# DALYNN BIOLOGICALS

# SAFETY DATA SHEET Version 1.9 Revision Date 02/07/2024

# **1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Catalog Number: Product Use:	Modified SAF Transport Medium / Fixative SAF O&P Stool Collection Kit F03 / F05K For laboratory use only
Manufacturer's Name: Supplier's Name: Address:	Dalynn Biologicals Inc. Dalynn Biologicals Inc. 3253 – 34 Avenue NE Calgary, AB, Canada T1Y 6X2
Telephone:	1-888-404-4045
Fax:	(403) 250-9010
Chemical Emergency: Phone Number Only	1-613-996-6666

# 2. HAZARD IDENTIFICATION

#### Emergency Overview

#### **GHS Classification**

Acute toxicity, Oral (Category 4) Acute toxicity, Inhalation (Category 5) Acute toxicity, Dermal (Category 5) Skin corrosion/irritation (Sub-category 1B) Serious eye damage/eye irritation (Category 1) Germ cell mutagenicity (Category 2) Specific target organ toxicity – repeated exposure (Category 1)

# **GHS Label Elements, Including Precautionary Statements**



Signal word

Pictogram

Danger

Hazard statement(s)

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure

Precautionary statement(s)

,	
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

P271 P273 P280 P301 + P310 + P330	Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
1 301 + 1 310 + 1 330	Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338	+ P310
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P361 + P364 P391	Take off immediately all contaminated clothing and wash it before reuse. Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/ container to an approved waste disposal plant.

# **3. COMPOSITION & INFORMATION ON INGREDIENTS**

INGREDIENT	%	CAS-No.	EC-No.	Index-No.
Formaldehyde	4.0	50-00-0	200-001-8	605-001-00-5
Acetic Acid	2.0	64-19-7	200-580-7	607-002-00-6
Water	~90.0	7732-18-5	231-791-2	-

# 4. FIRST AID MEASURES

### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move affected individual out of affected area.

# If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Take victim to hospital and consult a physician.

#### In case of skin contact

Take off contaminated clothing. Wash affected area with soap and plenty of water. Take victim to hospital and consult a physician.

#### In case of eye contact

Flush eyes with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do not induce vomiting. Rinse mouth with water if patient is conscious. Take patient to hospital and consult a physician.

# **5. FIREFIGHTING MEASURES**

#### **Conditions of flammability**

Contains mostly water therefore the flammability hazard is minimal.

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### Hazardous combustion products

Hazardous decomposition products formed under fire conditions: carbon oxides (ie. carbon dioxides, carbon monoxide), formaldehyde, formic acid

#### Explosion data - sensitivity to mechanical impact

No

# Explosion data - sensitivity to static discharge

No

# 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions**

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Collect spillage and hold for disposal.

#### Methods and materials for containment and cleaning up

Wearing appropriate safety gear including chemical resistant gloves and dust mask or respirator, soak up with inert absorbent material. Place in a sealed container and hold for disposal.

# 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use in area with adequate ventilation.

#### Conditions for safe storage

Keep container tightly closed in a well ventilated place away from direct light or sunlight.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Formaldehyde	50-0-0	TWA	0.75 ppm 0.9 mg/m3	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)
		(C)	1.0 ppm 1.3 mg/m3	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)
Remarks	Suspected hu	uman carcir	nogen	
		TWA	0.3 ppm	Canada. British Columbia OEL
		С	1.0 ppm	Canada. British Columbia OEL

		С	2 ppm 3 mg/m3	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part
		STEL	1.0 ppm	1 Canada. Ontario Table of Occupational Exposure Limits made Occupational Health and
		С	1.5 ppm	Safety Act Canada. Ontario Table of Occupational Exposure Limits made Occupational Health and Safety Act
	A substance	to which exp		a accordance with section 108 loced to a minimum in accordance with section 42
		С	0.3 ppm	USA. ACGIH Threshold Limit Values (TLV)
Acetic acid	64-19-7	TWA	10 ppm 25 mg/m3	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)
		STEL	15 ppm 37 mg/m3	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)
		TWA	10 ppm	Canada. British Columbia OEL
		STEL	15 ppm	Canada. British Columbia OEL
		TWAEV	10 ppm 25 mg/m3	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part 1
		STEV	15 ppm 37 mg/m3	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part 1
		TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	15 ppm	USA. ACGIH Threshold Limit Values (TLV)

#### **Engineering measures**

Ensure adequate ventilation especially in confined areas. If desired, use mechanical exhaust or laboratory fumehood to avoid exposure.

#### Personal protective equipment

#### **Respiratory protection**

Use in area with adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type ABEK (EN14387) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand 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 after use.

#### Eye protection

Face shield and/or safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

#### Skin and body protection

Wear appropriate clothing such as a lab coat that covers as much of the body as possible. Complete suit can also be worn if desired.

#### **Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

	Form	Liquid	
	Color	Clear	
Safet	y data		
	рН		~4.5
	Melting point/ freezing point		No data available
	Boiling point		No data available
	Flash point		No data available
	Ignition temperature		No data available
	Auto ignition temperature	re	No data available
	Lower explosion limit		No data available
	Upper explosion limit		No data available
	Vapor pressure		No data available
	Density		No data available
	Water solubility		soluble
	Partition coefficient/ n-octanol/water		No data available
	Relative vapor density		No data available
	Odour		No data available
	Odour threshold		No data available
	Evaporation rate		No data available

# **10. STABILITY AND REACTIVITY**

### **Chemical stability**

Stable under recommended storage conditions.

### Possibility of hazardous reactions

No data available

### Materials to avoid

Strong oxidizing agents, strong acids, strong bases, isocyanates, phenol, anhydrides, nitromethane, aniline, peroxyformic acid

#### Hazardous decomposition products

Other decomposition products – No data available Hazardous decomposition products formed under fire conditions – Carbon oxides, formaldehyde, formic acid

### Hazardous polymerization

Hazardous polymerization does not occur

#### **Hazardous reactions**

None under normal processing

# **11. TOXICOLOGICAL INFORMATION**

# Acute toxicity

Oral LD50

LD50 Oral - Rat - 500 mg/kg (formaldehyde) LD50 Oral - Rat - 3,310 mg/kg (acetic acid)

#### Inhalation LC50

LD50 Inhalation - Rat - 4h - 0.578 mg/L (formaldehyde) LD50 Inhalation – Rat – 4h – 11.4 mg/L (acetic acid)

#### **Dermal LD50**

LD50 Dermal – Rabbit – 270 mg/kg (formaldehyde) LD50 Dermal - Rabbit - 1,112 mg/kg (acetic acid)

#### Other information on acute toxicity

No data available

Skin corrosion/irritation Skin - Rabbit - Severe burns (acetic acid)

# Serious eye damage/eye irritation

Eye - Rabbit - Corrosive to eyes (acetic acid)

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

In vitro tests showed mutagenic effects for phenol and auramine.

#### Carcinogenicity

This table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Formaldehyde	50-0-0	Group 1	Known	A1	Х	A2
Acetic acid	64-19-7	Not listed	Not listed	Not listed	Not listed	Not listed
ARC: (International Agency for Re	esearch on Cancer)	IARC: (I	nternational Agency	for Research on Cano	er)	

IARC: (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

Group 1 - Carcinogenic to Humans Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

### **Reproductive toxicity**

Experiments have shown reproductive toxicity effects on laboratory animals for formaldehyde

#### Teratogenicity

Teratogenic effects have occurred in experimental animals for formaldehyde

#### Specific target organ toxicity - single exposure (GHS)

Respiratory system, CNS, optic nerve

#### Specific target organ toxicity – repeated exposure (GHS)

Kidney, liver, heart, spleen, blood

### Aspiration hazard

No data available

### **Potential Health Effects**

Inhalation	May be toxic if inhaled. May cause respiratory tract irritation.
Skin	May be harmful or toxic if absorbed through skin. May causes skin irritation or
	burns depending on duration.
Eyes	May cause eye irritation or burns on contact.
Ingestion	Toxic if swallowed in sufficient quantity. Keep in mind that the main component
	in this product is water and the hazardous symptoms described are from
	exposure to formaldehyde therefore negative health effects are
	expected but muted given the diluted nature of the mixture. Symptoms of
	exposure include abdominal pain, nausea, vomiting, headache and dizziness.

#### Signs and Symptoms of Exposure

Symptoms of exposure include abdominal pain, nausea, vomiting, headache and dizziness. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### Synergistic effects

No data available

# **12. ECOLOGICAL INFORMATION**

Ecotoxicity No data available

Persistence and degradability No data available

**Bioaccumulative potential** No data available

Mobility in soil No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

# **13. DISPOSAL CONSIDERATIONS**

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### **Contaminated packaging**

Dispose of as unused product.

# **14. TRANSPORT INFORMATION**

**DOT (US)** Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

# **15. REGULATORY INFORMATION**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by them.

# **16. OTHER INFORMATION**

#### **Further information**

Copyright 2018 Dalynn Biologicals Inc. The above information is believed to be correct but does not purport to be all inclusive and shall be only used as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Dalynn Biologicals Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.