


SAFETY DATA SHEET

LC Gradient and Isocratic Sample Kit, Part Number 01080-68702

Section 1. Identification

Product identifier : LC Gradient and Isocratic Sample Kit, Part Number 01080-68702
Part no. (chemical kit) : 01080-68702
Part no. : LC Gradient Sample 01080-68703
 LC Isocratic Sample 01080-68704

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

Material uses :  Reagents and Standards for Analytical Chemistry Laboratory Use
 LC Gradient Sample 2 x 0.5 ml
 LC Isocratic Sample 2 x 0.5 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

LC Gradient Sample

H225 FLAMMABLE LIQUIDS - Category 2
 H301 ACUTE TOXICITY (oral) - Category 3
 H311 ACUTE TOXICITY (dermal) - Category 3
 H331 ACUTE TOXICITY (inhalation) - Category 3
 H350 CARCINOGENICITY - Category 1B
 H360 REPRODUCTIVE TOXICITY (Fertility) - Category 1B
 H360 REPRODUCTIVE TOXICITY (Unborn child) - Category 1B
 H370 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1

LC Isocratic Sample

H225 FLAMMABLE LIQUIDS - Category 2
 H301 ACUTE TOXICITY (oral) - Category 3
 H311 ACUTE TOXICITY (dermal) - Category 3
 H331 ACUTE TOXICITY (inhalation) - Category 3
 H370 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1

GHS label elements

Hazard pictograms


:  LC Gradient Sample



LC Isocratic Sample






Signal word

:  LC Gradient Sample
 LC Isocratic Sample

DANGER
 DANGER

Section 2. Hazard(s) identification

Hazard statements	:  LC Gradient Sample	<p>H225 - Highly flammable liquid and vapour. H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled. H350 - May cause cancer. H360 - May damage fertility or the unborn child. H370 - Causes damage to organs.</p>
	LC Isocratic Sample	<p>H225 - Highly flammable liquid and vapour. H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled. H370 - Causes damage to organs.</p>
<u>Precautionary statements</u>		
Prevention	:  LC Gradient Sample	<p>P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required. P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P233 - Keep container tightly closed. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe vapour. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.</p>
	LC Isocratic Sample	<p>P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P233 - Keep container tightly closed. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe vapour. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.</p>
Response	:  LC Gradient Sample	<p>P307 + P311 - IF exposed: Call a POISON CENTER or physician. P304 + P340 + P311 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician. P301 + P310 + P330 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P302 + P352 + P312 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell.</p>
	LC Isocratic Sample	<p>P307 + P311 - IF exposed: Call a POISON CENTER or physician.</p>

Section 2. Hazard(s) identification

P304 + P340 + P311 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician.
 P301 + P310 + P330 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth.
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P302 + P352 + P312 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell.

Storage : Gradient Sample
 LC Isocratic Sample

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

Disposal : Gradient Sample
 LC Isocratic Sample

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.

Supplemental label elements

Additional warning phrases : Gradient Sample
 LC Isocratic Sample

Not applicable.
 Not applicable.

Other hazards which do not result in classification : Gradient Sample
 LC Isocratic Sample

None known.
 None known.

Section 3. Composition and ingredient information

Substance/mixture : LC Gradient Sample Mixture
 LC Isocratic Sample Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
<input checked="" type="checkbox"/> Gradient Sample		
Methanol	≥90	67-56-1
bis(2-Ethylhexyl) phthalate	≤1	117-81-7
LC Isocratic Sample		
Methanol	≥90	67-56-1

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

Section 4. First aid measures

Eye contact	: LC Gradient Sample	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. If necessary, call a poison center or physician.
	LC Isocratic Sample	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. If necessary, call a poison center or physician.
Inhalation	: LC Gradient Sample	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.
	LC Isocratic Sample	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: LC Gradient Sample	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	LC Isocratic Sample	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: LC Gradient Sample	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. Do not induce vomiting unless directed to do so by medical

Section 4. First aid measures

LC Isocratic Sample

personnel. 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.
 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. Do not induce vomiting unless directed to do so by medical personnel. 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

Eye contact	: LC Gradient Sample LC Isocratic Sample	No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	: LC Gradient Sample LC Isocratic Sample	Toxic if inhaled. Toxic if inhaled.
Skin contact	: <input checked="" type="checkbox"/> LC Gradient Sample LC Isocratic Sample	Toxic in contact with skin. Toxic in contact with skin.
Ingestion	: LC Gradient Sample LC Isocratic Sample	Toxic if swallowed. Toxic if swallowed.

Over-exposure signs/symptoms

Eye contact	: LC Gradient Sample LC Isocratic Sample	No specific data. No specific data.
Inhalation	: LC Gradient Sample	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	: LC Isocratic Sample <input checked="" type="checkbox"/> LC Gradient Sample	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: LC Isocratic Sample LC Gradient Sample	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	LC Isocratic Sample	No specific data.

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

Section 4. First aid measures

Notes to physician	: LC Gradient Sample LC Isocratic Sample	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: LC Gradient Sample LC Isocratic Sample	No specific treatment. No specific treatment.
Protection of first-aiders	: LC Gradient Sample LC Isocratic Sample	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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.


See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	: LC Gradient Sample LC Isocratic Sample	Use dry chemical, CO ₂ , water spray (fog) or foam. Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: LC Gradient Sample LC Isocratic Sample	Do not use water jet. Do not use water jet.

Specific hazards arising from the chemical

:  LC Gradient Sample	Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
LC Isocratic Sample	Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products

: LC Gradient Sample	Decomposition products may include the following materials: carbon dioxide carbon monoxide Formaldehyde.
LC Isocratic Sample	Decomposition products may include the following materials: carbon dioxide carbon monoxide Formaldehyde.

Section 5. Firefighting measures

Special protective actions for fire-fighters : LC Gradient Sample

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.

LC Isocratic Sample

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 : LC Gradient Sample

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

LC Isocratic Sample

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazchem code : LC Gradient Sample
LC Isocratic Sample

•2WE
•2WE

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : LC Gradient Sample

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.

LC Isocratic Sample

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.

For emergency responders : LC Gradient Sample

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".

LC Isocratic Sample

Environmental precautions : LC Gradient Sample

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).

LC Isocratic Sample

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 6. Accidental release measures

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up : LC Gradient Sample

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.

LC Isocratic Sample

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

Section 7. Handling and storage

Precautions for safe handling

Protective measures : LC Gradient Sample

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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.

LC Isocratic Sample

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Advice on general occupational hygiene

: LC Gradient Sample

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.

LC Isocratic Sample

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.

Conditions for safe storage, including any incompatibilities

: LC Gradient Sample

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. See Section 10 for incompatible materials before handling or use.

LC Isocratic Sample

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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
<p>LC Gradient Sample Methanol</p> <p>bis(2-Ethylhexyl) phthalate</p> <p>LC Isocratic Sample Methanol</p>	<p>Safe Work Australia (Australia, 1/2014). Absorbed through skin. STEL: 328 mg/m³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 262 mg/m³ 8 hours. TWA: 200 ppm 8 hours.</p> <p>Safe Work Australia (Australia, 1/2014). STEL: 10 mg/m³ 15 minutes. TWA: 5 mg/m³ 8 hours.</p> <p>Safe Work Australia (Australia, 1/2014). Absorbed through skin.</p>

Section 8. Exposure controls and personal protection

STEL: 328 mg/m³ 15 minutes.
 STEL: 250 ppm 15 minutes.
 TWA: 262 mg/m³ 8 hours.
 TWA: 200 ppm 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- 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	: LC Gradient Sample	Liquid.
	: LC Isocratic Sample	Liquid.
Colour	: LC Gradient Sample	Light
	: LC Isocratic Sample	Light
Odour	: LC Gradient Sample	Slight
	: LC Isocratic Sample	Slight
Odour threshold	: LC Gradient Sample	Not available.
	: LC Isocratic Sample	Not available.

Section 9. Physical and chemical properties

pH	: LC Gradient Sample	Not available.
	LC Isocratic Sample	Not available.
Melting point	: LC Gradient Sample	-97.8°C (-144°F)
	LC Isocratic Sample	-97.8°C (-144°F)
Boiling point	: LC Gradient Sample	64.5°C (148.1°F)
	LC Isocratic Sample	64.5°C (148.1°F)
Flash point	: LC Gradient Sample	Closed cup: 12°C (53.6°F) [Setaflash.]
	LC Isocratic Sample	Closed cup: -18 to 23°C (-0.4 to 73.4°F)
Evaporation rate	: LC Gradient Sample	Not available.
	LC Isocratic Sample	Not available.
Flammability (solid, gas)	: LC Gradient Sample	Not applicable.
	LC Isocratic Sample	Not applicable.
Lower and upper explosive (flammable) limits	: LC Gradient Sample	Lower: 6%
		Upper: >13%
	LC Isocratic Sample	Lower: 6%
		Upper: >13%
Vapour pressure	: LC Gradient Sample	Not available.
	LC Isocratic Sample	Not available.
Vapour density	: LC Gradient Sample	Not available.
	LC Isocratic Sample	Not available.
Relative density	: LC Gradient Sample	Not available.
	LC Isocratic Sample	Not available.
Solubility	: LC Gradient Sample	Easily soluble in the following materials: cold water and hot water.
	LC Isocratic Sample	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: LC Gradient Sample	Not available.
	LC Isocratic Sample	Not available.
Auto-ignition temperature	: LC Gradient Sample	464°C (867.2°F)
	LC Isocratic Sample	Not available.
Decomposition temperature	: LC Gradient Sample	Not available.
	LC Isocratic Sample	Not available.
Viscosity	: LC Gradient Sample	Not available.
	LC Isocratic Sample	Not available.

Section 10. Stability and reactivity

Reactivity	: LC Gradient Sample	No specific test data related to reactivity available for this product or its ingredients.
	LC Isocratic Sample	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: LC Gradient Sample	The product is stable.
	LC Isocratic Sample	The product is stable.
Possibility of hazardous reactions	: LC Gradient Sample	Under normal conditions of storage and use, hazardous reactions will not occur.
	LC Isocratic Sample	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: LC Gradient Sample	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.
	LC Isocratic Sample	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.

Section 10. Stability and reactivity

Incompatible materials	: LC Gradient Sample	Reactive or incompatible with the following materials: oxidizing materials
	LC Isocratic Sample	Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: LC Gradient Sample	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	LC Isocratic Sample	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	
LC Gradient Sample 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	-	
	bis(2-Ethylhexyl) phthalate	LD50 Dermal	Rabbit	25 g/kg	-
		LD50 Oral	Rat	30 g/kg	-
LC Isocratic Sample 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	-	

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
LC Gradient Sample Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
bis(2-Ethylhexyl) phthalate	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
LC Isocratic Sample Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

Sensitisation

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Section 11. Toxicological information

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
LC Gradient Sample Methanol	Category 1	Not determined	Not determined
LC Isocratic Sample Methanol	Category 1	Not determined	Not determined

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : LC Gradient Sample
LC Isocratic Sample

Routes of entry anticipated: Oral, Dermal, Inhalation.
Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : LC Gradient Sample
LC Isocratic Sample

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Inhalation : LC Gradient Sample
LC Isocratic Sample

Toxic if inhaled.
Toxic if inhaled.

Skin contact : LC Gradient Sample
LC Isocratic Sample

Toxic in contact with skin.
Toxic in contact with skin.

Ingestion : LC Gradient Sample
LC Isocratic Sample

Toxic if swallowed.
Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : LC Gradient Sample
LC Isocratic Sample

No specific data.
No specific data.

Inhalation : LC Gradient Sample

Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
No specific data.

Skin contact : LC Gradient Sample
LC Isocratic Sample

Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
No specific data.

Ingestion : LC Gradient Sample
LC Isocratic Sample

Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
No specific data.

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

Section 11. Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: <input checked="" type="checkbox"/> Gradient Sample LC Isocratic Sample	No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: <input checked="" type="checkbox"/> Gradient Sample LC Isocratic Sample	May cause cancer. Risk of cancer depends on duration and level of exposure. No known significant effects or critical hazards.
Mutagenicity	: LC Gradient Sample LC Isocratic Sample	No known significant effects or critical hazards. No known significant effects or critical hazards.
Teratogenicity	: LC Gradient Sample LC Isocratic Sample	May damage the unborn child. No known significant effects or critical hazards.
Developmental effects	: LC Gradient Sample LC Isocratic Sample	No known significant effects or critical hazards. No known significant effects or critical hazards.
Fertility effects	: LC Gradient Sample LC Isocratic Sample	May damage fertility. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
LC Gradient Sample	
Oral	100.7 mg/kg
Dermal	302 mg/kg
Inhalation (vapours)	3.02 mg/l
LC Isocratic Sample	
Oral	100.3 mg/kg
Dermal	301 mg/kg
Inhalation (vapours)	3.01 mg/l

Other information : LC Gradient Sample

Adverse symptoms may include the following: redness, blurred or double vision. Eye contact can result in corneal damage or blindness. Repeated or prolonged exposure to the substance can produce liver damage. Repeated exposure may cause skin dryness or cracking.

LC Isocratic Sample

Adverse symptoms may include the following: redness, blurred or double vision, headache. Eye contact can result in corneal damage or blindness. Repeated exposure may cause skin dryness or cracking.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> Gradient Sample Methanol	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 290 mg/l Fresh water	Fish - Danio rerio - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
bis(2-Ethylhexyl) phthalate	Acute EC50 31000000 µg/l Marine water	Algae - Karenia brevis	96 hours

Section 12. Ecological information

LC Isocratic Sample Methanol	Acute EC50 133 µg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 1106.2 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 76 µg/l Marine water	Algae - Hormosira banksii - Gamete	72 hours
	Chronic NOEC 109 µg/l Fresh water	Crustaceans - Eurytemora affinis - Nauplii	21 days
	Chronic NOEC 77 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 12 µg/l Fresh water	Fish - Pimephales promelas - Adult	28 days
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
Acute LC50 3289 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
Acute LC50 290 mg/l Fresh water	Fish - Danio rerio - Egg	96 hours	
Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours	

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
LC Gradient Sample bis(2-Ethylhexyl) phthalate	OECD 301B Ready Biodegradability - CO2 Evolution Test	82 % - Readily - 29 days	-	20.3 mg/l Activated sludge
	OECD 301B Ready Biodegradability - CO2 Evolution Test	82 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
LC Gradient Sample bis(2-Ethylhexyl) phthalate	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
LC Gradient Sample Methanol bis(2-Ethylhexyl) phthalate	-0.77	<10	low
	7.6	1380	high
LC Isocratic Sample Methanol	-0.77	<10	low

Mobility in soil

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

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

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

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Model Work Health and Safety Regulations - Scheduled Substances

<u>Ingredient name</u>	<u>Schedule</u>
LC Gradient Sample methanol	Restricted hazardous chemical [For spray painting if the substance contains more than 1% by volume]
LC Isocratic Sample methanol	Restricted hazardous chemical [For spray painting if the substance contains more than 1% by volume]

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

Section 15. Regulatory information

Not listed.

Inventory list

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : All components are listed or exempted.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: Not determined.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: All components are listed or exempted.
Viet Nam	: Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 09/05/2018

Date of previous issue : 28/04/2016

Version : 6

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
LC Gradient Sample Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Carc. 1B, H350 Repr. 1B, H360 (Fertility) Repr. 1B, H360 (Unborn child) STOT SE 1, H370	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method
LC Isocratic Sample Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370	On basis of test data Calculation method Calculation method Calculation method Calculation method

Section 16. Any other relevant information

References : Not available.

✔ Indicates information that has changed from previously issued version.

Notice to reader

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