

SDS# ATK-1, ATK-4
Issue 1, Version 2 Revised 24 October 2016
Safety Data Sheet according to Regulation (EC) No 1272/2008 (CLP)

Acid Test Kit

SECTION 1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1 Product identifier

Acid Test Kit

1.2 Relevant identified uses of the mixture and uses advised against

Detects acid in refrigeration oil.

Uses advised against: Any applications other than those specified above.

1.3 Details of the supplier of the safety data sheet

US

DiversiTech Corporation
6650 Sugarloaf Parkway
Duluth, GA, 30097

UK

DiversiTech UK Limited
Glaisdale Drive East
Nottingham
NG8 4LY
United Kingdom
Tel: +44 1159005858
Fax: +44 1159294468
Email: www.diversitech.com

1.4 Telephone number

Emergency tel: 1+678.542.3600

Emergency tel: 1 800.255.3924 (USA), 001+ 1813 248 0585 (UK), 24 Hours, 7 Emergency Days, Chem-Tel, Inc.

SECTION 2. HAZARDOUS IDENTIFICATION

2.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

GHS Classification:

Flammable Liquids Category 2
Acute Toxicity Oral Category 4
Acute Toxicity Inhalation Category 4
Acute Toxicity Dermal Category 4
Skin Irritation Category 2
Eye Irritation Category 2A
Reproductive Toxicity Category 2
Aspiration Category 1
Specific Target Organ Toxicity - Single Exposure Category 2
Specific Target Organ Toxicity - Repeat Exposure Category 2

2.2 Label Elements



Signal Word: Danger!

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SECTION 2. HAZARDOUS IDENTIFICATION (cont.)

2.2 Label Elements (cont.)

Hazard Statement(s)

H225	Highly flammable liquid and vapor
H302	Harmful in contact with skin
H332	Harmful if inhaled
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H304	May be fatal if swallowed and enters airways
H361	Suspected of damaging fertility or the unborn child.
H371	May cause damage to organs, eyes, skin, respiratory system, central nervous system.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statement(s)

P102	Keep out of reach of children.
P103	Read label before use.
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, or hot surfaces. No smoking.
P233	Keep container tightly closed.
P241	Use explosion-proof electrical, ventilating, and lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe vapors.
P264	Wash 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 rubber, nitrile or neoprene protective gloves and clothing, and safety goggles or face shield to protect eyes and face.
P303+361+353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse SKIN with water or shower.
P332+313	If skin irritation occurs: Get medical attention.
P362 + 364	Take off contaminated clothing and wash it before reuse.
P301+312	IF SWALLOWED: Call a poison control center or doctor if you feel unwell.
P330	Rinse mouth.
P304+340	If INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a Poison Center or doctor if you feel unwell.
P305 + 351 + 338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + 313	If eye irritation persists: Get medical attention.
P308 + 313	IF exposed or concerned: Get medical advice.
P370+378	IN CASE OF FIRE: Use foam or Carbon dioxide extinguishing media to extinguish
P403+235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents to appropriate facility in accordance with Federal, State, and local regulations.

2.3 Other Hazards:

PBT: This product does not contain substances identified as PBT or vPvB.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

INGREDIENT	EC Index No.	CAS No.	EINECS No.	% or Range	GHS Classification
Isopropanol	603-117-00-0	67-63-0	200-661-7	5-15	H225: Highly flammable Liquid and vapor. Category 2 H319: Causes serious Eye irritation. Category 2A H336: May cause Drowsiness or dizziness. Category 3
Toluene	601-021-00-3	108-88-3	203-625-9	45-55*	H225: Highly flammable Liquid and vapor. Category 2 H304: May be fatal if Swallowed and Enters airways. Category 1 H315: Causes skin Irritation. Category 2 H336: May cause Drowsiness or dizziness. Category 3 H361: Suspected to Damaging Fertility or The unborn child. Category 2
Methanol	603-001-00-X	67-56-1		40-45*	H225: Flam. Liq. Category 2 H301: Acute Tox. Category 2A H331: Toxic if inhaled Category 3 H370 Cause damage To organs.

*None of the ingredients listed in Section 3 contain REACH registration numbers.

3.2 Mixtures

No further information

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2. Most symptoms and effects, both acute and delayed

Inhalation: High vapor concentration may cause burning sensation in nose and throat and stinging and watering in the eyes. At concentrations which cause irritation, dizziness, faintness, drowsiness, nausea and vomiting may also occur.

Ingestion: May cause dizziness, faintness, drowsiness decreased awareness or responsiveness, nausea, vomiting, staggering gait, lack of coordination, blindness, coma and death.

Skin Contact: Prolonged or repeated contact may cause defatting and drying of the skin.

Eye Contact: May cause irritation including stinging, tearing, and redness.

4.3 Indication of any immediate medical attention and special treatment needed

Effects of Repeated Overexposure: Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis. Overexposure to methanol may cause eye damage and liver or kidney injury.

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SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Apply alcohol-type or all-purpose foam by manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires.

5.2 Special hazards arising from the substance or mixture

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode. Use water spray to cool fire-exposed containers and structures; Use water spray to disperse vapors - re-ignition is possible. Vapors may travel to source of ignition and flash back. Vapors may settle in low or confined spaces, or produce a floating fire hazard. Static ignition hazard can result from handling and use.

5.3 Advice for fire-fighters

Wear self contained breathing apparatus. Wear protective clothing to prevent contact with skin or eyes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment and clothing during clean-up.

6.2 Environmental precautions

Do not discharge into drains or rivers

6.3 Methods and material for containment and cleaning up

Small spills can be wiped or soaked up. Large spills: Eliminate all ignition sources; ground all equipment; do not walk through spill; stop spill if possible; prevent entry into sewers, confined spaces, etc.; use a vapor suppressing foam to reduce vapors; absorb spill with noncombustible matter and transfer to containers; use non-sparking tools to collect absorbed material. Refer to section 11 for disposal information.

6.4 Reference to other sections

Please refer to Section 8 for details on protective wear.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Keep in a tightly closed container. Protect from physical damage. Keep this and all chemicals out of the reach of children. Wash thoroughly after handling.

7.2 Conditions for Safe Storage, Including any Incompatibilities

Flammable material - keep away from heat, sparks, and flame; sudden releases of hot organic vapors or mists from process equipment operating at elevated temperature may result in ignitions without the presence of obvious ignition sources. Observe all warnings and precautions listed for the product.

7.3 Specific end uses(s)

Detect acids in refrigeration oils
Industrial section specific solution: None.

SECTION 8. EXPOSURE CONTROLS /PERSONAL PROTECTION

8.1 Control parameters:

USA

Isopropanol (CAS# 67-63-0) 400 ppm TWA (OSHA) 980mg/m³ TWA (OSHA) 2000ppm IDLH (NIOSH)

Methanol (CAS# 67-63-0) 200 ppm TWA 260mg/m³

Toluene (CAS#188-88-3) 200ppm TWA (OSHA) 375 mg/m³ (NIOSH)

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SECTION 8. EXPOSURE CONTROLS /PERSONAL PROTECTION (cont.)

UK

ISOPROPANOL

UK- TWA: 980mg/m³

UK-TLV: 2000ppm

TOLUENE

UK-TWA: 375 mg/m³

8.2 Exposure controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation. A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved)

Use in a well-ventilated area. If vapors are generated and exceed the TLV, use of air-purifying respirators and follow respiratory program meeting OSHA 910.134 and ANSI Z88.2 requirements. Filter device type EN 371. Filter suitable for organic gases and vapors according to EN14387.

Skin Protection

Protective gloves according to directive EN 374. For prolonged contact: Protective gloves made of Nitrile permeation time is: > 160 mins layer thickness: 3.1 mil. Wear rubber, neoprene, nitrile, Saranex® boots, gloves, lab coat, apron or coveralls, as necessary and appropriate, to prevent skin contact.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities or a source of running water in the work area. Goggles according to directive EN 166.

Work Hygienic Practices

Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material, and before eating, smoking or using the bathroom.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State: liquid

Colour: Maroon/purplish

Odor: alcohol-like

Odor Threshold: No data available

pH @ 25°C: No data available

Melting Point (Pour Point): No data available

Boiling Point: 82°C @ 760 mmHg

Freezing Point: No data available

Density: No data available

Viscosity: No data available

Explosive Properties: No data available

Oxidising Properties: No data available

Flash Point: 12°C (54°F)

Evaporation Rate (Water = 1): 1.7 (n-butyl acetate=1)

Flammable Limits:

LEL: 2.0 °C

UEL: 12.7°C

Vapor pressure (mm Hg): 33 mm Hg @ 20°C

Vapor Density (Air = 1): 2.1

Specific gravity (H₂O = 1): 0.85

Solubility in water: Miscible

Octanol/Water Partition Coefficient: No data available

Autoignition Temperature: 399 ° C (750° F)

Decomposition Temperature: No data available

9.2 Other information

No further details

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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under ordinary conditions

10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur.

10.4 Conditions to Avoid

Extreme heat, incompatibles.

10.5 Incompatible Materials

Strong oxidizers and strong acids

10.6 Hazardous Decomposition Products

May evolve carbon monoxide, carbon dioxide if burned.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Potential Health Effects:

11.1.1 Acute Toxicity: Harmful by inhalation and ingestion. Inhaling the product may have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Arrhythmia (deviation from normal heart beat). May cause drowsiness and dizziness.
LD/LC50 values that are relevant: LD50: ORL-RAT, 5628 mg/kg (Methanol)

(Isopropanol)

Draize test, rabbit, eye: 100 mg Severe

Draize test, rabbit, eye: 10 mg Moderate;

Draize test, rabbit, eye: 100 mg/24H Moderate

Draize test, rabbit, skin: 500 mg Mild;

Inhalation, mouse: LC50 = 53000 mg/m³

Inhalation, rat: LC50 = 16000 ppm/8H

Inhalation, rat: LC50 = 72600 mg/m³

Oral, mouse: LD50 = 3600 mg/kg

Oral, mouse: LD50 = 3600 mg/kg

Oral, rabbit: LD50 = 6410 mg/kg

11.1.2 Irritation: If in contact with eye, there may be irritation and pain.

11.1.3 Corrosive: Non-Corrosive.

11.1.4 Sensitisation: Not expected to be a sensitizer

11.1.5 Repeated dose toxicity: Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Prolonged exposure may cause liver, kidney, and heart damage.

11.1.6 Carcinogenicity: Not expected to be carcinogenic.

11.1.7 Mutagenicity: No data available.

11.1.8 Toxicity for reproduction: In an epidemiologic study of toluene and pregnancy, occupational exposures to toluene were said to be associated with an increased incidence of renal, urinary, gastrointestinal, and cardiac anomalies. Fetotoxicity (reduced fetal weight), behavioral effects (effects on learning and memory) and hearing loss (in males) were observed in the offspring of rats exposed by inhalation to toluene, in the absence of maternal toxicity.

11.1.9 Route of exposure: Inhalation

Symptoms related to the physical, chemical and toxicological characteristics: Harmful if inhaled. May cause adverse central nervous system effects including headache and convulsions. Chronic: Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Prolonged exposure may cause liver, kidney, and heart damage.

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SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Isopropanol: Fish: Fathead Minnow: >1000 ppm; 96h; LC50

Daphnia: >1000 ppm; 96h; LC50

Gold orfe: 8970-9280 ppm; 48h; LC50

Toluene: Bluegill LC50=17 mg/L/24H

Shrimp LC50=4.3 ppm/96H Fathead minnow LC50=36.2 mg/L/96H

Sunfish (fresh water) TLm=1180 mg/L/96H

IPA as a high biochemical oxygen demand and a potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a low potential to affect the germination of some plants, a high potential to biodegrade (low persistence) with unacclimated microorganisms from activated sludge.

12.2 Persistence and Degradability

Biodegradable

12.3 Bioaccumulative Potential

No data available

12.4 Mobility in Soil

From soil, substance evaporates and is microbially biodegraded

12.5 Results of PBT and vPvB assessment

This product does not contain substances identified as PBT

12.6 Other Adverse Effects

None known

For more information, see "HANDBOOK OF ENVIRONMENTAL FATE AND EXPOSURE DATA."

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Vapors may collect in empty containers. Treat empty containers as hazardous.

Dispose of spill-clean up and other wastes in accordance with local, state, regional, national, and international regulations.

SECTION 14. TRANSPORTATION INFORMATION

14.1 UN Number

1933

14.2 UN Proper Shipping Name

Flammable Liquid, N.O.S. (Contains methanol, isopropanol and toluene)

14.3 Transport Hazard Class(s)

3

14.4 Packing Group

II

14.5 Environmental Hazards

Not a marine pollutant

14.6 Special precautions for user

See section 8

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

EmS

F-E / S-D

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SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Comprehensive Environmental Response Compensation and Liability

Act of 1980

(CERCLA) requires notification of the National Response Center of release quantities of Hazardous Substances is not required for this material.

WHMIS

This SDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

15.2 Chemical safety assessment

A chemical safety assessment has not been conducted.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

SECTION 16. OTHER INFORMATION

Revision Summary: All Sections: New GHS Format and accordance with Regulation (EC) No 1272/2008 (CLP).

SDS DATE REVISED: 10/24/2016

HMIS III Ratings:

HMIS III®

Health	1
Flamability	3
Physical Hazard	0
Personal Protection	B

ABBREVIATIONS:

UN Model Regulations means the Model Regulations annexed to the most recently revised edition of the Recommendations on the Transport of Dangerous Goods published by the United Nations.

IMDG Code means the International Maritime Dangerous Goods code, as amended.

ADR means the European Agreement concerning the International Carriage of Dangerous Goods by Road, as amended.

RID means the Regulations concerning the International Carriage of Dangerous Goods by Rail, as amended.

ADN means the European Agreement concerning the International Transport of Dangerous Goods by Inland Waterways, as amended.

Sources of Key Data:

UK Regulatory References: The Control of Substances Hazardous to Health Regulations 2002 (as amended 2004). European Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.

Approved Code of Practice: Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. British

Workplace Exposure Limits EH40.

Classification and Labelling Guidance: Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Annex 2

Precautionary Statement and Pictograms: Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Annex 3

Guidance on the Preparation of Safety Data Sheets: Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Annex 4

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