

## Contents Ref. 249400:

### Summary

The Apacor Transportation Vial with SAF offers standardised protocol for the handling of microbiological materials. Its ease of use allows for the correct procedures to be maintained for the routine collection, transportation, preservation, and the examination of stool samples for the identification of intestinal parasites.

### Description

In the laboratory intestinal parasites are confirmed by the identification of cysts, protozoan trophozoites, larvae and helminth eggs.

The priorities of these clinical laboratories do not always permit the immediate examination of a fresh sample.

The prompt collection and transportation of these samples cannot always be guaranteed.

Furthermore, freezing, refrigeration and / or incubation of samples cannot ensure the full recovery of parasites at all stages of identification.

The Apacor Transportation Vial with SAF will preserve the intestinal parasites in the faecal material until such time it can be examined by a qualified parasitologist.

### Principles of Use

We provide a fixative for cysts, protozoan trophozoites, larvae and helminth eggs in a stabilised solution.

This method of transportation is commonly used for concentrating and temporary staining, such as Lugol's Iodine.

### Composition

Each kit consists of 40 x 30ml transportation vials containing 15ml SAF and instructions for use.

### Sample Collection

Testing should be conducted by trained staff recognised by local regulatory requirements.

1. The patient should be warned before the collection of the sample against the use of substances such as oily laxatives, bismuth, antacids, anti-diarrheal medication and barium.
2. For optimum results, 3 samples should be collected from the patient over the course of 3 days. This will guarantee finding all stages of the parasite life cycle. Variable quantities of parasites can pass through a patient; therefore collecting samples over 3 days will guarantee a higher yield. Samples should be collected over a designated length of time to avoid prolonged hospital visits.
3. A clean container should be used to collect the sample. Place something in the toilet to catch the stool, such as a potty or an empty plastic food container, or spread clean newspaper or plastic wrap over the rim of the toilet. Please note: Urine must not contaminate the sample.
4. Each vial should have enough sample to bring the SAF up to the 15 ml line. This is approximately an extra 5 ml of sample. This should be completed by using the collection spoon attached to the vial cap and selecting the appropriate slimy, bloody, watery areas of a sample. When sampling a formed stool, material can be taken from anywhere on the sample.
5. Shake the vial firmly until it has emulsified with the SAF. Please ensure that the cap has been closed tightly and that the sample has been agitated with the spoon.
6. Label the vial with the date, your name, and date of birth and return the vial(s) in a sealed bag.

## SAF SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

### 1.1 Product Identifier: SAF

(Sodium Acetate-Acetic Acid-Formalin Solution)  
145500, 145501 1461, 146500, 146501, 108920, 149920,  
249400, 249401, 901000, 906000

**1.2 Relevant identified uses of the substance or mixture and uses advised against:** laboratory chemical (in vitro diagnostic)

### 1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road,  
Wokingham, Berkshire, RG41 2QL, United Kingdom  
+44 (0) 118 979 5566  
[technical@apacor.com](mailto:technical@apacor.com)

### 1.4 Emergency telephone number:

+44 (0)118 979 5566  
(Monday-Friday 0900-1700 excluding UK Public Holidays)

## SECTION 2 HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302  
Skin sensitisation (Category 1), H317  
Acute toxicity, Inhalation (Category 4), H332  
Germ Cell Mutagenicity (Category 2), H341  
Carcinogenicity (Category 1B), H350

See Section 16 for the full text of H-Statements mentioned in this Section.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]



**Pictogram**  
**Signal word**

**Danger**

### Hazard statement(s)

H302 Harmful if swallowed.  
H317 May cause an allergic skin reaction.  
H332 Harmful if inhaled.  
H341 Suspected of causing genetic defects.  
H350 May cause cancer.  
Contains Formaldehyde

### Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician  
P308 + P313 - IF exposed or concerned: Get medical advice/ attention

### 2.3 Other hazards

No data available.

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **Formaldehyde**

CAS No: 50-00-0

EC No: 200-001-8

Index No: 605-001-00-5

Classification: Acute Tox. 3 (H301 + H311 + H331); Skin Corr. 1B (H314); Skin Sens. 1 (H317); Muta. 2 (H341); Carc. 1B (H350);  
Concentration: < 5%

Component: **Methanol**

CAS No: 67-56-1

EC No: 200-659-6

Index No: 603-001-00-x

Registration No: 01-2119433307-44-xxxx

Classification: Flam. Liq. 2 (H225); Acute Tox 3 (H301 + H311 + H331); STOT SE 1 (H370)

Concentration: < 1%

Component: **Acetic Acid**

CAS No: 64-19-7

EC No: 200-580-7

Index No: -

Registration No: -

Classification: Skin Corr. 1A (H314) ; Flam. Liq 3 (H226)

Concentration: ≤ 2%

## SECTION 4 FIRST AID MEASURES

### 4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothes and shoes.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (Section 2.2) and/or in Section 11.

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: treat symptomatically.

## SECTION 5 FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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**5.2 Special hazards arising from the substance or mixture**

Carbon oxides.

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus and full protective gear.

**SECTION 6 ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see Section 8.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and material for containment and cleaning up**

Contain spillage and place in container for disposal according to local regulations (see Section 13). Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal, see Section 13.

**SECTION 7 HANDLING AND STORAGE****7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition—no smoking. Take measures to prevent the build-up of electrostatic charge. For precautions, see Section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**7.3 Specific end use(s)**

No other specific uses are specified apart from those listed in Section 1.2.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

	<b>Formaldehyde 50-00-0</b>	<b>Methanol 67-56-1</b>	<b>Acetic Acid 64-19-7</b>
<b>Austria</b>	STEL: 0.5 ppm STEL: 0.6 mg/m <sup>3</sup> TWA: 0.5 ppm TWA: 0.6 mg/m <sup>3</sup>	STEL: 800 ppm STEL: 1040 mg/m <sup>3</sup> TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	STEL: 20 ppm STEL: 50 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
<b>Belgium</b>	STEL: 0.3 ppm STEL: 0.38 mg/m <sup>3</sup>	STEL: 250 ppm STEL: 333 mg/m <sup>3</sup> TWA: 200 ppm TWA: 266 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 38 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>

	<b>Formaldehyde 50-00-0</b>	<b>Methanol 67-56-1</b>	<b>Acetic Acid 64-19-7</b>
<b>Denmark</b>	STEL: 0.3 ppm STEL: 0.4 mg/m <sup>3</sup> TWA: 0.3 ppm TWA: 0.4 mg/m <sup>3</sup>	STEL: 400 ppm STEL: 520 mg/m <sup>3</sup> TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	STEL: 20 ppm STEL: 50 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
<b>France</b>	TWA: 0.5 ppm STEL: 1 ppm	STEL: 1000 ppm STEL: 1300 mg/m <sup>3</sup> TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	STEL: 10 ppm STEL: 25 mg/m <sup>3</sup>
<b>Germany</b>	STEL: 0.6 ppm STEL: 0.74 mg/m <sup>3</sup> TWA: 0.3 ppm TWA: 0.37 mg/m <sup>3</sup>	STEL: 800 ppm STEL: 1080 mg/m <sup>3</sup> TWA: 200 ppm TWA: 270 mg/m <sup>3</sup>	STEL: 20 ppm STEL: 50 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
<b>Ireland</b>	STEL: 2 ppm STEL: 2.5 mg/m <sup>3</sup> TWA: 2 ppm TWA: 2.5 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 37 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
<b>Italy</b>		TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
<b>Poland</b>	STEL: 1 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>	STEL: 300 mg/m <sup>3</sup> TWA: 100 mg/m <sup>3</sup>	STEL: 30 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>
<b>Portugal</b>	STEL: 0.3 ppm	STEL: 250 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	STEL: 15 ppm TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
<b>Spain</b>	STEL: 0.3 ppm STEL: 0.37 mg/m <sup>3</sup>	STEL: 250 ppm STEL: 333 mg/m <sup>3</sup> TWA: 200 ppm TWA: 266 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 37 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
<b>Sweden</b>	STEL: 0.6 ppm STEL: 0.74 mg/m <sup>3</sup> TWA: 0.3 ppm TWA: 0.37 mg/m <sup>3</sup>	STEL: 250 ppm STEL: 350 mg/m <sup>3</sup> TWA: 200 ppm TWA: 250 mg/m <sup>3</sup>	STEL: 10 ppm STEL: 25 mg/m <sup>3</sup> TWA: 5 ppm TWA: 13 mg/m <sup>3</sup>
<b>The Netherlands</b>	STEL: 0.5 mg/m <sup>3</sup> TWA: 0.15 mg/m <sup>3</sup>	TWA: 133 mg/m <sup>3</sup>	
<b>UK</b>	STEL: 2 ppm STEL: 2.5 mg/m <sup>3</sup> TWA: 2 ppm TWA: 2.5 mg/m <sup>3</sup>	STEL: 250 ppm STEL: 333 mg/m <sup>3</sup> TWA: 200 ppm TWA: 266 mg/m <sup>3</sup>	

**8.2 Exposure controls****8.2.1 Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**8.2.2 Personal protective equipment**

(a) Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use

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a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 8.2.3 Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) **Appearance** aqueous solution Form: colourless liquid

b) **Odour** characteristic

c) **Odour threshold** no data available

d) **pH** no data available

e) **Melting point / freezing point** no data available

f) **Initial boiling point and boiling range** 102°C

g) **Flash point** >105°C

h) **Evaporation rate** no data available

i) **Flammability (solid, gas)** no data available

j) **Upper/lower flammability or explosive limits** no data available

k) **Vapour pressure** no data available

l) **Vapour density** >1

m) **Relative density** 1.071

n) **Solubility (ies)** Soluble in water

o) **Partition coefficient: n-octanol/water** no data available

p) **Auto-ignition temperature** no data available

q) **Decomposition temperature** no data available

r) **Viscosity** no data available

s) **Explosive properties** no data available

t) **Oxidising properties** no data available

### 9.2 Other information

No data available.

## SECTION 10 STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

No materials to be mentioned in particular.

### 10.6 Hazardous decomposition products

Carbon oxides.

## SECTION 11 TOXICOLOGICAL INFORMATION

### 11.1 Information of toxicological effects

**Acute toxicity:** no data available

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** no data available

**Respiratory or skin sensitisation:** no data available

**Germ cell mutagenicity:** no data available

**Carcinogenicity:** IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde)

**Reproductive toxicity:** no data available

**Specific target organ toxicity - single exposure:** no data available

**Specific target organ toxicity - repeated exposure:** no data available

**Aspiration hazard:** no data available

### Additional Information

Chemical Name	
Formaldehyde	LD50 oral 600 mg/kg (Rat) LD50 dermal 270 mg/kg (Rabbit) LC50 inhalation 0.578 mg/L (Rat) 4 h
Methanol	LD50 oral - rat - 5628 mg / kg LC50 inhalation - rat - 4h – 83.2 mg/l/4h
Acetic Acid	LD50 oral 3310 mg/kg (Rat) LD50 dermal 1060 mg/kg (Rabbit) LC50 inhalation 11.4 mg/L (Rat) 4 h

## SECTION 12 ECOLOGICAL INFORMATION

### 12.1 Toxicity

Ecotoxicity effects: contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Toxicity to Fish	
Formaldehyde	0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 100- 136: 96 h Oncorhynchus mykiss mg/L LC50 static 1510: 96 h Lepomis macrochirus µg/L LC50 static 22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static
Methanol	LC50 - Pimephales promelas – 28200 mg / L 96h
Acetic Acid	75: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Pimephales promelas mg/L LC50 static

### Toxicity to Daphnia and other Aquatic Invertebrates

Formaldehyde	11.3 - 18: 48 h Daphnia magna mg/L EC50 Static 2: 48 h Daphnia magna mg/L LC50
Methanol	EC50 - Daphnia magna - >10000 mg/l
Acetic Acid	47: 24 h Daphnia magna mg/L EC50 65: 48 h Daphnia magna mg/L EC50 Static

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No data available.

Chemical Name	log Pow
Formaldehyde	0.35
Methanol	-0.77
Acetic Acid	0

### 12.4 Mobility in soil

No data available.



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### 12.5 Results of PBT and vPvB assessment

No data available.

### 12.6 Other adverse effects

No data available.

### 12.7 Additional information

None.

## SECTION 13 DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product:** Dispose of waste in accordance with all federal, state, and local regulations.

**Contaminated packaging:** Dispose of as unused product.

## SECTION 14 TRANSPORT INFORMATION

**IATA/DOT/IMDG/TDG:** Not regulated.

**14.1 UN number:** -

**14.2 UN proper shipping name:** -

**14.3 Transport hazard class(es):** -

**14.4 Packing group:** -

**14.5 Environmental hazards:** -

**14.6 Special precautions for user:** -

## SECTION 15 REGULATORY INFORMATION

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

No data available.

### 15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for this product.

## SECTION 16 OTHER INFORMATION

### Full text of H-Statements referred to in Sections 2 and 3

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.

Acute Tox. Acute toxicity

Carc. Carcinogenicity

Flam. Liq. Flammable liquids

Muta. Germ Cell Mutagenicity

Skin Corr. Skin corrosion

Skin Sens. Skin sensitisation

STOT SE Specific target organ toxicity - single exposure

Amended sections are indicated by a line in the border.

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



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