous system) (inhalation) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant |
| Heptane | ≥10 - ≤25 | FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant |
| pentane | ≥10 - ≤25 | FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant |
| Isopentane | ≥10 - ≤25 | FLAMMABLE LIQUIDS - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant |
| Butane | ≤10 | FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS |
| Propane | ≤10 | FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS |
| Propylbenzene | ≤10 | FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant |
| Octane | ≤10 | HNOC - Static-accumulating flammable liquid FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract |

Section 15. Regulatory information

| | | |
|---------------------|-----|--|
| Butylbenzene | ≤10 | irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |
| 2,4-dimethylpentane | ≤10 | FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| 2-Methylpentane | ≤10 | ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| n-Hexane | ≤10 | ASPIRATION HAZARD - Category 1 FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Fertility) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| Decane | ≤5 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (nervous system, peripheral nervous system) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Static-accumulating flammable liquid FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| dodecane | ≤5 | ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant FLAMMABLE LIQUIDS - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |
| Isobutane | ≤5 | ASPIRATION HAZARD - Category 1 FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS |
| Tridecane | ≤5 | FLAMMABLE LIQUIDS - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |
| Tetradecane | ≤5 | ASPIRATION HAZARD - Category 1 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |
| Pentadecane | ≤5 | ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant |

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Section 15. Regulatory information

| | Product name | CAS number | % |
|---------------------------------|--------------|------------|-----------|
| Form R - Reporting requirements | p-Xylene | 106-42-3 | ≥10 - ≤25 |
| | Toluene | 108-88-3 | ≥10 - ≤23 |
| | n-Hexane | 110-54-3 | ≤10 |
| Supplier notification | p-Xylene | 106-42-3 | ≥10 - ≤25 |
| | Toluene | 108-88-3 | ≥10 - ≤23 |
| | n-Hexane | 110-54-3 | ≤10 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts

: The following components are listed: TOLUENE; METHYLBENZENE; ISOPENTANE; P-XYLENE; P-DIMETHYLBENZENE; HEPTANE; N-HEPTANE; PENTANE; BUTANE; PROPANE; HEXANE; N-HEXANE; ISOHEXANE; 2,4-DIMETHYLPENTANE; BUTYLBENZENE; N-BUTYLBENZENE; OCTANE; PROPYLBENZENE; N-PROPYLBENZENE; ISOBUTANE

New York

: The following components are listed: Toluene; p-Xylene; Hexane

New Jersey

: The following components are listed: TOLUENE; BENZENE, METHYL-; ISOPENTANE; BUTANE, 2-METHYL-; p-XYLENE; BENZENE, 1,4-DIMETHYL-; n-HEPTANE; HEPTANE; PENTANE; BUTANE; PROPANE; n-HEXANE; HEXANE; 2-METHYLPENTANE; ISOHEXANE; 2,4-DIMETHYLPENTANE; PENTANE, 2, 4-DIMETHYL-; BUTYL BENZENE; BENZENE, BUTYL-; DECANE; OCTANE; PROPYL BENZENE; BENZENE, PROPYL-; Isobutane; PROPANE, 2-METHYL-

Pennsylvania

: The following components are listed: BENZENE, METHYL-; BUTANE, 2-METHYL-; BENZENE, 1,4-DIMETHYL-; HEPTANE; PENTANE; BUTANE; PROPANE; HEXANE; PENTANE, 2-METHYL-; PENTANE, 2,4-DIMETHYL-; BENZENE, BUTYL-; DECANE; OCTANE; BENZENE, PROPYL-; PROPANE, 2-METHYL-

California Prop. 65

⚠ WARNING: This product can expose you to Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| Ingredient name | No significant risk level | Maximum acceptable dosage level |
|-----------------|---------------------------|---------------------------------|
| Toluene | - | Yes. |

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia

: Not determined.

Section 15. Regulatory information

| | |
|--------------------------|--|
| Canada | : At least one component is not listed in DSL but all such components are listed in NDSL. |
| China | : All components are listed or exempted. |
| Europe | : All components are listed or exempted. |
| Japan | : Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : All components are listed or exempted. |
| Malaysia | : Not determined. |
| New Zealand | : All components are listed or exempted. |
| Philippines | : All components are listed or exempted. |
| Republic of Korea | : Not determined. |
| Taiwan | : All components are listed or exempted. |
| Thailand | : <input checked="" type="checkbox"/> Not determined. |
| Turkey | : Not determined. |
| United States | : All components are listed or exempted. |
| Viet Nam | : <input checked="" type="checkbox"/> Not determined. |

Section 16. Other information

History

| | |
|-------------------------------|--------------|
| Date of issue | : 02/28/2018 |
| Date of previous issue | : 03/31/2016 |
| Version | : 4 |

Procedure used to derive the classification

| Classification | Justification |
|---|-----------------------|
| <input checked="" type="checkbox"/> FLAMMABLE LIQUIDS - Category 2 | On basis of test data |
| SKIN IRRITATION - Category 2 | Calculation method |
| EYE IRRITATION - Category 2A | Calculation method |
| TOXIC TO REPRODUCTION (Fertility) - Category 2 | Calculation method |
| TOXIC TO REPRODUCTION (Unborn child) - Category 2 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys, liver, nervous system, peripheral nervous system) - Category 2 | Calculation method |
| ASPIRATION HAZARD - Category 1 | Expert judgment |

Indicates information that has changed from previously issued version.

Notice to reader

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