Flynap

Section 1

CAROLINA® www.carolina.com

Product Description

Product Name: Recommended Use: Synonyms: Distributor:

Flynap Science education applications N/A Carolina Biological Supply Company 2700 York Road, Burlington, NC 27215 1-800-227-1150 800-227-1150 (8am-5pm (ET) M-F) 800-424-9300 (Transportation Spill Response 24 hours)

Chemical Information: Chemtrec:

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;



Section 2



Highly flammable liquid and vapor. Harmful if swallowed. Toxic in contact with skin or if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. Causes damage to organs. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

GHS Classification:

Skin Corrosion/Irritation Category 1A, Serious Eye Damage/Eye Irritation Category 1, Specific Target Organ Systemic Toxicity (STOT) -Single Exposure Category 1, Flammable Liquid Category 2, Acute Toxicity - Inhalation Vapor Category 3, Acute Toxicity - Dermal Category 3, Hazardous to the aquatic environment - Acute Category 3, Hazardous to the aquatic environment - Chronic Category 3, Acute Toxicity - Oral Category 4

| Other Safety Precautions: | Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting// equipment. Use only non-sparking tools. Do not breathe dust/fume/gas/mist/vapors/spray. Do no eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. |
|--|--|
| Acute Toxicity Oral Contains Acute Toxicity Dermal Contains | 47.625 % of the mixture consists of ingredient(s) of unknown toxicity 47.625 % of the mixture consists of ingredient(s) of unknown toxicity |

Section 3

Composition / Information on Ingredients

| Chemical Name | CAS # | <u>%</u> |
|-------------------------|----------|----------|
| Triethylamine | 121-44-8 | 50 |
| Fragrance (Neutralizer) | | 25 |
| Ethanol | 64-17-5 | 22.63 |
| 2-Propanol | 67-63-0 | 1.25 |
| Methanol | 67-56-1 | 1.13 |

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

| Eyes: Skin Contact: Ingestion: | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. | | | |
|---|---|--|--|--|
| Section 5 | | Firefighting Procedures | | |
| Extinguishing Media: Fire Fighting Method | | Use dry chemical, CO2 or appropriate foam. Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus. Use water spray/fog for cooling. | | |
| Fire and/or Explosion Hazardous Combusti | | Vapors may travel back to ignition source. Closed Containers exposed to heat may explode. Carbon dioxide, Carbon monoxide, Nitrogen oxides | | |
| Section 6 | | Spill or Leak Procedures | | |
| Steps to Take in Case Released or Spilled: | equinee circ are spi No Fol Cle mir cor Pre to o rec gra Us cor sm | posure to the spilled material may be severely irritating or toxic. Follow personal protective uipment recommendations found in Section 8 of this SDS. Personal protective equipment eds must be evaluated based on information provided on this sheet and the special cumstances created by the spill including; the material spilled, the quantity of the spill, the a in which the spill occurred, and the expertise of employees in the area responding to the II. Never exceed any occupational exposure limits. health affects expected from the clean-up of this material if contact can be avoided. llow personal protective equipment recommendations found in Section 8 of this (M)SDS ean up spills immediately using Protective Equipment recommended in Section 8 at a nimum. Ventilate the contaminated area. Evacuate the area promptly. Wear a self- ntained breathing apparatus and appropriate Personal protection. (See Section 8.) event the spread of any spill to minimize harm to human health and the environment if safe do so. Wear complete and proper personal protective equipment following the commendation of Section 8 at a minimum. Dike with suitable absorbent material like inulated clay. Gather and store in a sealed container pending a waste disposal evaluation. e an inert absorbent such as sand or vermiculite. Place in properly labeled closed ntainer. Shut off ignition sources; including electrical equipment and flames. Do not allow oking in the area. Do not allow the spilled product to enter public drainage system or open terways. Do not flush spill to drain. | | |

Section 7

Handling and Storage

| Handling: | Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting// equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do no eat, drink or smoke when using this |
|---------------|---|
| 0 | product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from oxidizing materials and strong acids. |
| Storage: | Keep container tightly closed. Store in a well-ventilated place. Keep container tightly closed. Store in a well- ventilated place. Keep cool. Store locked up. This material should be kept in an area suitable for the storage of flammable liquids. Store away from oxidizing agents, sparks and flame. |
| Storage Code: | Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials. |

Section 8

Protection Information

| | AC | <u>GIH</u> | <u>OSHA P</u> | EL |
|---------------|--------------|---------------|-----------------|---------------|
| Chemical Name | <u>(TWA)</u> | <u>(STEL)</u> | <u>(TWA)</u> | <u>(STEL)</u> |
| Triethylamine | 1 ppm TWA | 3 ppm STEL | 25 ppm TWA; 100 | N/A |
| | | | mg/m3 TWA | |
| Ethanol | N/A | 1000 ppm STEL | 1000 ppm TWA; | N/A |
| | | | 1900 mg/m3 TWA | |

| 2-Propanol | 200 ppm TWA | 400 ppm STEL | 400 ppm TWA; 980 mg/m3 TWA | N/A | |
|--------------------------------------|---|-------------------------|---|---------|--|
| Methanol | 200 ppm TWA | 250 ppm STEL | 200 ppm TWA; 260 mg/m3 TWA | N/A | |
| Control Parameters | | | | | |
| Engineering Measures: | | · • | s, or other engineering contro ct to avoid overexposure. | ols are | |
| Personal Protective Equipment (PPE): | Lab coat, apron, eye was | sh, safety shower. | | | |
| Respiratory Protection: | Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided. | | | | |
| Respirator Type(s): | None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection. | | | | |
| Eye Protection: | Wear chemical splash goggles when handling this product. Have an eye wash station available. | | | | |
| Skin Protection: | Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. | | | | |
| Gloves: | Impervious rubber, Natu | ral latex,, Natural rub | ber, Nitrile, Butyl rubber, Ne | oprene | |

Section 9

Physical Data

| Formula: See Section 3 | Vapor Pressure: (Triethylamine) 54 mmHg at 20 °C |
|--|--|
| Molecular Weight: N/A | Evaporation Rate (BuAc=1): >1 |
| Appearance: Colorless | Vapor Density (Air=1): 3.5 (Triethylamine) |
| Odor: Moderate Alcohol Odor Amine | Specific Gravity: .73 (Triethylamine) |
| Odor Threshold: No data available | Solubility in Water: Soluble |
| pH: No data available | Log Pow (calculated): No data available |
| Melting Point: No data available -115 C | Autoignition Temperature: No data available |
| Boiling Point: 79 C | Decomposition Temperature: No data available |
| Flash Point: No data available -7 C | Viscosity: No data available |
| Flammable Limits in Air: (Triethylamine) LEL: 1.2% UEL: 8.0% | Percent Volatile by Volume: 100% |
| · · · · | - |

Section 10

Reactivity: Chemical Stability: Conditions to Avoid:

No data available Stable under normal conditions.

Sparks, open flame, other ignition sources, and elevated temperatures. Temperatures above flash point in combination with sparks, open flames, or other sources of ignition. Strong oxidizing agents, Organic Peroxides, Strong acids, Oxidizing materials Nitrogen oxides, Carbon dioxide, Carbon monoxide Will not occur

Reactivity Data

Incompatible Materials: Hazardous Decomposition Products: Hazardous Polymerization:

Section 11

Toxicity Data

Routes of Entry Symptoms (Acute): Delayed Effects:

Acute Toxicity: Chemical Name Triethylamine Inhaltion and skin contact. , Eye disorders, Liver disorders, Impaired Kidney Function No data available

CAS Number 121-44-8

Oral LD50 Oral LD50 Rat 460 mg/kg Oral LD50 Mouse 546 mg/kg

Dermal LD50 Dermal LD50 Rabbit 570 UL/KG Inhalation LC50 Inhalation LC50 (4h) Mouse = 6000 ul/l Inhalation LC50 (4h) Rat 7.1 MG/L

| | Salety | Data Sheet | | |
|--|--|--|---|---|
| 2-Propanol | 67-63-0 | Oral LD50 Rat 5045 mg/kg Oral LD50 Mouse | 9 | Inhalation LC50 (4h) Rat 16000 MG/L |
| Methanol | 67-56-1 | 3600 mg/kg Oral LD50 Mouse 7300 mg/kg | 3 | Inhalation LC50 (4h) Rat 64000 MG/L |
| Carcinogenicity: Chemical Name | CAS Numbe | r IARC | NTP | OSHA |
| Ethanol | CAS Number 64-17-5 | Listed | Listed | Listed |
| 2-Propanol | 67-63-0 | Listed | Not listed | Not listed |
| Methanol | 67-56-1 | Not listed | Not listed | Not listed |
| Chronic Effects: Mutagenicity: Teratogenicity: Sensitization: Reproductive: Target Organ Effects: Acute: Chronic: | No evidence of a mutagenic effect. No evidence of a teratogenic effect (b No evidence of a sensitization effect. No evidence of negative reproductive See Section 2 Mutation data cited., Reproductive Tumorigenic data cited. | effects. | s a carcinogen by IAF | RC, NTP or OSHA., |
| Section 12 | | Ecological Dat | a | |
| Overview: | Slight ecological hazard. In hi wildlife. Harmful to fish and ot | | product may be dang | erous to plants and/or |
| Mobility: Persistence: Bioaccumulation: Degradability: Other Adverse Effects: | No data Biodegradation No data No data No data | ner water organisms. | | |
| Chemical Name Triethylamine | CAS Number 121-44-8 | Eco Toxicity 96 HR LC50 PIMEPH 48 HR EC50 DAPHN | | |
| Ethanol | 64-17-5 | 96 HR LC50 DAPHN 96 HR LC50 DAPHN 48 HR EC50 DAPHN 24 HR EC50 DAPHN | IALES PROMELAS > IA MAGNA 2 MG/L [\$ | • 100 MG/L [STATIC] STATIC] |
| 2-Propanol | 67-63-0 | 48 HR LC50 DAPHN 96 HR LC50 LEPOM | IA MAGNA 9268 - 14 IS MACROCHIRUS > IALES PROMELAS 1 IA MAGNA 13299 M(| 221 MG/L ▶ 1400000 µG/L 1130 MG/L [STATIC] G/L |
| Methanol | 67-56-1 | 96 HR EC50 DESMO 96 HR LC50 PIMEPH | | |
| Section 13 | Dis | posal Informa | tion | |
| Disposal Methods: | | e with all applicable Fee | | l regulations. Always |
| Wasta Disposal Cada/s | • | aste disposer (TSD) to | assure compliance. | |

Waste Disposal Code(s):

Transport Information

Ground - DOT Proper Shipping Name:

UN2924, Flammable Liquid, corrosive, n.o.s. (contains Ethyl Alcohol, Triethylamine), 3, II Label(s) Required: FLAMMABLE LIQUID, CORROSIVE

Not Determined

Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Section 15

Section 14

Regulatory Information

TSCA Status:

All components in this product are on the TSCA Inventory.

| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|---------------|---------------|----------------------|---------------|--|-----------|------------------|
| Triethylamine | 121-44-8 | Triethylamine | 5000 lb RQ | 5000 lb final RQ; 2270 kg final RQ | No | No |
| Ethanol | 64-17-5 | No | No | No | No | No |
| 2-Propanol | 67-63-0 | Isopropyl alcohol | No | No | No | No |
| Methanol | 67-56-1 | No | No | No | No | No |

California Prop 65:

Section 16

WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

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Additional Information

Revised: 09/03/2014

Replaces: 09/03/2014

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.

| Glossary | | | |
|----------|---|------|---|
| ACGIH | American Conference of Governmental | NTP | National Toxicology Program |
| | Industrial Hygienists | OSHA | Occupational Safety and Health Administration |
| CAS | Chemical Abstract Service Number | PEL | Permissible Exposure Limit |
| CERCLA | Comprehensive Environmental Response, | ppm | Parts per million |
| | Compensation, and Liability Act | RCRA | Resource Conservation and Recovery Act |
| DOT | U.S. Department of Transportation | SARA | Superfund Amendments and Reauthorization Act |
| IARC | International Agency for Research on Cancer | TLV | Threshold Limit Value |
| N/A | Not Available | TSCA | Toxic Substances Control Act |
| | | IDLH | Immediately dangerous to life and health |