

Agilent Technologies Australia Pty Ltd  
679 Springvale Road  
Mulgrave  
Victoria 3170, Australia  
1800 802 402

## D5501 Calibration Standards and Linearity Mix, Part Number G3440-85033

### 1. Identification of the material and supplier

#### Names

**Product name** : D5501 Calibration Standards and Linearity Mix, Part Number G3440-85033

**Part No. (Chemical Kit)** : G3440-85033

**Part No.** : Mix 1 Not available.  
Mix 2 Not available.  
Mix 3 Not available.  
Mix 4 Not available.  
Mix 5 Not available.  
Mix 6 Not available.

**ADG** : Not regulated as Dangerous Goods according to the ADG Code

#### Supplier

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

**Emergency telephone number** : CHEMTREC®: +(61)-290372994

#### Uses

**Area of application** : Mix 1 Industrial applications, Professional applications.  
Mix 2 Industrial applications, Professional applications.  
Mix 3 Industrial applications, Professional applications.  
Mix 4 Industrial applications, Professional applications.  
Mix 5 Industrial applications, Professional applications.  
Mix 6 Industrial applications, Professional applications.

**Material uses** : Analytical chemistry.  
2 ml ampoule  
Mix 1 1 ml  
Mix 2 1 ml  
Mix 3 1 ml  
Mix 4 1 ml  
Mix 5 1 ml  
Mix 6 1 ml

### 2. Hazards identification

**Classification** : Mix 1 F; R11  
Xn; R65  
Xi; R38  
R67  
N; R50/53  
Mix 2 F; R11  
Xn; R65  
Xi; R38  
R67  
N; R50/53  
Mix 3 F; R11

## 2 . Hazards identification

		Xn; R65 Xi; R38 R67 N; R51/53
	Mix 4	F; R11 Xn; R65 N; R51/53
	Mix 5	F; R11 Xn; R65 R52/53
	Mix 6	F; R11 Xn; R65 Xi; R38 R67 N; R50/53
<b>Risk phrases</b>	: Mix 1	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 2	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 3	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 4	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 5	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 6	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 2 . Hazards identification

<b>Safety phrases</b>	: Mix 1	S36- Wear suitable protective clothing. S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
	Mix 2	S36- Wear suitable protective clothing. S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
	Mix 3	S36- Wear suitable protective clothing. S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
	Mix 4	S36- Wear suitable protective clothing. S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
	Mix 5	S36- Wear suitable protective clothing. S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
	Mix 6	S36- Wear suitable protective clothing. S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
<b>Statement of hazardous/ dangerous nature</b>	: Mix 1	HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
	Mix 2	HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
	Mix 3	HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
	Mix 4	HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
	Mix 5	HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
	Mix 6	HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

## 3 . Composition/information on ingredients

<b>Mixture</b>	: Mix 1	Yes.
	Mix 2	Yes.
	Mix 3	Yes.
	Mix 4	Yes.
	Mix 5	Yes.
	Mix 6	Yes.

Ingredient name	CAS number	Concentration
<b>Mix 1</b>		
2,2,4-trimethylpentane	540-84-1	>60
Ethanol	64-17-5	10 - <30
n-Heptane	142-82-5	<10
Methanol	67-56-1	<10
<b>Mix 2</b>		
Ethanol	64-17-5	30 - 60
2,2,4-trimethylpentane	540-84-1	30 - 60
n-Heptane	142-82-5	<10
Methanol	67-56-1	<10
<b>Mix 3</b>		
Ethanol	64-17-5	>60
2,2,4-trimethylpentane	540-84-1	10 - <30
n-Heptane	142-82-5	<10
Methanol	67-56-1	<10
<b>Mix 4</b>		
Ethanol	64-17-5	>60
2,2,4-trimethylpentane	540-84-1	<10
n-Heptane	142-82-5	<10
Methanol	67-56-1	<10
<b>Mix 5</b>		
Ethanol	64-17-5	>60

### 3 . Composition/information on ingredients

n-Heptane	142-82-5	<10
Methanol	67-56-1	<10
<b>Mix 6</b>		
Decane	124-18-5	10 - <30
n-Heptane	142-82-5	10 - <30
Octane	111-65-9	10 - <30
Undecane	1120-21-4	10 - <30
3-Methylhexane	589-34-4	10 - <30
Nonane	111-84-2	<10
2,2-Dimethylbutane	75-83-2	<10
2,2,4-trimethylpentane	540-84-1	<10
2,4-Dimethylpentane	108-08-7	<10
Pentane	109-66-0	<10

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

**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.**

### 4 . First-aid measures

<b>Inhalation</b>	: Mix 1	Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. 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.
	Mix 2	Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. 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.
	Mix 3	Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. 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.
	Mix 4	Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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

## 4 . First-aid measures

		the person providing aid to give mouth-to-mouth resuscitation. 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.
	Mix 5	Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. 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.
	Mix 6	Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. 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>Ingestion</b>	: Mix 1	Get medical attention immediately. 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.
	Mix 2	Get medical attention immediately. 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.
	Mix 3	Get medical attention immediately. Wash out

## 4 . First-aid measures

Mix 4	<p>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.</p>
Mix 5	<p>Get medical attention immediately. 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.</p>
Mix 6	<p>Get medical attention immediately. 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</p>

## 4 . First-aid measures

		open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Skin contact</b>	: Mix 1	Wash skin thoroughly with soap and water or use recognised skin cleanser. 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.
	Mix 2	Wash skin thoroughly with soap and water or use recognised skin cleanser. 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.
	Mix 3	Wash skin thoroughly with soap and water or use recognised skin cleanser. 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.
	Mix 4	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Mix 5	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Mix 6	Wash skin thoroughly with soap and water or use recognised skin cleanser. 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.
<b>Eye contact</b>	: Mix 1	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.
	Mix 2	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.
	Mix 3	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.
	Mix 4	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.
	Mix 5	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.
	Mix 6	Immediately flush eyes with plenty of water,

## 4 . First-aid measures

		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>Protection of first-aiders</b>	: Mix 1	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.
	Mix 2	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.
	Mix 3	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.
	Mix 4	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.
	Mix 5	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.
	Mix 6	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.
<b>Advice to doctor</b>	: Mix 1	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Mix 2	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Mix 3	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Mix 4	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Mix 5	No specific treatment. Treat symptomatically. Contact poison treatment specialist

## 4 . First-aid measures

Mix 6	immediately if large quantities have been ingested or inhaled. No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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## 5 . Fire-fighting measures

### Extinguishing media

<b>Suitable</b>	: Mix 1	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	Mix 2	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	Mix 3	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	Mix 4	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	Mix 5	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	Mix 6	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Not suitable</b>	: Mix 1	Do not use water jet.
	Mix 2	Do not use water jet.
	Mix 3	Do not use water jet.
	Mix 4	Do not use water jet.
	Mix 5	Do not use water jet.
	Mix 6	Do not use water jet.
<b>Special exposure hazards</b>	: Mix 1	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. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Mix 2	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. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Mix 3	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. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Mix 4	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

## 5 . Fire-fighting measures

	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. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Mix 5	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. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Mix 6	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. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Mix 1	Highly flammable liquid. 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.
Mix 2	Highly flammable liquid. 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.
Mix 3	Highly flammable liquid. 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.
Mix 4	Highly flammable liquid. 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

## 5 . Fire-fighting measures

	Mix 5	fire or explosion hazard. Highly flammable liquid. 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.
	Mix 6	Highly flammable liquid. 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.
<b>Hazardous thermal decomposition products</b>	: Mix 1	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 2	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 3	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 4	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 5	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 6	Decomposition products may include the following materials: carbon dioxide carbon monoxide
<b>Special protective equipment for fire-fighters</b>	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>Hazchem code</b>	:	2Z

## 6 . Accidental release measures

<b>Personal precautions</b>	: Mix 1	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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
	Mix 2	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and

## 6 . Accidental release measures

	<p>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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).</p>
Mix 3	<p>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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).</p>
Mix 4	<p>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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).</p>
Mix 5	<p>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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).</p>
Mix 6	<p>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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).</p>
<b>Environmental precautions</b> : Mix 1	<p>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.</p>
Mix 2	<p>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</p>

## 6 . Accidental release measures

	Mix 3	<p>in large quantities.</p> <p>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.</p>
	Mix 4	<p>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.</p>
	Mix 5	<p>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.</p>
	Mix 6	<p>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.</p>
<b>Methods for cleaning up</b>	: Mix 1	<p>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.</p>
	Mix 2	<p>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.</p>
	Mix 3	<p>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.</p>
	Mix 4	<p>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.</p>
	Mix 5	<p>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</p>

## 6 . Accidental release measures

Mix 6

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 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.

## 7 . Handling and storage

### Handling

: Mix 1

Put on appropriate personal protective equipment (see Section 8). 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. Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Refer to special instructions/safety data sheet. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Mix 2

Put on appropriate personal protective equipment (see Section 8). 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. Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Refer to special instructions/safety data sheet. 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)

## 7 . Handling and storage

Mix 3

equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. Put on appropriate personal protective equipment (see Section 8). 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. Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Refer to special instructions/safety data sheet. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Mix 4

Put on appropriate personal protective equipment (see Section 8). 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. Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Refer to special instructions/safety data sheet. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and

## 7 . Handling and storage

Mix 5

equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. Put on appropriate personal protective equipment (see Section 8). 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. Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Mix 6

Put on appropriate personal protective equipment (see Section 8). 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. Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Refer to special instructions/safety data sheet. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

## 7 . Handling and storage

### Storage

: Mix 1

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. 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.

Mix 2

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. 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.

Mix 3

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. 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.

Mix 4

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. 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.

Mix 5

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. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been

## 7 . Handling and storage

Mix 6

opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

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. 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.

## 8 . Exposure controls/personal protection

### Occupational exposure limits

Ingredient name	Exposure limits
<b>Mix 1</b> 2,2,4-trimethylpentane  Ethanol  n-Heptane  Methanol	<b>ACGIH TLV (United States, 6/2013).</b> TWA: 300 ppm 8 hours. <b>Safe Work Australia (Australia, 4/2013).</b> TWA: 1880 mg/m <sup>3</sup> 8 hours. TWA: 1000 ppm 8 hours. <b>Safe Work Australia (Australia, 4/2013).</b> STEL: 2050 mg/m <sup>3</sup> 15 minutes. STEL: 500 ppm 15 minutes. TWA: 1640 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours. <b>Safe Work Australia (Australia, 4/2013). Absorbed through skin.</b> STEL: 328 mg/m <sup>3</sup> 15 minutes. STEL: 250 ppm 15 minutes. TWA: 262 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
<b>Mix 2</b> Ethanol  2,2,4-trimethylpentane  n-Heptane  Methanol	<b>Safe Work Australia (Australia, 4/2013).</b> TWA: 1880 mg/m <sup>3</sup> 8 hours. TWA: 1000 ppm 8 hours. <b>ACGIH TLV (United States, 6/2013).</b> TWA: 300 ppm 8 hours. <b>Safe Work Australia (Australia, 4/2013).</b> STEL: 2050 mg/m <sup>3</sup> 15 minutes. STEL: 500 ppm 15 minutes. TWA: 1640 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours. <b>Safe Work Australia (Australia, 4/2013). Absorbed through skin.</b> STEL: 328 mg/m <sup>3</sup> 15 minutes. STEL: 250 ppm 15 minutes. TWA: 262 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
<b>Mix 3</b> Ethanol	<b>Safe Work Australia (Australia, 4/2013).</b> TWA: 1880 mg/m <sup>3</sup> 8 hours.

## 8 . Exposure controls/personal protection

2,2,4-trimethylpentane	TWA: 1000 ppm 8 hours. <b>ACGIH TLV (United States, 6/2013).</b>
n-Heptane	TWA: 300 ppm 8 hours. <b>Safe Work Australia (Australia, 4/2013).</b> STEL: 2050 mg/m <sup>3</sup> 15 minutes. STEL: 500 ppm 15 minutes. TWA: 1640 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours.
Methanol	<b>Safe Work Australia (Australia, 4/2013). Absorbed through skin.</b> STEL: 328 mg/m <sup>3</sup> 15 minutes. STEL: 250 ppm 15 minutes. TWA: 262 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
<b>Mix 4</b>	
Ethanol	<b>Safe Work Australia (Australia, 4/2013).</b> TWA: 1880 mg/m <sup>3</sup> 8 hours. TWA: 1000 ppm 8 hours.
2,2,4-trimethylpentane	<b>ACGIH TLV (United States, 6/2013).</b> TWA: 300 ppm 8 hours.
n-Heptane	<b>Safe Work Australia (Australia, 4/2013).</b> STEL: 2050 mg/m <sup>3</sup> 15 minutes. STEL: 500 ppm 15 minutes. TWA: 1640 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours.
Methanol	<b>Safe Work Australia (Australia, 4/2013). Absorbed through skin.</b> STEL: 328 mg/m <sup>3</sup> 15 minutes. STEL: 250 ppm 15 minutes. TWA: 262 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
<b>Mix 5</b>	
Ethanol	<b>Safe Work Australia (Australia, 4/2013).</b> TWA: 1880 mg/m <sup>3</sup> 8 hours. TWA: 1000 ppm 8 hours.
n-Heptane	<b>Safe Work Australia (Australia, 4/2013).</b> STEL: 2050 mg/m <sup>3</sup> 15 minutes. STEL: 500 ppm 15 minutes. TWA: 1640 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours.
Methanol	<b>Safe Work Australia (Australia, 4/2013). Absorbed through skin.</b> STEL: 328 mg/m <sup>3</sup> 15 minutes. STEL: 250 ppm 15 minutes. TWA: 262 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
<b>Mix 6</b>	
Decane	<b>TRGS900 AGW (Germany, 9/2013).</b> TWA: 600 mg/m <sup>3</sup> 8 hours. PEAK: 1200 mg/m <sup>3</sup> 15 minutes.
n-Heptane	<b>Safe Work Australia (Australia, 4/2013).</b> STEL: 2050 mg/m <sup>3</sup> 15 minutes. STEL: 500 ppm 15 minutes. TWA: 1640 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours.
Octane	<b>Safe Work Australia (Australia, 4/2013).</b> STEL: 1750 mg/m <sup>3</sup> 15 minutes. STEL: 375 ppm 15 minutes. TWA: 1400 mg/m <sup>3</sup> 8 hours. TWA: 300 ppm 8 hours.

## 8 . Exposure controls/personal protection

Undecane	<b>TRGS900 AGW (Germany, 9/2013).</b> TWA: 600 mg/m <sup>3</sup> 8 hours. PEAK: 1200 mg/m <sup>3</sup> 15 minutes.
3-Methylhexane	<b>ACGIH TLV (United States, 6/2013).</b> TWA: 400 ppm 8 hours. TWA: 1640 mg/m <sup>3</sup> 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m <sup>3</sup> 15 minutes.
Nonane	<b>NOHSC (Australia, 8/2005).</b> TWA: 200 ppm 8 hours. TWA: 1050 mg/m <sup>3</sup> 8 hours. <b>Safe Work Australia (Australia, 4/2013).</b> TWA: 1050 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
2,2-Dimethylbutane	<b>Safe Work Australia (Australia, 4/2013).</b> STEL: 3500 mg/m <sup>3</sup> 15 minutes. STEL: 1000 ppm 15 minutes. TWA: 1760 mg/m <sup>3</sup> 8 hours. TWA: 500 ppm 8 hours.
2,2,4-trimethylpentane	<b>ACGIH TLV (United States, 6/2013).</b> TWA: 300 ppm 8 hours.
2,4-Dimethylpentane	<b>ACGIH TLV (United States, 6/2013).</b> TWA: 400 ppm 8 hours. TWA: 1640 mg/m <sup>3</sup> 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m <sup>3</sup> 15 minutes.
Pentane	<b>Safe Work Australia (Australia, 4/2013).</b> STEL: 2210 mg/m <sup>3</sup> 15 minutes. STEL: 750 ppm 15 minutes. TWA: 1770 mg/m <sup>3</sup> 8 hours. TWA: 600 ppm 8 hours.

**No additional exposure standard allocated for other ingredients/components covered by the MSDS other than those listed in the table above.**

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### Exposure controls

- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- 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.
- Eyes** : 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 or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Hands** : 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.

## 8 . Exposure controls/personal protection

- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : 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.
- 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.

## 9 . Physical and chemical properties

<b>Physical state</b>	: Mix 1	Liquid. [Clear.]
	Mix 2	Liquid. [Clear.]
	Mix 3	Liquid. [Clear.]
	Mix 4	Liquid. [Clear.]
	Mix 5	Liquid. [Clear.]
	Mix 6	Liquid.
<b>Colour</b>	: Mix 1	Colourless.
	Mix 2	Colourless.
	Mix 3	Colourless.
	Mix 4	Colourless.
	Mix 5	Colourless.
	Mix 6	Colourless.
<b>Odour</b>	: Mix 1	Sweetish. Ethereal. Unpleasant.
	Mix 2	Sweetish. Ethereal. Unpleasant.
	Mix 3	Sweetish. Ethereal. Unpleasant.
	Mix 4	Sweetish. Ethereal. Unpleasant.
	Mix 5	Sweetish. Ethereal. Unpleasant.
	Mix 6	Gasoline-like
<b>Odour threshold</b>	: Mix 1	Not available.
	Mix 2	Not available.
	Mix 3	Not available.
	Mix 4	Not available.
	Mix 5	Not available.
	Mix 6	Not available.
<b>Boiling point</b>	: Mix 1	78.3°C (172.9°F)
	Mix 2	78.3°C (172.9°F)
	Mix 3	78.3°C (172.9°F)
	Mix 4	78.3°C (172.9°F)
	Mix 5	78.3°C (172.9°F)
	Mix 6	98°C (208.4°F)
<b>Melting point</b>	: Mix 1	-114°C (-173.2°F)
	Mix 2	-114°C (-173.2°F)
	Mix 3	-114°C (-173.2°F)
	Mix 4	-114°C (-173.2°F)
	Mix 5	-114°C (-173.2°F)
	Mix 6	-114°C (-173.2°F)
<b>Vapour pressure</b>	: Mix 1	5.9 kPa (44.25 mm Hg) [room temperature]
	Mix 2	5.9 kPa (44.25 mm Hg) [room temperature]
	Mix 3	5.9 kPa (44.25 mm Hg) [room temperature]
	Mix 4	5.9 kPa (44.25 mm Hg) [room temperature]
	Mix 5	5.9 kPa (44.25 mm Hg) [room temperature]
	Mix 6	<5.3 kPa (<40 mm Hg) [room temperature]
<b>Relative density</b>	: Mix 1	0.789 [Water = 1]
	Mix 2	0.789 [Water = 1]
	Mix 3	0.789 [Water = 1]
	Mix 4	0.789 [Water = 1]
	Mix 5	0.789 [Water = 1]
	Mix 6	0.684 [Water = 1]

## 9 . Physical and chemical properties

<b>Flash point</b>	: Mix 1	Closed cup: 14°C (57.2°F)
	Mix 2	Closed cup: 14°C (57.2°F)
	Mix 3	Closed cup: 14°C (57.2°F)
	Mix 4	Closed cup: 14°C (57.2°F)
	Mix 5	Closed cup: 14°C (57.2°F)
	Mix 6	Closed cup: -4°C (24.8°F)
<b>Flammable limits</b>	: Mix 1	Lower: 3.3% Upper: 19%
	Mix 2	Lower: 3.3% Upper: 19%
	Mix 3	Lower: 3.3% Upper: 19%
	Mix 4	Lower: 3.3% Upper: 19%
	Mix 5	Lower: 3.3% Upper: 19%
	Mix 6	Lower: 1.05% Upper: 6.7%
<b>Vapour density</b>	: Mix 1	1.59 [Air = 1]
	Mix 2	1.59 [Air = 1]
	Mix 3	1.59 [Air = 1]
	Mix 4	1.59 [Air = 1]
	Mix 5	1.59 [Air = 1]
	Mix 6	3.52 [Air = 1]
<b>pH</b>	: Mix 1	Not available.
	Mix 2	Not available.
	Mix 3	Not available.
	Mix 4	Not available.
	Mix 5	Not available.
	Mix 6	Not available.
<b>Viscosity</b>	: Mix 1	Not available.
	Mix 2	Not available.
	Mix 3	Not available.
	Mix 4	Not available.
	Mix 5	Not available.
	Mix 6	Not available.
<b>Auto-ignition temperature</b>	: Mix 1	Not available.
	Mix 2	Not available.
	Mix 3	Not available.
	Mix 4	Not available.
	Mix 5	Not available.
	Mix 6	Not available.
<b>Evaporation rate</b>	: Mix 1	2.4 (butyl acetate = 1)
	Mix 2	2.4 (butyl acetate = 1)
	Mix 3	2.4 (butyl acetate = 1)
	Mix 4	2.4 (butyl acetate = 1)
	Mix 5	2.4 (butyl acetate = 1)
	Mix 6	Not available.
<b>Solubility</b>	: Mix 1	Soluble in the following materials: cold water and hot water.
	Mix 2	Soluble in the following materials: cold water and hot water.
	Mix 3	Soluble in the following materials: cold water and hot water.
	Mix 4	Soluble in the following materials: cold water and hot water.
	Mix 5	Soluble in the following materials: cold water and hot water.
	Mix 6	Insoluble in the following materials: cold water and hot water.

## 10 . Stability and reactivity

<b>Chemical stability</b>	:	Mix 1	The product is stable.
		Mix 2	The product is stable.
		Mix 3	The product is stable.
		Mix 4	The product is stable.
		Mix 5	The product is stable.
		Mix 6	The product is stable.
<b>Possibility of hazardous reactions</b>	:	Mix 1	Under normal conditions of storage and use, hazardous reactions will not occur.
		Mix 2	Under normal conditions of storage and use, hazardous reactions will not occur.
		Mix 3	Under normal conditions of storage and use, hazardous reactions will not occur.
		Mix 4	Under normal conditions of storage and use, hazardous reactions will not occur.
		Mix 5	Under normal conditions of storage and use, hazardous reactions will not occur.
		Mix 6	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	:	Mix 1	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 vapor to accumulate in low or confined areas.
		Mix 2	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 vapor to accumulate in low or confined areas.
		Mix 3	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 vapor to accumulate in low or confined areas.
		Mix 4	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 vapor to accumulate in low or confined areas.
		Mix 5	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 vapor to accumulate in low or confined areas.
		Mix 6	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 vapor to accumulate in low or confined areas.
<b>Materials to avoid</b>	:	Mix 1	oxidizing materials
		Mix 2	oxidizing materials
		Mix 3	oxidizing materials
		Mix 4	oxidizing materials
		Mix 5	oxidizing materials
		Mix 6	oxidizing materials
<b>Hazardous decomposition products</b>	:	Mix 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
		Mix 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
		Mix 3	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
		Mix 4	Under normal conditions of storage and use,

## 10 . Stability and reactivity

Mix 5	hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Mix 6	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 . Toxicological information

### Potential acute health effects

<b>Inhalation</b>	:	Mix 1	Can cause central nervous system (CNS) depression. Vapours may cause drowsiness and dizziness.
		Mix 2	Can cause central nervous system (CNS) depression. Vapours may cause drowsiness and dizziness.
		Mix 3	Can cause central nervous system (CNS) depression. Vapours may cause drowsiness and dizziness.
		Mix 4	Can cause central nervous system (CNS) depression.
		Mix 5	Can cause central nervous system (CNS) depression.
		Mix 6	Can cause central nervous system (CNS) depression. Vapours may cause drowsiness and dizziness.
<b>Ingestion</b>	:	Mix 1	Can cause central nervous system (CNS) depression. Aspiration hazard if swallowed. Can enter lungs and cause damage. Irritating to mouth, throat and stomach.
		Mix 2	Can cause central nervous system (CNS) depression. Aspiration hazard if swallowed. Can enter lungs and cause damage. Irritating to mouth, throat and stomach.
		Mix 3	Can cause central nervous system (CNS) depression. Aspiration hazard if swallowed. Can enter lungs and cause damage. Irritating to mouth, throat and stomach.
		Mix 4	Can cause central nervous system (CNS) depression. Aspiration hazard if swallowed. Can enter lungs and cause damage.
		Mix 5	Can cause central nervous system (CNS) depression. Aspiration hazard if swallowed. Can enter lungs and cause damage.
		Mix 6	Can cause central nervous system (CNS) depression. Aspiration hazard if swallowed. Can enter lungs and cause damage. Irritating to mouth, throat and stomach.
<b>Skin contact</b>	:	Mix 1	Irritating to skin.
		Mix 2	Irritating to skin.
		Mix 3	Irritating to skin.
		Mix 4	May cause skin dryness and irritation.
		Mix 5	May cause skin dryness and irritation.
		Mix 6	Irritating to skin.
<b>Eye contact</b>	:	Mix 1	May cause eye irritation.
		Mix 2	May cause eye irritation.
		Mix 3	May cause eye irritation.
		Mix 4	May cause eye irritation.
		Mix 5	May cause eye irritation.
		Mix 6	May cause eye irritation.

### Acute toxicity

## 11 . Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
<b>Mix 1</b>				
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
Ethanol	LC50 Inhalation Dusts and mists	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-
n-Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	103 g/m <sup>3</sup>	4 hours
Methanol	LC50 Inhalation Vapour	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
<b>Mix 2</b>				
Ethanol	LC50 Inhalation Dusts and mists	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
n-Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	103 g/m <sup>3</sup>	4 hours
Methanol	LC50 Inhalation Vapour	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
<b>Mix 3</b>				
Ethanol	LC50 Inhalation Dusts and mists	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
n-Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	103 g/m <sup>3</sup>	4 hours
Methanol	LC50 Inhalation Vapour	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
<b>Mix 4</b>				
Ethanol	LC50 Inhalation Dusts and mists	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
n-Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	103 g/m <sup>3</sup>	4 hours
Methanol	LC50 Inhalation Vapour	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
<b>Mix 5</b>				
Ethanol	LC50 Inhalation Dusts and mists	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-
n-Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	103 g/m <sup>3</sup>	4 hours
Methanol	LC50 Inhalation Vapour	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
<b>Mix 6</b>				
n-Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	103 g/m <sup>3</sup>	4 hours
Octane	LC50 Inhalation Dusts and mists	Rat	118 g/m <sup>3</sup>	4 hours

## 11 . Toxicological information

Nonane	LC50 Inhalation Vapour	Rat	25260 ppm	4 hours
	LC50 Inhalation Gas.	Rat	3200 ppm	4 hours
2,2,4-trimethylpentane	LC50 Inhalation Vapour	Rat	17000 mg/m <sup>3</sup>	4 hours
	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
Pentane	LD50 Oral	Rat	>2500 mg/kg	-
	LC50 Inhalation Vapour	Rat	364 g/m <sup>3</sup>	4 hours

**Conclusion/Summary** : Not available.

### Potential chronic health effects

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Mix 1</b>					
Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant Skin - Moderate irritant	Rabbit Rabbit	- -	40 milligrams 24 hours 20 milligrams	- -
<b>Mix 2</b>					
Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant Skin - Moderate irritant	Rabbit Rabbit	- -	40 milligrams 24 hours 20 milligrams	- -
<b>Mix 3</b>					
Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant Skin - Moderate irritant	Rabbit Rabbit	- -	40 milligrams 24 hours 20 milligrams	- -

## 11 . Toxicological information

<b>Mix 4</b> Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
<b>Mix 5</b> Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
<b>Mix 6</b> Nonane	Skin - Moderate irritant	Rat	-	96 hours 300 microliters	-

**Conclusion/Summary** : Not available.

### Sensitiser

**Conclusion/Summary** : Not available.

### Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity

Not available.

<b>Chronic effects</b>	: Mix 1	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	Mix 2	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	Mix 3	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	Mix 4	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	Mix 5	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	Mix 6	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

## 11 . Toxicological information

<b>Carcinogenicity</b>	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
<b>Mutagenicity</b>	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
<b>Teratogenicity</b>	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
<b>Developmental effects</b>	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
<b>Fertility effects</b>	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
<b><u>Over-exposure signs/symptoms</u></b>			
<b>Inhalation</b>	:	Mix 1	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 2	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 3	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 4	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 5	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 6	Adverse symptoms may include the following: nausea or vomiting

## 11 . Toxicological information

		headache drowsiness/fatigue dizziness/vertigo unconsciousness
<b>Ingestion</b>	: Mix 1	Adverse symptoms may include the following: nausea or vomiting
	Mix 2	Adverse symptoms may include the following: nausea or vomiting
	Mix 3	Adverse symptoms may include the following: nausea or vomiting
	Mix 4	Adverse symptoms may include the following: nausea or vomiting
	Mix 5	Adverse symptoms may include the following: nausea or vomiting
	Mix 6	Adverse symptoms may include the following: nausea or vomiting
<b>Skin</b>	: Mix 1	Adverse symptoms may include the following: irritation redness dryness cracking
	Mix 2	Adverse symptoms may include the following: irritation redness dryness cracking
	Mix 3	Adverse symptoms may include the following: irritation redness dryness cracking
	Mix 4	Adverse symptoms may include the following: irritation dryness cracking
	Mix 5	Adverse symptoms may include the following: irritation dryness cracking
	Mix 6	Adverse symptoms may include the following: irritation redness dryness cracking
<b>Eyes</b>	: Mix 1	No specific data.
	Mix 2	No specific data.
	Mix 3	No specific data.
	Mix 4	No specific data.
	Mix 5	No specific data.
	Mix 6	No specific data.
<b>Other adverse symptoms</b>	: Mix 1	Adverse symptoms may include the following: Eye contact can result in corneal damage or blindness.
	Mix 2	Adverse symptoms may include the following: Eye contact can result in corneal damage or blindness.
	Mix 3	Adverse symptoms may include the following: Eye contact can result in corneal damage or blindness.
	Mix 4	Adverse symptoms may include the following: Eye contact can result in corneal damage or blindness.
	Mix 5	Adverse symptoms may include the following: Eye contact can result in corneal damage or

## 11 . Toxicological information

<b>Target organs</b>	Mix 6	blindness. Not available.
	: Mix 1	Contains material which may cause damage to the following organs: blood, lungs, the reproductive system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
	Mix 2	Contains material which may cause damage to the following organs: blood, lungs, the reproductive system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
	Mix 3	Contains material which may cause damage to the following organs: blood, lungs, the reproductive system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
	Mix 4	Contains material which may cause damage to the following organs: blood, lungs, the reproductive system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
	Mix 5	Contains material which may cause damage to the following organs: blood, the reproductive system, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).
Mix 6	Contains material which may cause damage to the following organs: lungs, peripheral nervous system, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.	

## 12 . Ecological information

**Ecotoxicity** : This material is very toxic to aquatic life with long lasting effects.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
<b>Mix 1</b>			
Ethanol	Acute EC50 17.921 mg/l Marine water Acute EC50 2000 µg/l Fresh water Acute LC50 25500 µg/l Marine water	Algae - Ulva pertusa Daphnia - Daphnia magna Crustaceans - Artemia franciscana - Larvae	96 hours 48 hours 48 hours
	Acute LC50 42000 µg/l Fresh water Chronic NOEC 4.995 mg/l Marine water Chronic NOEC 0.375 ul/L Fresh water	Fish - Oncorhynchus mykiss Algae - Ulva pertusa Fish - Gambusia holbrooki - Larvae	4 days 96 hours 12 weeks
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Methanol	Acute EC50 16.912 mg/l Marine water Acute EC50 10000000 µg/l Fresh water Acute LC50 2500000 µg/l Marine water	Algae - Ulva pertusa Daphnia - Daphnia magna Crustaceans - Crangon crangon - Adult	96 hours 48 hours 48 hours
	Acute LC50 100 mg/l Fresh water Chronic NOEC 9.96 mg/l Marine water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) Algae - Ulva pertusa	96 hours 96 hours
<b>Mix 2</b>			
Ethanol	Acute EC50 17.921 mg/l Marine water Acute EC50 2000 µg/l Fresh water	Algae - Ulva pertusa Daphnia - Daphnia magna	96 hours 48 hours

## 12 . Ecological information

	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Methanol	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 10000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
<b>Mix 3</b>			
Ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Methanol	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 10000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
<b>Mix 4</b>			
Ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Methanol	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 10000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
<b>Mix 5</b>			
Ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki -	12 weeks

## 12 . Ecological information

n-Heptane	Acute LC50 375000 µg/l Fresh water	Larvae Fish - Oreochromis mossambicus	96 hours
Methanol	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 10000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
<b>Mix 6</b> Decane	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 89 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 18000 to 24000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
n-Heptane	Acute LC50 >500 ppm Marine water	Fish - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours

### Other ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
<b>Mix 1</b> 2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-
<b>Mix 2</b> 2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-
<b>Mix 3</b> 2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-
<b>Mix 4</b> 2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-
<b>Mix 6</b> 2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>Mix 1</b> 2,2,4-trimethylpentane	-	-	Inherent
Ethanol	-	-	Readily
<b>Mix 2</b> Ethanol	-	-	Readily
2,2,4-trimethylpentane	-	-	Inherent
<b>Mix 3</b> Ethanol	-	-	Readily
2,2,4-trimethylpentane	-	-	Inherent
<b>Mix 4</b> Ethanol	-	-	Readily
2,2,4-trimethylpentane	-	-	Inherent
<b>Mix 5</b> Ethanol	-	-	Readily
<b>Mix 6</b> 2,2,4-trimethylpentane	-	-	Inherent

### Bioaccumulative potential

## 12 . Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Mix 1</b>			
2,2,4-trimethylpentane	4.08	231	low
Ethanol	-0.35	-	low
n-Heptane	4.66	552	high
Methanol	-0.77	<10	low
<b>Mix 2</b>			
Ethanol	-0.35	-	low
2,2,4-trimethylpentane	4.08	231	low
n-Heptane	4.66	552	high
Methanol	-0.77	<10	low
<b>Mix 3</b>			
Ethanol	-0.35	-	low
2,2,4-trimethylpentane	4.08	231	low
n-Heptane	4.66	552	high
Methanol	-0.77	<10	low
<b>Mix 4</b>			
Ethanol	-0.35	-	low
2,2,4-trimethylpentane	4.08	231	low
n-Heptane	4.66	552	high
Methanol	-0.77	<10	low
<b>Mix 5</b>			
Ethanol	-0.35	-	low
n-Heptane	4.66	552	high
Methanol	-0.77	<10	low
<b>Mix 6</b>			
Decane	5.86	-	high
n-Heptane	4.66	552	high
Octane	5.18	198.7	low
Undecane	6.42	-	high
Nonane	5.65	105	low
2,2-Dimethylbutane	3.82	-	low
2,2,4-trimethylpentane	4.08	231	low
2,4-Dimethylpentane	3.9	-	low
Pentane	3.45	171	low

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

## 13 . Disposal considerations

**Methods of disposal** : 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14 . Transport information

### Regulatory information

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

**Additional information** : **Remarks**  
De minimis quantities

## 15 . Regulatory information

### Standard Uniform Schedule of Medicine and Poisons

Not regulated.

### Control of Scheduled Carcinogenic Substances

<u>Ingredient name</u>	<u>Schedule</u>
No listed substance	

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

## 16 . Other information

**Remarks** :

**Date of issue** : 10/06/2014

**Date of previous issue** : 12/11/2012.

✔ Indicates information that has changed from previously issued version.

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