

SAFETY DATA SHEET

PAH Analyzer Calibration Sample Kit, Part Number G3440-85009

Section 1. Identification

Product identifier : PAH Analyzer Calibration Sample Kit, Part Number G3440-85009
Part no. (chemical kit) : G3440-85009
Part no. : PAH Analyzer Calibration Sample # 1 G3440-85009-1
 PAH Analyzer Calibration Sample # 2 G3440-85009-2

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

Material uses : Reagents and Standards for Analytical Chemistry Laboratory Use
 PAH Analyzer Calibration Sample # 1 2 x1 ml
 PAH Analyzer Calibration Sample # 2 2 x1 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

PAH Analyzer Calibration

Sample # 1

H225 FLAMMABLE LIQUIDS - Category 2
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
 H336 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
 H401 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 2
 H412 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

PAH Analyzer Calibration

Sample # 2

H225 FLAMMABLE LIQUIDS - Category 2
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
 H336 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3

GHS label elements

Hazard pictograms

: PAH Analyzer Calibration Sample # 1



PAH Analyzer Calibration Sample # 2



Signal word

: PAH Analyzer Calibration Sample # 1 DANGER
 PAH Analyzer Calibration Sample # 2 DANGER

Section 2. Hazard(s) identification

Hazard statements	: PAH Analyzer Calibration Sample # 1	H225 - Highly flammable liquid and vapour. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. H401 - Toxic to aquatic life. H412 - Harmful to aquatic life with long lasting effects. H225 - Highly flammable liquid and vapour.
	PAH Analyzer Calibration Sample # 2	H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.
 <u>Precautionary statements</u>		
Prevention	: PAH Analyzer Calibration Sample # 1	P280 - Wear protective gloves. Wear eye or face protection. 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. P273 - Avoid release to the environment. P261 - Avoid breathing vapour. P264 - Wash hands thoroughly after handling.
	PAH Analyzer Calibration Sample # 2	P280 - Wear protective gloves. Wear eye or face protection. 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. P261 - Avoid breathing vapour. P264 - Wash hands thoroughly after handling.
Response	: PAH Analyzer Calibration Sample # 1	P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
	PAH Analyzer Calibration Sample # 2	P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.

Section 2. Hazard(s) identification

Storage	: PAH Analyzer Calibration Sample # 1	P405 - Store locked up.
	PAH Analyzer Calibration Sample # 2	P403 - Store in a well-ventilated place. P235 - Keep cool. P405 - Store locked up.
Disposal	: PAH Analyzer Calibration Sample # 1	P403 - Store in a well-ventilated place. P235 - Keep cool.
	PAH Analyzer Calibration Sample # 2	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	: PAH Analyzer Calibration Sample # 1	Not applicable.
	PAH Analyzer Calibration Sample # 2	Not applicable.
Other hazards which do not result in classification	: PAH Analyzer Calibration Sample # 1	None known.
	PAH Analyzer Calibration Sample # 2	None known.

Section 3. Composition and ingredient information

Substance/mixture	: PAH Analyzer Calibration Sample # 1	Mixture
	PAH Analyzer Calibration Sample # 2	Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
PAH Analyzer Calibration Sample # 1		
Acetone	≥90	67-64-1
Fluoranthene	≤0.0022	206-44-0
Pyrene	≤0.002	129-00-0
PAH Analyzer Calibration Sample # 2		
Acetone	≥90	67-64-1

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

Eye contact	: PAH Analyzer Calibration Sample # 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.
	PAH Analyzer Calibration Sample # 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.

Section 4. First aid measures

Inhalation	: PAH Analyzer Calibration Sample # 1	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.
	PAH Analyzer Calibration Sample # 2	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	: PAH Analyzer Calibration Sample # 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	PAH Analyzer Calibration Sample # 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: PAH Analyzer Calibration Sample # 1	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. Get medical attention. If necessary, call a poison center or physician. 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.
	PAH Analyzer Calibration Sample # 2	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. Get medical attention. If necessary, call a poison center or physician. Never

Section 4. First aid measures

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	: PAH Analyzer Calibration Sample # 1	Causes serious eye irritation.
	: PAH Analyzer Calibration Sample # 2	Causes serious eye irritation.
Inhalation	: PAH Analyzer Calibration Sample # 1	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
	: PAH Analyzer Calibration Sample # 2	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: PAH Analyzer Calibration Sample # 1	No known significant effects or critical hazards.
	: PAH Analyzer Calibration Sample # 2	No known significant effects or critical hazards.
Ingestion	: PAH Analyzer Calibration Sample # 1	Can cause central nervous system (CNS) depression.
	: PAH Analyzer Calibration Sample # 2	Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact	: PAH Analyzer Calibration Sample # 1	Adverse symptoms may include the following: pain or irritation watering redness
	: PAH Analyzer Calibration Sample # 2	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: PAH Analyzer Calibration Sample # 1	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	: PAH Analyzer Calibration Sample # 2	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: PAH Analyzer Calibration Sample # 1	No specific data.
	: PAH Analyzer Calibration Sample # 2	No specific data.
Ingestion	: PAH Analyzer Calibration Sample # 1	No specific data.
	: PAH Analyzer Calibration Sample # 2	No specific data.

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

Section 4. First aid measures

Notes to physician	: PAH Analyzer Calibration Sample # 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	PAH Analyzer Calibration Sample # 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: PAH Analyzer Calibration Sample # 1	No specific treatment.
	PAH Analyzer Calibration Sample # 2	No specific treatment.
Protection of first-aiders	: PAH Analyzer Calibration Sample # 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.
	PAH Analyzer Calibration Sample # 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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	: PAH Analyzer Calibration Sample # 1	Use dry chemical, CO ₂ , water spray (fog) or foam.
	PAH Analyzer Calibration Sample # 2	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: PAH Analyzer Calibration Sample # 1	Do not use water jet.
	PAH Analyzer Calibration Sample # 2	Do not use water jet.
Specific hazards arising from the chemical	: PAH Analyzer Calibration Sample # 1	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. 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. This material is toxic to aquatic life. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	PAH Analyzer Calibration Sample # 2	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. 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.

Section 5. Firefighting measures

Hazardous thermal decomposition products	: PAH Analyzer Calibration Sample # 1	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	PAH Analyzer Calibration Sample # 2	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: PAH Analyzer Calibration Sample # 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.
	PAH Analyzer Calibration Sample # 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.
Special protective equipment for fire-fighters	: PAH Analyzer Calibration Sample # 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	PAH Analyzer Calibration Sample # 2	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	: PAH Analyzer Calibration Sample # 1	•2YE
	PAH Analyzer Calibration Sample # 2	•2YE

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: PAH Analyzer Calibration Sample # 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	PAH Analyzer Calibration Sample # 2	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

For emergency responders	: PAH Analyzer Calibration Sample # 1	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".
	PAH Analyzer Calibration Sample # 2	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".
Environmental precautions	: PAH Analyzer Calibration Sample # 1	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.
	PAH Analyzer Calibration Sample # 2	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).
<u>Methods and material for containment and cleaning up</u>		
Methods for cleaning up	: PAH Analyzer Calibration Sample # 1	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.
	PAH Analyzer Calibration Sample # 2	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	: PAH Analyzer Calibration Sample # 1	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
	PAH Analyzer Calibration Sample # 2	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Section 7. Handling and storage

Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: PAH Analyzer Calibration Sample # 1

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.

PAH Analyzer Calibration Sample # 2

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

: PAH Analyzer Calibration Sample # 1

Store between the following temperatures: 18 to 25°C (64.4 to 77°F). 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.

PAH Analyzer Calibration Sample # 2

Store between the following temperatures: 18 to 25°C (64.4 to 77°F). 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
PAH Analyzer Calibration Sample # 1 Acetone Pyrene	Safe Work Australia (Australia, 1/2014). STEL: 2375 mg/m ³ 15 minutes. STEL: 1000 ppm 15 minutes. TWA: 1185 mg/m ³ 8 hours. TWA: 500 ppm 8 hours. DFG MAC-values list (Germany, 7/2017). Absorbed through skin.
PAH Analyzer Calibration Sample # 2 Acetone	Safe Work Australia (Australia, 1/2014). STEL: 2375 mg/m ³ 15 minutes. STEL: 1000 ppm 15 minutes. TWA: 1185 mg/m ³ 8 hours. TWA: 500 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: chemical splash goggles.

[Skin protection](#)

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls and personal protection

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	: PAH Analyzer Calibration Sample # 1	Liquid.
	: PAH Analyzer Calibration Sample # 2	Liquid.
Colour	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
Odour	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
Odour threshold	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
pH	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
Melting point	: PAH Analyzer Calibration Sample # 1	-94.2°C (-137.6°F)
	: PAH Analyzer Calibration Sample # 2	-94.2°C (-137.6°F)
Boiling point	: PAH Analyzer Calibration Sample # 1	56.1°C (133°F)
	: PAH Analyzer Calibration Sample # 2	56.1°C (133°F)
Flash point	: PAH Analyzer Calibration Sample # 1	Closed cup: -18.15°C (-0.67°F)
	: PAH Analyzer Calibration Sample # 2	Closed cup: -18.15°C (-0.67°F)
Evaporation rate	: PAH Analyzer Calibration Sample # 1	6.06 (butyl acetate = 1)
	: PAH Analyzer Calibration Sample # 2	6.06 (butyl acetate = 1)
Flammability (solid, gas)	: PAH Analyzer Calibration Sample # 1	Not applicable.
	: PAH Analyzer Calibration Sample # 2	Not applicable.
Lower and upper explosive (flammable) limits	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
Vapour pressure	: PAH Analyzer Calibration Sample # 1	24.7 kPa (185 mm Hg) [room temperature]
	: PAH Analyzer Calibration Sample # 2	24.7 kPa (185 mm Hg) [room temperature]
Vapour density	: PAH Analyzer Calibration Sample # 1	2 [Air = 1]
	: PAH Analyzer Calibration Sample # 2	2 [Air = 1]

Section 9. Physical and chemical properties

Relative density	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
Solubility	: PAH Analyzer Calibration Sample # 1	Easily soluble in the following materials: cold water and hot water.
	: PAH Analyzer Calibration Sample # 2	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
Auto-ignition temperature	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
Decomposition temperature	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.
Viscosity	: PAH Analyzer Calibration Sample # 1	Not available.
	: PAH Analyzer Calibration Sample # 2	Not available.

Section 10. Stability and reactivity

Reactivity	: PAH Analyzer Calibration Sample # 1	No specific test data related to reactivity available for this product or its ingredients.
	: PAH Analyzer Calibration Sample # 2	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: PAH Analyzer Calibration Sample # 1	The product is stable.
	: PAH Analyzer Calibration Sample # 2	The product is stable.
Possibility of hazardous reactions	: PAH Analyzer Calibration Sample # 1	Under normal conditions of storage and use, hazardous reactions will not occur.
	: PAH Analyzer Calibration Sample # 2	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: PAH Analyzer Calibration Sample # 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 vapour to accumulate in low or confined areas.
	: PAH Analyzer Calibration Sample # 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 vapour to accumulate in low or confined areas.
Incompatible materials	: PAH Analyzer Calibration Sample # 1	Reactive or incompatible with the following materials: oxidizing materials
	: PAH Analyzer Calibration Sample # 2	Reactive or incompatible with the following materials: oxidizing materials

Section 10. Stability and reactivity

Hazardous decomposition products	: PAH Analyzer Calibration Sample # 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	PAH Analyzer Calibration Sample # 2	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
PAH Analyzer Calibration Sample # 1				
Acetone	LC50 Inhalation Vapour	Rat	76 mg/l	4 hours
	LD50 Oral	Rat	5800 mg/kg	-
Fluoranthene	LD50 Dermal	Rabbit	3180 mg/kg	-
	LD50 Oral	Rat	2 g/kg	-
PAH Analyzer Calibration Sample # 2				
Acetone	LC50 Inhalation Vapour	Rat	76 mg/l	4 hours
	LD50 Oral	Rat	5800 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
PAH Analyzer Calibration Sample # 1					
Acetone	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-
Pyrene	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
PAH Analyzer Calibration Sample # 2					
Acetone	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-

Sensitisation

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
PAH Analyzer Calibration Sample # 1 Acetone Pyrene	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation
PAH Analyzer Calibration Sample # 2 Acetone	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : PAH Analyzer Calibration Sample # 1 Routes of entry anticipated: Oral, Dermal, Inhalation.

PAH Analyzer Calibration Sample # 2 Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : PAH Analyzer Calibration Sample # 1 Causes serious eye irritation.

PAH Analyzer Calibration Sample # 2 Causes serious eye irritation.

Inhalation : PAH Analyzer Calibration Sample # 1 Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

PAH Analyzer Calibration Sample # 2 Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : PAH Analyzer Calibration Sample # 1 No known significant effects or critical hazards.

PAH Analyzer Calibration Sample # 2 No known significant effects or critical hazards.

Ingestion : PAH Analyzer Calibration Sample # 1 Can cause central nervous system (CNS) depression.

PAH Analyzer Calibration Sample # 2 Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : PAH Analyzer Calibration Sample # 1 Adverse symptoms may include the following:

pain or irritation
watering
redness

PAH Analyzer Calibration Sample # 2 Adverse symptoms may include the following:

pain or irritation
watering
redness

Inhalation : PAH Analyzer Calibration Sample # 1 Adverse symptoms may include the following:

nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

PAH Analyzer Calibration Sample # 2 Adverse symptoms may include the following:

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		nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: PAH Analyzer Calibration Sample # 1	No specific data.
	: PAH Analyzer Calibration Sample # 2	No specific data.
Ingestion	: PAH Analyzer Calibration Sample # 1	No specific data.
	: PAH Analyzer Calibration Sample # 2	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

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: PAH Analyzer Calibration Sample # 1	No known significant effects or critical hazards.
	: PAH Analyzer Calibration Sample # 2	No known significant effects or critical hazards.
Carcinogenicity	: PAH Analyzer Calibration Sample # 1	No known significant effects or critical hazards.
	: PAH Analyzer Calibration Sample # 2	No known significant effects or critical hazards.
Mutagenicity	: PAH Analyzer Calibration Sample # 1	No known significant effects or critical hazards.
	: PAH Analyzer Calibration Sample # 2	No known significant effects or critical hazards.
Teratogenicity	: PAH Analyzer Calibration Sample # 1	No known significant effects or critical hazards.
	: PAH Analyzer Calibration Sample # 2	No known significant effects or critical hazards.
Developmental effects	: PAH Analyzer Calibration Sample # 1	No known significant effects or critical hazards.
	: PAH Analyzer Calibration Sample # 2	No known significant effects or critical hazards.
Fertility effects	: PAH Analyzer Calibration Sample # 1	No known significant effects or critical hazards.
	: PAH Analyzer Calibration Sample # 2	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

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Other information	: PAH Analyzer Calibration Sample # 1	Adverse symptoms may include the following: altered blood counts. Repeated exposure may cause skin dryness or cracking.
	PAH Analyzer Calibration Sample # 2	Adverse symptoms may include the following: altered blood counts. Repeated exposure may cause skin dryness or cracking.

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Toxicity

Product/ingredient name	Result	Species	Exposure	
PAH Analyzer Calibration Sample # 1 Acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours	
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours	
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours	
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours	
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours	
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days	
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days	
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Fundulus heteroclitus	4 weeks	
	Fluoranthene	Acute EC50 0.103 ug/ml Marine water	Algae - Phaeodactylum tricornutum	72 hours
		Acute EC50 45 ppm Marine water	Algae - Skeletonema costatum	96 hours
		Acute LC50 5.32 µg/l Marine water	Crustaceans - Americamysis bahia	48 hours
		Acute LC50 1.6 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Pyrene	Acute LC50 0.1 µg/l Marine water	Fish - Pleuronectes americanus	96 hours
		Chronic NOEC 41.7 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
Chronic NOEC 95 µg/l Marine water		Aquatic plants - Plantae	72 hours	
Chronic NOEC 1.4 µg/l Fresh water		Daphnia - Daphnia magna	21 days	
Chronic NOEC 1.4 µg/l Fresh water		Fish - Pimephales promelas	32 days	
Acute EC50 20 µg/l Fresh water		Daphnia - Daphnia magna - Neonate	48 hours	
PAH Analyzer Calibration Sample # 2 Acetone	Acute LC50 0.89 µg/l Marine water	Crustaceans - Americamysis bahia	48 hours	
	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours	
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours	
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours	
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours	
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours	
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days	
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days	
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Fundulus heteroclitus	4 weeks	

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
PAH Analyzer Calibration Sample # 1 Acetone	OECD 301B Ready Biodegradability - CO2 Evolution Test	95 % - Readily - 28 days	-	-

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PAH Analyzer Calibration Sample # 2 Acetone	OECD 301B Ready Biodegradability - CO2 Evolution Test	95 % - Readily - 28 days	-	-
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Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
PAH Analyzer Calibration Sample # 1 Acetone Fluoranthene	- -	- -	Readily Not readily
PAH Analyzer Calibration Sample # 2 Acetone	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
PAH Analyzer Calibration Sample # 1 Acetone Fluoranthene Pyrene	-0.23 5.16 5.43	3 3630.78 1513.56	low high high
PAH Analyzer Calibration Sample # 2 Acetone	-0.23	3	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

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Europe	: Not determined.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: <input checked="" type="checkbox"/> All components are listed or exempted.
Thailand	: <input checked="" type="checkbox"/> Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: <input checked="" type="checkbox"/> Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 23/07/2018

Date of previous issue : 31/08/2016

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
PAH Analyzer Calibration Sample # 1 Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336 Aquatic Acute 2, H401 Aquatic Chronic 3, H412	On basis of test data Calculation method Calculation method Calculation method Calculation method
PAH Analyzer Calibration Sample # 2 Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336	On basis of test data Calculation method Calculation method

References : Not available.

📌 Indicates information that has changed from previously issued version.

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