

Safety Data Sheet

MODIFIED KANOVSKY'S FIXATIVE

Section 1 - Chemical Product and Company Identification

SDS Name: Modified Kanovsky's Fixative

Catalog Numbers: SO-1051

Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923

For information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H302-Acute toxicity, oral: 4

H313-Acute toxicity, dermal: 5

H314-Skin corrosion/irritation: 1B

H317-Sensitisation, skin: 1

H318-Serious eye damage/eye irritation: 1

H331-Acute toxicity, inhalation: 3

H334-Sensitisation, respiratory: 1

H341-Germ cell mutagenicity: 2

H350-Carcinogenicity: 1A

H371-Specific target organ toxicity, single exposure: 2

H373-Specific target organ toxicity, repeated exposure: 2

Pictograms or Hazard symbols and Hazard statement(s):



Signal word: Danger

Hazard statements:

H302-Harmful if swallowed

H313-May be harmful in contact with skin

H314-Causes severe skin burns and eye damage

H317-May cause an allergic skin reaction
H318-Causes serious eye damage
H331-Toxic if inhaled
H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341-Suspected of causing genetic defects
H350-May cause cancer
H371-May cause damage to organs (target organs: respiratory system, central nervous system, and optic nerve)
H373-May cause damage to organs through prolonged or repeated exposure (target organs: kidney, liver, heart, spleen, and blood)

Precautionary Statements:

P201-Obtain special instructions before use.
P202-Do not handle until all safety precautions have been read and understood.
P260-Do not breathe dust/fume/gas/mist/vapours/spray.
P261-Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P272-Contaminated work clothing should not be allowed out of the workplace.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P281-Use personal protective equipment as required.
P285-In case of inadequate ventilation wear respiratory protection.
P301+P312-If swallowed: Call a Poison Center or doctor/physician if you feel unwell.
P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.
P302+P352-If on skin: Wash with plenty of soap and water.
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.
P304+P341-If inhaled: If breathing is difficult, 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.
P308+P313-If exposed or concerned: Get medical advice/attention.
P309+P311-If exposed or if you feel unwell: Call a Poison Center or doctor/physician.
P310-Immediately call a Poison Center or doctor/physician.
P311-Call a Poison Center or doctor/physician.
P312-Call a Poison Center or doctor/physician if you feel unwell.
P314-Get medical advice/attention if you feel unwell.
P330-Rinse mouth.
P333+P313-If skin irritation or rash occurs: Get medical advice/attention.
P342+P311-If experiencing respiratory systems: Call a Poison Center or doctor/physician.
P363-Wash contaminated clothing before reuse.
P403+P233-Store in a well-ventilated place. Keep container tightly closed.
P405-Store locked up.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7758-80-7	Sodium Phosphate, monobasic	1.4 w/v
7558-79-4	Sodium Phosphate, dibasic	1.4 w/v
111-30-8	Glutaraldehyde	5 v/v
50-00-0	Formaldehyde, 37-40%	6.5 v/v
67-56-1	Methyl Alcohol	<1 v/v
7732-18-5	Water	balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention.

Oral Exposure: If swallowed, seek immediate medical advice. Do NOT induce vomiting.

Inhalation Exposure: If inhaled, remove to fresh air. Seek medical attention.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Carbon oxides, sodium oxides, phosphorus oxides, hydrogen, formaldehyde, irritating toxic fumes and gases.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. **Store in a tightly closed container in the refrigerator (4°C).** Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium Phosphate, monobasic CAS#7558-80-7	Not listed	Not listed	Not listed
Sodium Phosphate, dibasic CAS#7558-79-4	Not listed	Not listed	Not listed
Glutaraldehyde CAS#111-30-8	0.05 ppm Ceiling	0.2 ppm Ceiling 0.8 mg/m3 Ceiling	0.2 ppm Ceiling (Vacated) 0.8 mg/m3 Ceiling (Vacated)
Formaldehyde, 37-40% CAS#50-00-0	0.1 ppm TWA 0.3 ppm STEL	0.1 ppm Ceiling 0.016 ppm TWA 20 ppm IDLH	0.75 ppm TWA 2 ppm STEL
Methyl Alcohol CAS#67-56-1	200 ppm TWA 250 ppm STEL	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL 6000 ppm IDLH	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL

OSHA Vacated PELs: Glutaraldehyde: 0.2 ppm Ceiling; 0.8 mg/m3 Ceiling
Formaldehyde, 37-40%: 5 ppm Ceiling; 3 ppm TWA; 10 ppm STEL
Methyl Alcohol: 200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL;
325 mg/m3 STEL

Section 9 - Physical and Chemical Properties
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Physical State: Liquid

Appearance: Clear, colorless

Odor: Pungent

Vapor Pressure: Not available

Odor threshold: Not available

Vapor Density: Not available

pH: approx. 6.5

Relative Density: Not available

Melting point/freezing point: Not available

Solubility: Soluble in water

Boiling Point: Not available

Flash point: Not available

Evaporation Rate: Not available

Flammability (solid, gas): Not available

Partition coefficient: n-octanol/water: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: Not available

Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability. **Keep refrigerated (4 °C).**

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, and freezing.

Incompatibilities with Other Materials: Strong oxidizing agents, acids, strong bases, alcohols, amines, ammonia, ketones, nitriles, isocyanates, acid anhydrides, metals, and acid chlorides.

Hazardous Decomposition Products: Carbon oxides, sodium oxides, phosphorus oxides, hydrogen, formaldehyde, irritating toxic fumes and gases.

Section 11 - Toxicological Information

CAS#7758-80-7 Sodium phosphate, monobasic:

LD50 Oral: 8290 mg/kg (rat)

LD50 Dermal: >7940 mg/kg (rabbit)

LC50 Inhalation: >0.83 mg/L 4h (rat)

Carcinogenicity: Sodium phosphate, monobasic CAS#7758-80-7 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

CAS#7558-79-4 Sodium phosphate, dibasic:

LD50 Oral: 17 g/kg (rat)

LD50 Dermal: Not available

LC50 Inhalation: Not available

Carcinogenicity: Sodium phosphate, dibasic CAS#7558-79-4 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

CAS#111-30-8 Glutaraldehyde:

LD50 Oral: 77 mg/kg (rat)

LD50 Dermal: >2500 mg/kg (rat)

LC50 Inhalation: 0.28-0.39 mg/L 4h (rat)

Carcinogenicity: Glutaraldehyde CAS#111-30-8 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

CAS#50-00-0 Formaldehyde:

LD50 Oral: 500 mg/kg (rat)

LD50 Dermal: 270 mg/kg (rabbit)

LC50 Inhalation: 0.578 mg/L 4h (rat)

Carcinogenicity: Formaldehyde CAS#50-00-0 is not listed by OSHA. Formaldehyde is listed by IARC (Group 1, Carcinogenic to Humans), NTP (Known Carcinogen), ACGIH (A1, Known Human Carcinogen), and California Prop. 65 as a carcinogen.

CAS#67-56-1 Methyl Alcohol: RTECS#: PC1400000

LD50 Oral: >1187-2769 mg/kg (rat)
LD50 Dermal: 17100 mg/kg (rabbit)
LC50 Inhalation: 128.2 mg/L (rat) 4h

Carcinogenicity: Methyl Alcohol CAS# 67-56-1 is not listed by IARC, NTP, ACGIH, or OSHA. Methyl Alcohol is listed by California Prop. 65 as a developmental carcinogen.

Epidemiology: Not available

Teratogenicity: Not available

Reproductive Effects: Not available

Developmental Effects: Not available

Neurotoxicity: Not available

Mutagenicity: Not available

Specific Target Organ Toxicity, Single Exposure: Respiratory system, central nervous system, and optic nerve.

Specific Target Organ Toxicity, Repeated Exposure: Kidney, liver, heart, spleen, and blood.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains. Very toxic to aquatic life. May cause long-term adverse effects in the aquatic environment.

CAS#111-30-8 Glutaraldehyde:

LC50, freshwater fish: 5.4 mg/L 96h static (pimephales promelas)
LC50, freshwater fish: 7.8-22 mg/L 96h static (lepomis macrochirus)
LC50, freshwater fish: 2.6-4.8 mg/L 96h flow-through (oncorhynchus mykiss)
LC50, freshwater fish: 7.8-13 mg/L 96h static (oncorhynchus mykiss)
EC50, freshwater algae: 0.61 mg/L 72h (desmodesmus subspicatus)
EC50, freshwater algae: 0.84 mg/L 96h (desmodesmus subspicatus)
EC50, water flea: 0.56-1.0 mg/L 48h static (daphnia magna)
EC50, water flea: 14 mg/L 48h (daphnia magna)
EC50, microtox: 13.3 mg/L 17h
EC50, microtox: 76.0 mg/L 5min

CAS#50-00-0 Formaldehyde:

LC50, freshwater fish: 15 mg/L 96h (leuciscus idus)
EC50, water flea: 20 mg/L 96h
EC50, water flea: 2 mg/L 48h

CAS# 67-56-1 Methyl Alcohol:

LC50, freshwater fish: >10000 mg/L 96h (pimephales promelas)(fathead minnow)

EC50, water flea: >10000 mg/L 24h
EC50, algae: 22000 mg/L 96h (pseudokirchneriella subcapitata)(green algae)
IC50, bacteria: >1000 mg/L 3h (activated sludge)

Persistence and degradability: Not available

Bio-accumulative potential: Not available

Solubility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

DOT

Non-Regulated

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 6-8-22

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