

# SAFETY DATA SHEET

Dioxin Analyzer Standard, Part Number G3440-85039

## Section 1. Identification

**Product identifier** : Dioxin Analyzer Standard, Part Number G3440-85039  
**Part No. (Chemical Kit)** : G3440-85039  
**Part No.** : Dioxin/Furan/DL-PCB Check Standard G3440-85039-1  
 DL/NDL-PCB Check Standard G3440-85039-2

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

Analytical chemistry.

Dioxin/Furan/DL-PCB Check Standard 1 ml  
 DL/NDL-PCB Check Standard 1 ml

**Supplier/Manufacturer** : Agilent Technologies Australia Pty Ltd  
 679 Springvale Road  
 Mulgrave  
 Victoria 3170, Australia  
 1800 802 402

**Emergency telephone number (with hours of operation)** : CHEMTREC®: (61)-290372994

## Section 2. Hazard(s) identification

### Classification of the substance or mixture

#### Dioxin/Furan/DL-PCB Check Standard

H226 FLAMMABLE LIQUIDS - Category 3  
 H315 SKIN CORROSION/IRRITATION - Category 2  
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A  
 H335 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3  
 H336 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3  
 H304 ASPIRATION HAZARD - Category 1  
 H410 LONG-TERM AQUATIC HAZARD - Category 1

#### DL/NDL-PCB Check Standard

H225 FLAMMABLE LIQUIDS - Category 2  
 H315 SKIN CORROSION/IRRITATION - Category 2  
 H336 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3  
 H304 ASPIRATION HAZARD - Category 1  
 H400 ACUTE AQUATIC HAZARD - Category 1  
 H410 LONG-TERM AQUATIC HAZARD - Category 1

### GHS label elements

#### Hazard pictograms



## Section 2. Hazard(s) identification

<b>Signal word</b>	: Dioxin/Furan/DL-PCB Check Standard	DANGER
	DL/NDL-PCB Check Standard	DANGER
<b>Hazard statements</b>	: Dioxin/Furan/DL-PCB Check Standard	<p>H226 - Flammable liquid and vapour.</p> <p>H319 - Causes serious eye irritation.</p> <p>H315 - Causes skin irritation.</p> <p>H304 - May be fatal if swallowed and enters airways.</p> <p>H335 - May cause respiratory irritation.</p> <p>H336 - May cause drowsiness or dizziness.</p> <p>H410 - Very toxic to aquatic life with long lasting effects.</p>
	DL/NDL-PCB Check Standard	<p>H225 - Highly flammable liquid and vapour.</p> <p>H315 - Causes skin irritation.</p> <p>H304 - May be fatal if swallowed and enters airways.</p> <p>H336 - May cause drowsiness or dizziness.</p> <p>H410 - Very toxic to aquatic life with long lasting effects.</p>
<b>Precautionary statements</b>		
<b>Prevention</b>	: Dioxin/Furan/DL-PCB Check Standard	<p>P280 - Wear protective gloves. Wear eye or face protection.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.</p> <p>P242 - Use only non-sparking tools.</p> <p>P243 - Take precautionary measures against static discharge.</p> <p>P233 - Keep container tightly closed.</p> <p>P271 - Use only outdoors or in a well-ventilated area.</p> <p>P273 - Avoid release to the environment.</p> <p>P261 - Avoid breathing vapour.</p> <p>P264 - Wash hands thoroughly after handling.</p>
	DL/NDL-PCB Check Standard	<p>P280 - Wear protective gloves. Wear eye or face protection.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.</p> <p>P242 - Use only non-sparking tools.</p> <p>P243 - Take precautionary measures against static discharge.</p> <p>P233 - Keep container tightly closed.</p> <p>P271 - Use only outdoors or in a well-ventilated area.</p> <p>P273 - Avoid release to the environment.</p> <p>P261 - Avoid breathing vapour.</p> <p>P264 - Wash hands thoroughly after handling.</p>
<b>Response</b>	: Dioxin/Furan/DL-PCB Check Standard	<p>P391 - Collect spillage.</p> <p>P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.</p> <p>P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.</p> <p>P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P302 + P352 + P362 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing.</p>

## Section 2. Hazard(s) identification

		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. P391 - Collect spillage.
	DL/NDL-PCB Check Standard	P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. P332 + P313 - If skin irritation occurs: Get medical attention.
<b>Storage</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	P405 - Store locked up.
	DL/NDL-PCB Check Standard	P403 - Store in a well-ventilated place. P235 - Keep cool. P405 - Store locked up.
<b>Disposal</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	P403 - Store in a well-ventilated place. P235 - Keep cool.
	DL/NDL-PCB Check Standard	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	Not applicable.
	DL/NDL-PCB Check Standard	Not applicable.
<b>Other hazards which do not result in classification</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	None known.
	DL/NDL-PCB Check Standard	None known.

## Section 3. Composition and ingredient information

<b>Substance/mixture</b>	: Dioxin/Furan/DL-PCB Check Standard	Mixture
	DL/NDL-PCB Check Standard	Mixture

### CAS number/other identifiers

## Section 3. Composition and ingredient information

Ingredient name	% (w/w)	CAS number
Dioxin/Furan/DL-PCB Check Standard nonane	≥90	111-84-2
DL/NDL-PCB Check Standard 2,2,4-trimethylpentane	≥90	540-84-1

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

### Description of necessary first aid measures

<b>Eye contact</b>	: Dioxin/Furan/DL-PCB Check Standard	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.
	DL/NDL-PCB Check Standard	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.
<b>Inhalation</b>	: Dioxin/Furan/DL-PCB Check Standard	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.
	DL/NDL-PCB Check Standard	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.
<b>Skin contact</b>	: Dioxin/Furan/DL-PCB Check Standard	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.
	DL/NDL-PCB Check Standard	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.

## Section 4. First aid measures

<b>Ingestion</b>	: Dioxin/Furan/DL-PCB Check Standard	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.
	DL/NDL-PCB Check Standard	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.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: Dioxin/Furan/DL-PCB Check Standard	Causes serious eye irritation.
	DL/NDL-PCB Check Standard	No known significant effects or critical hazards.
<b>Inhalation</b>	: Dioxin/Furan/DL-PCB Check Standard	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
	DL/NDL-PCB Check Standard	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
<b>Skin contact</b>	: Dioxin/Furan/DL-PCB Check Standard	Causes skin irritation.
	DL/NDL-PCB Check Standard	Causes skin irritation.
<b>Ingestion</b>	: Dioxin/Furan/DL-PCB Check Standard	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
	DL/NDL-PCB Check Standard	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: Dioxin/Furan/DL-PCB Check Standard	Adverse symptoms may include the following: pain or irritation watering redness
	DL/NDL-PCB Check Standard	Adverse symptoms may include the following: pain or irritation

## Section 4. First aid measures

<b>Inhalation</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	watering redness Adverse symptoms may include the following:  respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	DL/NDL-PCB Check Standard	Adverse symptoms may include the following:  nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
<b>Skin contact</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	Adverse symptoms may include the following:  irritation redness
	DL/NDL-PCB Check Standard	Adverse symptoms may include the following:  irritation redness
<b>Ingestion</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	Adverse symptoms may include the following:  nausea or vomiting
	DL/NDL-PCB Check Standard	Adverse symptoms may include the following:  nausea or vomiting

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

<b>Notes to physician</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	DL/NDL-PCB Check Standard	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	No specific treatment.
	DL/NDL-PCB Check Standard	No specific treatment.
<b>Protection of first-aiders</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	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.
	DL/NDL-PCB Check Standard	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. Firefighting measures

### Extinguishing media

**Suitable extinguishing media** :  Dioxin/Furan/DL-PCB Check Standard Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.  
DL/NDL-PCB Check Standard Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** :  Dioxin/Furan/DL-PCB Check Standard Do not use water jet.  
DL/NDL-PCB Check Standard Do not use water jet.

**Specific hazards arising from the chemical** :  Dioxin/Furan/DL-PCB Check Standard Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.  
DL/NDL-PCB Check Standard Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** :  Dioxin/Furan/DL-PCB Check Standard Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
DL/NDL-PCB Check Standard Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** :  Dioxin/Furan/DL-PCB Check Standard 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.  
DL/NDL-PCB Check Standard 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** :  Dioxin/Furan/DL-PCB Check Standard Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  
DL/NDL-PCB Check Standard Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 5. Firefighting measures

**Hazchem code** : Dioxin/Furan/DL-PCB Check 3Y  
Standard  
DL/NDL-PCB Check 3YE  
Standard

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: Dioxin/Furan/DL-PCB Check Standard  DL/NDL-PCB Check Standard	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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.  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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: Dioxin/Furan/DL-PCB Check Standard  DL/NDL-PCB Check Standard	If specialised 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".  If specialised 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".
<b>Environmental precautions</b>	: Dioxin/Furan/DL-PCB Check Standard  DL/NDL-PCB Check Standard	Avoid dispersal of spilt 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.  Avoid dispersal of spilt 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	: Dioxin/Furan/DL-PCB Check Standard  DL/NDL-PCB Check Standard	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.  Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof
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## Section 6. Accidental release measures

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

### Precautions for safe handling

#### Protective measures


:  Dioxin/Furan/DL-PCB Check Standard

Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. 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.

DL/NDL-PCB Check Standard

Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. 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.

#### Advice on general occupational hygiene

:  Dioxin/Furan/DL-PCB Check Standard

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.

DL/NDL-PCB Check Standard

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.

## Section 7. Handling and storage

<p><b>Conditions for safe storage, including any incompatibilities</b></p>	<p><b>Dioxin/Furan/DL-PCB Check Standard</b></p> <p>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 unlabelled containers. Use appropriate containment to avoid environmental contamination.</p>
<p><b>DL/NDL-PCB Check Standard</b></p>	<p>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 unlabelled containers. Use appropriate containment to avoid environmental contamination.</p>

## Section 8. Exposure controls and personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<b>Dioxin/Furan/DL-PCB Check Standard</b> nonane	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 1050 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
<b>DL/NDL-PCB Check Standard</b> 2,2,4-trimethylpentane	<b>ACGIH TLV (United States, 3/2016).</b> TWA: 300 ppm 8 hours.

<p><b>Appropriate engineering controls</b></p>	<p><b>Use</b> 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, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.</p>
<p><b>Environmental exposure controls</b></p>	<p><b>Emissions</b> 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.</p>

### Individual protection measures

<p><b>Hygiene measures</b></p>	<p><b>Wash</b> 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.</p>
<p><b>Eye/face protection</b></p>	<p><b>Safety eyewear</b> 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.</p>

## Section 8. Exposure controls and personal protection

### 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

### Appearance

- Physical state** : Dioxin/Furan/DL-PCB Check Liquid.  
Standard  
DL/NDL-PCB Check Liquid.  
Standard
- Colour** : Dioxin/Furan/DL-PCB Check Not available.  
Standard  
DL/NDL-PCB Check Not available.  
Standard
- Odour** : Dioxin/Furan/DL-PCB Check Not available.  
Standard  
DL/NDL-PCB Check Not available.  
Standard
- Odour threshold** : Dioxin/Furan/DL-PCB Check Not available.  
Standard  
DL/NDL-PCB Check Not available.  
Standard
- pH** : Dioxin/Furan/DL-PCB Check Not available.  
Standard  
DL/NDL-PCB Check Not available.  
Standard
- Melting point** : Dioxin/Furan/DL-PCB Check -53°C (-63.4°F)  
Standard  
DL/NDL-PCB Check -107°C (-160.6°F)  
Standard
- Boiling point** : Dioxin/Furan/DL-PCB Check 151°C (303.8°F)  
Standard  
DL/NDL-PCB Check 98 to 99°C (208.4 to 210.2°F)  
Standard
- Flash point** : Dioxin/Furan/DL-PCB Check Closed cup: 31°C (87.8°F)  
Standard  
DL/NDL-PCB Check Closed cup: -12°C (10.4°F)  
Standard

## Section 9. Physical and chemical properties

<b>Evaporation rate</b>	: Dioxin/Furan/DL-PCB Check Standard	Not available.
	DL/NDL-PCB Check Standard	Not available.
<b>Flammability (solid, gas)</b>	: Dioxin/Furan/DL-PCB Check Standard	Not applicable.
	DL/NDL-PCB Check Standard	Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: Dioxin/Furan/DL-PCB Check Standard	Lower: 0.87%
	DL/NDL-PCB Check Standard	Upper: 2.9% Lower: 1%
		Upper: 6%
<b>Vapour pressure</b>	: Dioxin/Furan/DL-PCB Check Standard	Not available.
	DL/NDL-PCB Check Standard	5.5 kPa (41 mm Hg) [room temperature]
<b>Vapour density</b>	: Dioxin/Furan/DL-PCB Check Standard	Not available.
	DL/NDL-PCB Check Standard	3.94 [Air = 1]
<b>Relative density</b>	: Dioxin/Furan/DL-PCB Check Standard	Not available.
	DL/NDL-PCB Check Standard	Not available.
<b>Solubility</b>	: Dioxin/Furan/DL-PCB Check Standard	Insoluble in the following materials: cold water and hot water.
	DL/NDL-PCB Check Standard	Insoluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: Dioxin/Furan/DL-PCB Check Standard	Not available.
	DL/NDL-PCB Check Standard	Not available.
<b>Auto-ignition temperature</b>	: Dioxin/Furan/DL-PCB Check Standard	205°C (401°F)
	DL/NDL-PCB Check Standard	396°C (744.8°F)
<b>Decomposition temperature</b>	: Dioxin/Furan/DL-PCB Check Standard	Not available.
	DL/NDL-PCB Check Standard	Not available.
<b>Viscosity</b>	: Dioxin/Furan/DL-PCB Check Standard	Not available.
	DL/NDL-PCB Check Standard	Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	No specific test data related to reactivity available for this product or its ingredients.
	DL/NDL-PCB Check Standard	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	The product is stable.
	DL/NDL-PCB Check Standard	The product is stable.

## Section 10. Stability and reactivity

<b>Possibility of hazardous reactions</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard DL/NDL-PCB Check Standard	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard  DL/NDL-PCB Check Standard	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
<b>Incompatible materials</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard  DL/NDL-PCB Check Standard	Reactive or incompatible with the following materials:  oxidizing materials Reactive or incompatible with the following materials:  oxidizing materials
<b>Hazardous decomposition products</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard  DL/NDL-PCB Check Standard	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard nonane	LC50 Inhalation Vapour LD50 Oral	Rat Rat - Male, Female	3200 ppm >5000 mg/kg	4 hours -
<b>DL/NDL-PCB Check Standard</b> 2,2,4-trimethylpentane	LC50 Inhalation Vapour LD50 Oral	Rat - Male, Female Rat - Male, Female	>33.52 mg/l >5000 mg/kg	4 hours -

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard nonane	Skin - Moderate irritant	Rat	-	96 hours 300 microliters	-

#### Sensitisation

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

## Section 11. Toxicological information

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
<b>Dioxin/Furan/DL-PCB Check Standard</b> nonane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
<b>DL/NDL-PCB Check Standard</b> 2,2,4-trimethylpentane	Category 3	Not applicable.	Narcotic effects

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Name	Result
<b>Dioxin/Furan/DL-PCB Check Standard</b> Dioxin/Furan/DL-PCB Check Standard nonane	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
<b>DL/NDL-PCB Check Standard</b> DL/NDL-PCB Check Standard 2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

**Information on likely routes of exposure** : Dioxin/Furan/DL-PCB Check Standard Routes of entry anticipated: Oral, Dermal, Inhalation.  
DL/NDL-PCB Check Standard Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : **Dioxin/Furan/DL-PCB Check Standard** Causes serious eye irritation.  
**DL/NDL-PCB Check Standard** No known significant effects or critical hazards.

**Inhalation** : **Dioxin/Furan/DL-PCB Check Standard** Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.  
**DL/NDL-PCB Check Standard** Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Skin contact** : **Dioxin/Furan/DL-PCB Check Standard** Causes skin irritation.  
**DL/NDL-PCB Check Standard** Causes skin irritation.

**Ingestion** : **Dioxin/Furan/DL-PCB Check Standard** Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.  
**DL/NDL-PCB Check Standard** Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics



## Section 11. Toxicological information

<b>Eye contact</b>	: Dioxin/Furan/DL-PCB Check Standard	Adverse symptoms may include the following: pain or irritation watering redness
	: DL/NDL-PCB Check Standard	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: Dioxin/Furan/DL-PCB Check Standard	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	: DL/NDL-PCB Check Standard	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
<b>Skin contact</b>	: Dioxin/Furan/DL-PCB Check Standard	Adverse symptoms may include the following: irritation redness
	: DL/NDL-PCB Check Standard	Adverse symptoms may include the following: irritation redness
<b>Ingestion</b>	: Dioxin/Furan/DL-PCB Check Standard	Adverse symptoms may include the following: nausea or vomiting
	: DL/NDL-PCB Check Standard	Adverse symptoms may include the following: nausea or vomiting

### Delayed and immediate effects as well as 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

Not available.

**General** : Dioxin/Furan/DL-PCB Check Standard No known significant effects or critical hazards.  
DL/NDL-PCB Check Standard No known significant effects or critical hazards.

## Section 11. Toxicological information

<b>Carcinogenicity</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	No known significant effects or critical hazards.
	: DL/NDL-PCB Check Standard	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	No known significant effects or critical hazards.
	: DL/NDL-PCB Check Standard	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	No known significant effects or critical hazards.
	: DL/NDL-PCB Check Standard	No known significant effects or critical hazards.
<b>Developmental effects</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	No known significant effects or critical hazards.
	: DL/NDL-PCB Check Standard	No known significant effects or critical hazards.
<b>Fertility effects</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	No known significant effects or critical hazards.
	: DL/NDL-PCB Check Standard	No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

<b>Other information</b>	: <input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard	Adverse symptoms may include the following: Repeated exposure may cause skin dryness or cracking.
	: DL/NDL-PCB Check Standard	Adverse symptoms sometimes include the following: Repeated exposure may cause skin dryness or cracking.

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<input checked="" type="checkbox"/> Dioxin/Furan/DL-PCB Check Standard nonane	5.65	105	low
DL/NDL-PCB Check Standard 2,2,4-trimethylpentane	4.08	231	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

## Section 12. Ecological information

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

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimised 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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

### Regulatory information

**ADG / IMDG / IATA** : Not regulated as Dangerous Goods according to the ADG Code .

**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

### Standard Uniform Schedule of Medicine and Poisons

7

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

**Australia inventory (AICS)** : Not determined.

### 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.

### International lists

## Section 15. Regulatory information

### National inventory

Canada	: Not determined.
China	: Not determined.
Europe	: Not determined.
Japan	: <input checked="" type="checkbox"/> <b>Japan inventory (ENCS)</b> : Not determined. <b>Japan inventory (ISHL)</b> : Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Turkey	: <input checked="" type="checkbox"/> Not determined.
United States	: Not determined.

## Section 16. Any other relevant information

### History

Date of issue/Date of revision	: 20/10/2016
Date of previous issue	: 24/11/2014.
Version	: 2

### Key to abbreviations

: ADG = Australian Dangerous Goods
: ATE = Acute Toxicity Estimate
: BCF = Bioconcentration Factor
: GHS = Globally Harmonized System of Classification and Labelling of Chemicals
: IATA = International Air Transport Association
: IBC = Intermediate Bulk Container
: IMDG = International Maritime Dangerous Goods
: LogPow = logarithm of the octanol/water partition coefficient
: MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
: NOHSC = National Occupational Health and Safety Commission
: SUSMP = Standard Uniform Schedule of Medicine and Poisons
: UN = United Nations

### Procedure used to derive the classification

Classification	Justification
<input checked="" type="checkbox"/> <b>Dioxin/Furan/DL-PCB Check Standard</b> Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 1, H410	On basis of test data Calculation method Calculation method Calculation method Calculation method Expert judgment Calculation method
<b>DL/NDL-PCB Check Standard</b> Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	On basis of test data Calculation method Calculation method Expert judgment Calculation method Calculation method

**References** : Not available.

**Indicates information that has changed from previously issued version.**

### Notice to reader

## Section 16. Any other relevant information

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