

MATERIAL SAFETY DATA SHEET

DOGFISH SKELETON IN 5-10% FORMALIN
CAROLINA BIOLOGICAL

Revised: 13/10/09
Replaces: 15/05/08
Printed: 06/03/10

1. PRODUCT DESCRIPTION

Product Name: Dogfish Skeleton in 5-10% Formalin
Product Code(s): 24-3110, 24-3120, 24-3130, 24-3140, 24-3150, 24-3160,
24-3170
Size: N/A
Chemical Name: Does not apply, product is a mixture
CAS Number: 50-00-0
Formula: See Section 2
Synonyms: Formaldehyde Solution
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principle Hazardous Components:
Formaldehyde (CAS#50-00-0) 3.7%
TLV and PEL units: Formaldehyde: ACGIH-TLV Ceiling 0.3ppm;
OSHA-PEL 0.75 ppm (TWA), STEL 2 ppm

3. HAZARD IDENTIFICATION

Emergency Overview: May cause irritation to eyes or skin.
Potential Health Effects:
Eyes: May cause irritation.
Skin: May cause irritation.
Ingestion: May cause gastrointestinal discomfort.
Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:
Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.
Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.
Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.
Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): Not applicable
NFPA Rating: Health: 2
Fire: 2
Reactivity: 0

Extinguisher Media:
Use media suitable to extinguish surrounding fire.
Flammable Limits in Air % by Volume: LEL 7%, UEL 73%

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Autoignition Temperature: No information available
Special Firefighting Procedures:
Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: Not applicable

6. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:
Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Store tightly closed containers in a cool area. Protect against physical damage.
Other Precautions: Store away from heat, sparks, and open flame. Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):

A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Preferred
Mechanical(General): Acceptable
Special: No
Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight: Product is a mixture.

Melting Point: No information available

Boiling Point: 96.7 to 100C

Vapor Pressure: 17 to 20 at 25C

Vapor Density(Air=1): Approximately 1

Specific Gravity(H2O=1): Approximately 1

Percent Volatile by Volume: No information available

Evaporation Rate(H2O=1): Approximately the same as water

Solubility in Water: 100%

Appearance and Odor: Clear colorless liquid with extremely pungent odor

10. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Excessive heat

Incompatibility(Materials to Avoid): Reacts with phenol, strong acids or

alkalis violently. Reaction with hydrochloric acid may form

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carcinogenic
compounds

Hazardous Decomposition Products: If not contained formaldehyde gas may be evolved.

Hazardous Polymerization: May occur

11. TOXICITY DATA

Toxicity Data: To the best of our knowledge, the toxicological properties of this mixture have not been thoroughly evaluated. Data is listed below for

individual components

Formaldehyde: orl-rat LD50: 800 mg/kg; ihl-rat LC50; 590 mg/m3

Effects of Overexposure:

Acute: See section 3

Chronic:

Formaldehyde: Mutation data cited. Reproductive data cited.

Tumorigenic

data cited. Listed by the IARC as probably carcinogenic to humans on the

basis of animal evidence.

Conditions Aggravated by Overexposure: Individuals with pre-existing diseases

of the retina, kidneys, liver or cardiovascular system may have increased

susceptibility to the toxic effects of formaldehyde.

Target Organs: Eyes, kidneys, liver, cardiovascular systems, and skin

Primary Route(s) of Entry: Inhalation, skin contact, ingestion

12. ECOLOGICAL DATA

EPA Waste Numbers: Formaldehyde (U122) and Methanol (U154)

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal,

State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

Formaldehyde, solutions, 9, UN2209, PG III

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute Chronic

| Product or Components | SARA EHS Sec. 302 TPQ | SARA Sec. 313 Chemicals | | CERCLA Sec. 103 RQ lbs. | RCRA Sec. |
|-----------------------|-----------------------|-------------------------|------------------------|-------------------------|-----------|
| | | Name | Chemical List Category | | |
| 261.33 | | | | | |

| | | | | | |
|--------------|-----|-----|----|-----|-----|
| Formaldehyde | 500 | Yes | No | 100 | Yes |
|--------------|-----|-----|----|-----|-----|

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16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists
CAS Number..Chemical Abstracts Service Number
CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
DOT.....U.S. Department of Transportation
IARC.....International Agency of Research on Cancer
mppcf.....million particles per cubic foot
N/A.....Not Available
NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act