

SDS# ATK-1, ATK-4  
Issue 1, Version 2 Revised May 2016  
Safety Data Sheet according to Regulation (EU) 2015/830

# Acid Test Kit

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifier

Acid Test Kit

### 1.2 Relevant identified uses of the mixture and of the company

Detects acid in refrigeration oil.

### 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](http://www.diversitech.com)

### 1.4 Telephone number

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

#### 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.

# Acid Test Kit

## 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. H319: Causes serious Eye irritation. H336: May cause Drowsiness or dizziness Category 2
Toluene	601-021-00-3	108-88-3	203-625-9	45-55*	H225: Highly flammable Liquid and vapor. H304: May be fatal if Swallowed and Enters airways H315: Causes skin Irritation. H336: May cause Drowsiness or dizziness H361: Suspected to Damaging Fertility or The unborn child. Category 2A Category 3 Category 2
Methanol	603-001-00-X	67-56-1		40-45*	H225: Flam. Liq. H301: Acute Tox. H331: Toxic if inhaled H370 Cause damage To organs. Category 2 Category 2A Category 3

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

## 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. Signs and Symptoms of Exposure

**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.

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.

## SECTION 5. FIREFIGHTING MEASURES (cont.)

### 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.

## 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 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.

## 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.

## SECTION 8. EXPOSURE CONTROLS /PERSONAL PROTECTION

### 8.1 Airborne Exposure Limits:

#### USA

**Isopropanol** (CAS# 67-63-0) 400 ppm TWA (OSHA) 980mg/m<sup>3</sup> TWA (OSHA) 2000ppm IDLH (NIOSH)

**Methanol** (CAS# 67-63-0) 200 ppm TWA 260mg/m<sup>3</sup>

**Toluene** (CAS#188-88-3) 200ppm TWA (OSHA) 375 mg/m<sup>3</sup> (NIOSH)

#### UK

#### ISOPROPANOL

UK- TWA: 980mg/m<sup>3</sup>

UK-TLV: 2000ppm

#### TOLUENE

UK-TWA: 375 mg/m<sup>3</sup>

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

### 8.2 Appropriate Engineering 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.

### 8.3 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.

### 8.4 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.

### 8.5 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.

### 8.6 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)

**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

**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

## SECTION 10. STABILITY AND REACTIVITY

### 10.1 Chemical Stability

Stable under ordinary conditions of use and storage.

# Acid Test Kit

## SECTION 10. STABILITY AND REACTIVITY (cont.)

### 10.2 Possibility of Hazardous Reactions

Will not occur.

### 10.3 Conditions to Avoid

Extreme heat, incompatibles.

### 10.4 Incompatible Materials

Strong oxidizers and strong acids

### 10.5 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/m<sup>3</sup>

**Inhalation, rat: LC50 =** 16000 ppm/8H

**Inhalation, rat: LC50 =** 72600 mg/m<sup>3</sup>

**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 Ecotoxicity

**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

### 12.2 Aquatic

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.

### 12.3 Persistence and Degradability

Biodegradable

### 12.4 Bioaccumulative Potential

No data available

### 12.5 Mobility in Soil

From soil, substance evaporates and is microbially biodegraded

### 12.6 Other Adverse Effects

None known

### 12.7 Other

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 US DOT

Flammable liquid, N.O.S. (Contains methanol, isopropanol and toluene), 3, PGII

### 14.2 UN ID #

1993

### 14.3 Proper Shipping Name

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

### 14.4 Packing Group

II

### 14.5 UN Number

1933

### 14.6 UN Proper Shipping Name

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

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## SECTION 14. TRANSPORTATION INFORMATION (cont.)

### 14.7 Transport Hazard Class(s)

3

### 14.8 Packing Group

II

### 14.9 Environmental Hazards

Not a marine pollutant

### 14.10 ADR/RID Transport Information ADR/RID Class

3

### 14.11 ADR/RID Packing Group

II

### 14.12 IMDG Hazard Class

3

### 14.13 IMDG Packing Group

II

### 14.14 ADNR Class

3

### 14.15 ADNR Item

UN1993

### 14.16 IATA Hazard Class

3

### 14.17 ATA Packing Group

II

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

Not applicable

### 14.19 EmS

F-E / S-D

## SECTION 15. REGULATORY INFORMATION

### 15.1 US EPA

#### 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.

### 15.2 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.

### 15.3 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.



# Acid Test Kit

## SECTION 16. OTHER INFORMATION

**Revision Summary:** All Sections: New GHS Format and accordance with Regulation (EU) No 453/2010.  
**SDS DATE REVISED:** 05/05/2016

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 1988. Chemicals (Hazard Information & Packaging) Regulations.

EU Directives: Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. System of specific information relating to Dangerous Preparations. 2001/58/EC.

Statutory Instruments: Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

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

Guidance Notes: Workplace Exposure Limits EH40. CHIP for everyone HSG (108).

National Regulations: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

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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