SAFETY DATA SHEET

ACID ALERT TEST KIT, POE ACID ALERT TEST KIT, ACID ALERT UNIVERSAL TEST KIT

Infosafe No.: LQ5Q8 ISSUED Date: 28/06/2016 Issued by: ARP

1. IDENTIFICATION

GHS Product Identifier ACID ALERT TEST KIT, POE ACID ALERT TEST KIT, ACID ALERT UNIVERSAL TEST KIT

Company Name ARP (ABN 93 142 654 564)

Address 1-3 Annick Crescent Laverton North Vic 3026 Australia

Telephone/Fax Number Tel: +613 8348 9200 Fax: +613 8353 2083

Emergency phone number 1800 638 556 (24hrs)

Emergency Contact Name www.actrol.com.au

Recommended use of the chemical and restrictions on use Tester for acid in refrigerants.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition) Acute Toxicity - Dermal: Category 3 Acute Toxicity - Inhalation: Category 3 Acute Toxicity - Oral: Category 3 Aspiration Hazard: Category 1 Eye Damage/Irritation: Category 2A Flammable Liquids: Category 2 Skin Corrosion/Irritation: Category 2 STOT Repeated Exposure: Category 1 STOT Single Exposure: Category 3 (narcotic) Toxic to Reproduction: Category 2

Signal Word (s) DANGER

Hazard Statement (s)

H225 Highly flammable liquid and vapour.H301 Toxic if swallowed.H304 May be fatal if swallowed and enters airways.H311 Toxic in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.

H370 Causes damage to organs.

H373 May cause damage to organs through prolonged or repeated exposure.

Pictogram (s)

Flame, Skull and crossbones, Health hazard



Precautionary statement – Prevention

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash contaminated skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P311 Call a POISON CENTER or doctor/physician.

P330 Rinse mouth.

P331 Do NOT induce vomiting.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P361 Remove/Take off immediately all contaminated clothing.

P362 Take off contaminated clothing and wash before reuse.

P370+P378 In case of fire: Use carbon dioxide, dry chemical or foam. Alcohol resistant foam is preferred for extinction.

Precautionary statement – Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

Precautionary statement – Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name CAS Proportion Toluene 108-88-3 30-60 % Methanol 67-56-1 10-30 % Isopropanol 67-63-0 10-30 % Ingredients determined not to be hazardous Balance Not required

4. FIRST-AID MEASURES

Inhalation

Avoid becoming a casualty - to protect rescuer, use air-viva, oxy-viva or one-way mask. Remove affected person from contaminated area - Apply artificial respiration if not breathing. Do not give direct mouth to mouth resuscitation. Resuscitate in a well ventilated area. Seek IMMEDIATE medical attention.

Ingestion

Do not induce vomiting. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Immediately wash out mouth with water (never give anything by mouth if affected person is semi-conscious or unconscious). Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash gently and thoroughly with water and non-abrasive soap for 15 minutes. Ensure contaminated clothing is washed before re-use or discard. Seek immediate medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, dry chemical or foam. Alcohol resistant foam is preferred. If not available normal foam can be used.

Unsuitable Extinguishing Media

Water jet

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Specific Hazards Arising From The Chemical

Highly flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Hazchem Code

•3WE

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Remove all sources of ignition. Evacuate all unprotected personnel. Do not allow contact with skin and eyes. Do not breathe mist/ vapour. It is essential to wear self-contained breathing apparatus (S.C.B.A) and full personal protective equipment and clothing to prevent exposure. Avoid exposure to spillage by collecting the material using explosion proof vacuum and transfer into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Toxic and flammable liquid. Exposure without protection must be prevented. Avoid exposure, contact with skin and eyes. Wear overalls, impervious gloves and safety glasses. DO NOT store or use in confined spaces. Avoid breathing in spray or mists or vapours. Use in designated areas with adequate ventilation. Use approved flammable liquid storage containers in the work area. Prevent release of vapours and mists into workplace air. Keep containers tightly closed. Take precautionary measures against static discharges. Keep material away from sparks, flames and other ignition sources. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

Avoid exposure. Do not handle until all safety precautions have been read and understood. It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks.

Conditions for safe storage, including any incompatibilities

This material is Toxic and must be stored, handled and maintained according to the appropriate regulations. Limit quantity in storage. Restrict access to storage area. Post appropriate warning signs. Consider leak detection and alarm systems, as required. Structural materials and lighting and ventilation systems in storage area should be corrosion resistant. Store in a cool, dry, well-ventilated area away from sources of ignition, oxidizing agents, strong mineral acids, bases metal and/or water.

Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids and AS/NZS 4452 The storage and handling of toxic substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Toluene TWA: 50 ppm, 191 mg/m³ STEL: 150 ppm, 574 mg/m³ NOTICES: Sk

Methanol TWA: 200 ppm, 262 mg/m³ STEL: 250 ppm, 328 mg/m³ NOTICES: Sk

Isopropyl alcohol

TWA: 400 ppm, 983 mg/m³ STEL: 500 ppm, 1230 mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eighthour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sk' Notice: Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Biological Limit Values

Name: Toluene Determinant: Toluene in Blood Value: 0.02mg/l Sampling time: Prior to last shift of workweek Determinant: Toluene in urine Value: 0.03mg/l Sampling time: End of shift Determinant: o-cresol in urine with hydrolysis Value: 0.3mg/g creatinine Sampling time: End of shift

Name: Isopropanol Determinant: Acetone in urine Value: 40mg/l Sampling time: End of shift at end of workweek

Name: Methanol Determinant: Methanol in urine Value: 15 mg/L Sampling time: End of shift Notation: B, Ns Source: American Conference of Industrial Hygienists (ACGIH)

Appropriate Engineering Controls

This substance is toxic and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. Provide sufficient ventilation to keep airborne levels below the exposure limits or as low as possible. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Alternatively, a process enclosure system such as a fume cupboard should be employed.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1:2009 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/ face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as nitrile rubber. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid

Appearance Clear colourless solution with characteristic odour

Colour Colourless

Odour Characteristic odour

Decomposition Temperature Not available

Melting Point Not available

Boiling Point Not available

Solubility in Water Soluble in water

Specific Gravity Not available (20 °C)

pH Not available

Vapour Pressure Not available (20 °C)

Vapour Density (Air=1) Not available

Evaporation Rate Not available (n-Butyl acetate=1)

Odour Threshold Not available

Viscosity Not available

Partition Coefficient: n-octanol/water Not available

Flash Point <13 °C

Flammability Highly flammable liquid.

Auto-Ignition Temperature Not available

Flammable Limits - Lower Not available

Flammable Limits - Upper Not available

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Reacts with incompatible materials.

Conditions to Avoid Heat, open flames and other sources of ignition

Incompatible materials Oxidising agents.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes, smoke and gases including: oxides of nitrogen, carbon dioxide and carbon monoxide.

Possibility of hazardous reactions Not available

Hazardous Polymerization Not available

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Toxicity data available is given below

Acute Toxicity - Oral Toluene Oral LD50 (rat): 636 mg/kg

Acute Toxicity - Dermal

Toluene Dermal LD50 (rabbit): 14,100 uL/kg

Ingestion

Toxic if swallowed. May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

Toxic if inhaled. Inhalation may cause headaches, impairment of judgement and in extreme cases can lead to unconsciousness or death. May cause irritation to the mucous membrane and upper airways, especially where vapours or mists are generated. Symptoms include sneezing, coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea and vomiting.

Skin

Toxic in contact with skin. Causes skin irritation. Product can be absorbed through skin with resultant toxic systemic effects. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

SKIN: (Draize): Mild to moderate irritant

Eye

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

EYES: (Draize): Mild to moderate irritant

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Toluene is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Isopropyl alcohol is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Suspected of damaging fertility or the unborn child. Classified as a suspected human reproductive or developmental toxicant.

STOT-single exposure

Causes damage to organs. May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard

May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No ecological data available for this material.

Persistence and degradability Not available

Mobility Not available

Bioaccumulative Potential Not available

Other Adverse Effects Not available

Environmental Protection Do not discharge the product into waterways, drains or sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain flammable residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Advise flammable nature.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport (ADG Code):

This product is classified as Dangerous Goods Class 3 Flammable Liquids and subsidiary Division 6.1 Toxic Substances. Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1: Explosives

- Division 2.1: Flammable Gases.

(Division 2.1 and Class 3 are incompatible in transport if both are in tanks or other receptacles with a capacity individually exceeding 500 L)

- Division 2.3: Toxic Gases
- Class 3, If Class 3 is Nitromethane.
- Division 4.2: Spontaneously combustible substances
- Division 5.1: Oxidising substances
- Division 5.2: Organic peroxides
- Class 7: Radioactive materials unless specifically exempted

- Class 8: Corrosive substances (if the dangerous goods are cyanides and the Class 8 dangerous goods are acids) And are incompatible with food and food packaging in any quantity.

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. Class/Division: 3 (6.1) UN No: 1992 Proper Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S. (CONTAINS: TOLUENE, METHANOL & ISOPROPYL ALCOHOL)(MARINE POLLUTANT) Packing Group: II EMS : F-E, S-D Special Provisions: 274

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air. Class/Division: 3 (6.1) UN No: 1992 Proper Shipping Name: flammable liquid, toxic, n.o.s. (Contains: toluene, methanol & isopropyl alcohol) Packing Group: II Packaging Instructions (passenger & cargo): 352 Packaging Instructions (cargo only): 364 Hazard Label: Flammable Liquid, Toxic

U.N. Number

Special Provisions: A3

1992

UN proper shipping name

FLAMMABLE LIQUID, TOXIC, N.O.S.(Contains: toluene, methanol & isopropyl alcohol)

Transport hazard class(es) 3

Sub.Risk 6.1

Packing Group

Hazchem Code •3WE

Special Precautions for User Not available

IERG Number 16

IMDG Marine pollutant No

Transport in Bulk Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

S6

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS created: June 2016

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

END OF SDS

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