

Date of issue: 05/15/2015 Version: 1.0

| 1.1. Identification | |
|--|---|
| Product form | : Substance |
| Substance name | : Pyrazine, propyl- |
| CAS-No. | : 18138-03-9 |
| Product code | : (US) 712 |
| Formula | : C7H10N2 |
| Synonyms | : Propylpyrazine / 2-Propylpyrazine / Pyrazine, 2-propyl- |
| | ctions on use |
| No additional information available | |
| 1.3. Supplier | |
| Synerzine 5340 Hwy 42 S Ellenwood, Georgia 30294 - USA T 404-524-6744 - F 404-577-1651 info@synerzine.com - <u>www.synerzine.com</u> | |
| | r |
| Emergency number | : Infotrac 1-800-535-5053 (Contract# 102471) Dial +1-352-323-3500 when outside the US |
| SECTION 2: Hazard(s) identifica | tion |
| 2.1. Classification of the substance | |
| | |
| GHS-US classification Clammable liquids Category H226 | Flammable liquid and vapour |
| 3 | |
| Full text of H statements : see section 16 | |
| Full text of H statements : see section 16 | |
| | g precautionary statements |
| GHS-US labeling | g precautionary statements |
| 2.2. GHS Label elements, includin GHS-US labeling | g precautionary statements : ; |
| C.2. GHS Label elements, includin GHS-US labeling Hazard pictograms (GHS-US) | g precautionary statements : : : Warning |
| 2.2. GHS Label elements, includin | |

2.4. Unknown acute toxicity (GHS US)

Not applicable

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| SECTION 3: Composition/Inforn | natioi | i on ingredients | | | |
|---|----------|--|-----------------------|----------------|-----------------------------------|
| 3.1. Substances | | | | | |
| Name | | Pr | oduct identifier | % | GHS-US classification |
| Pyrazine, propyl- (Main constituent) | | (CA | S-No.) 18138-03-9 | 98 - 100 | Flam. Liq. 3, H226 |
| Full text of hazard classes and H-statements : s | ee secti | on 16 | | | |
| 3.2. Mixtures | | | | | |
| Not applicable | | | | | |
| SECTION 4: First-aid measures | | | | | |
| 4.1. Description of first aid meas | ures | | | | |
| First-aid measures general | : | Never give anything by mouth to (show the label where possible). | an unconscious pers | son. If you fe | el unwell, seek medical advice |
| First-aid measures after inhalation | | Remove person to fresh air and k Allow the victim to rest. | eep comfortable for | breathing. A | llow victim to breathe fresh air. |
| First-aid measures after skin contact | : | Remove/Take off immediately all | contaminated cloth | ing. Rinse sk | in with water/shower. |
| First-aid measures after eye contact | : | Rinse eyes with water as a precau attention if pain, blinking or redn | | ately with pl | enty of water. Obtain medical |
| First-aid measures after ingestion | : | Call a poison center/doctor/phys Obtain emergency medical attent | | ell. Rinse mo | outh. Do NOT induce vomiting. |
| 4.2. Most important symptoms an | d effe | cts (acute and delayed) | | | |
| Potential Adverse human health effects and symptoms | : | Based on available data, the class | fication criteria are | not met. | |
| Symptoms/effects | : | Not expected to present a signific | ant hazard under an | ticipated co | nditions of normal use. |

Treat symptomatically.

| SECTION 5: Fire-fighting measures | | | |
|---|--|--|--|
| 5.1. Suitable (and unsuitable) extinguishing media | | | |
| Suitable extinguishing media | : Foam. Dry powder. Carbon dioxide. Water spray. Sand. | | |
| Unsuitable extinguishing media | : Do not use a heavy water stream. | | |
| 5.2. Specific hazards arising from the | e chemical | | |
| Fire hazard | : Flammable liquid and vapour. | | |
| Explosion hazard | : May form flammable/explosive vapor-air mixture. | | |
| Reactivity | : Flammable liquid and vapour. | | |
| 5.3. Special protective equipment and precautions for fire-fighters | | | |
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. | | |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection. | | |

| SECTION 6: Accidental release measures | | |
|---|--|--|
| .1. Personal precautions, protective equipment and emergency procedures | | |
| General measures | : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. | |
| 6.1.1. For non-emergency personnel | | |
| Emergency procedures | : Ventilate spillage area. No open flames, no sparks, and no smoking. Evacuate unnecessary personnel. | |
| 6.1.2. For emergency responders | | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection. | |
| Emergency procedures | : Ventilate area. | |
| 22/22/22/2 | | |

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| 6.2. Environmental precautions Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. | | |
|---|--|--|
| 6.3. Methods and material for containment and cleaning up | | |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. | |
| Other information | : Dispose of materials or solid residues at an authorized site. | |

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

| SECTION 7: Handling and storage | | | |
|---|--|--|--|
| 7.1. Precautions for safe handling | | | |
| Additional hazards when processed | : Handle empty containers with care because residual vapors are flammable. | | |
| Precautions for safe handling | : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. | | |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. | | |
| 7.2. Conditions for safe storage, including any incompatibilities | | | |
| Technical measures | : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. | | |
| Storage conditions | : Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed. | | |
| Incompatible products | : Strong bases. Strong acids. | | |
| Incompatible materials | : Sources of ignition. Direct sunlight. Heat sources. | | |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

| 8.2. Appropriate engineering control | S |
|--------------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |
| Environmental exposure controls | : Avoid release to the environment. |
| 8.2 Individual protection measures/ | Porsonal protoctivo oquinment |

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Protective gloves. Wear protective gloves.

Eye protection:

Safety glasses. Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

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Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical | and chemical properties | |
|---|--|--|
| Physical state | : Liquid | |
| Color | : Colorless to pale yellow | |
| Odor | : mild nutty aroma green, vegetable | |
| Odor threshold | : No data available | |
| рН | : No data available | |
| Melting point | : Not applicable | |
| Freezing point | : No data available | |
| Boiling point | : 149 °F @12 mmHg | |
| Flash point | : 120 °F closed cup | |
| Relative evaporation rate (butyl acetate=1) | : No data available | |
| Flammability (solid, gas) | : Not applicable. Flammable liquid and vapour. | |
| Vapor pressure | : No data available | |
| Relative vapor density at 20 °C | : No data available | |
| Relative density | : No data available | |
| Specific gravity / density | : 0.965 - 0.975 20/20 | |
| Molecular mass | : $\approx 122 \text{ g/mol}$ | |
| Solubility | : Slighltly soluble in water. Soluble in organic solvents. | |
| Log Pow | : No data available | |
| Auto-ignition temperature | : No data available | |
| Decomposition temperature | : No data available | |
| Viscosity, kinematic | : No data available | |
| Viscosity, dynamic | : No data available | |
| Explosion limits | : No data available | |
| Explosive properties | : No data available | |
| Oxidizing properties | : No data available | |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions. Flammable liquid and vapour. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

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| SECTION 11: Toxicological information | | | |
|---|--|--|--|
| 11.1. Information on toxicological eff | ects | | |
| Acute toxicity | : Not classified | | |
| Skin corrosion/irritation | : Not classified | | |
| Serious eye damage/irritation | : Not classified | | |
| Respiratory or skin sensitization | : Not classified | | |
| Germ cell mutagenicity | : Not classified | | |
| | Based on available data, the classification criteria are not met | | |
| Carcinogenicity | : Not classified | | |
| Reproductive toxicity | : Not classified | | |
| | Based on available data, the classification criteria are not met | | |
| Specific target organ toxicity – single exposure | : Not classified | | |
| Specific target organ toxicity – repeated exposure | : Not classified | | |
| Aspiration hazard | : Not classified | | |
| Potential Adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. | | |
| Symptoms/effects | : Not expected to present a significant hazard under anticipated conditions of normal use. | | |
| | | | |

| SECTION | SECTION 12: Ecological information | | |
|-----------|------------------------------------|--|--|
| 12.1. | Toxicity | | |
| Ecology - | - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. | |

| 12.2. Persistence and degradability | | |
|-------------------------------------|------------------|--|
| Pyrazine, propyl- (18138-03-9) | | |
| Persistence and degradability | Not established. | |
| 12.3. Bioaccumulative potentia | | |
| Pyrazine, propyl- (18138-03-9) | | |
| Bioaccumulative potential | Not established. | |
| 12.4. Mobility in soil | | |
| No additional information available | | |

12.5. Other adverse effects

Other information

: Avoid release to the environment.

| SECTION 13: Disposal considerations | | | |
|---|---|--|--|
| 13.1. Disposal methods | | | |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. | | |
| Product/Packaging disposal recommendations | Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. | | |
| Additional information | : Flammable vapors may accumulate in the container. Handle empty containers with care because residual vapors are flammable. | | |
| Ecology - waste materials | : Avoid release to the environment. | | |
| SECTION 14: Transport information | on | | |
| Department of Transportation (DOT) In accordance with DOT | | | |
| Transport document description | : UN1993 Flammable liquids, n.o.s., 3, III | | |

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|---|--|
| UN-No.(DOT) | : UN1993 |
| Proper Shipping Name (DOT) | : Flammable liquids, n.o.s. |
| Class (DOT) | : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 |
| Packing group (DOT) | : III - Minor Danger |
| Hazard labels (DOT) | : 3 - Flammable liquid |
| | REMARKE LEQUE |
| DOT Packaging Non Bulk (49 CFR 173.xxx) | : 203 |
| DOT Packaging Bulk (49 CFR 173.xxx) | : 242 |
| DOT Symbols | : G - Identifies PSN requiring a technical name |
| DOT Special Provisions (49 CFR 172.102) | B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HB2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal |
| DOT Packaging Exceptions (49 CFR 173.xxx) | : 150 |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : 60 L |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) | : 220 L |
| DOT Vessel Stowage Location | : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel. |
| Other information | : No supplementary information available. |
| Transportation of Dangerous Goods | |
| Transport by sea | |
| Transport document description (IMDG) | : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III |
| UN-No. (IMDG) | : 1993 |
| Proper Shipping Name (IMDG) | : FLAMMABLE LIQUID, N.O.S. |
| Class (IMDG) | : 3 - Flammable liquids |
| Packing group (IMDG) | : III - substances presenting low danger |
| Limited quantities (IMDG) | : 5L |
| Air transport | |
| Transport document description (IATA) | : UN 1993 Flammable liquid, n.o.s., 3, III |
| UN-No. (IATA) | : 1993 |
| Proper Shipping Name (IATA) | : Flammable liquid, n.o.s. |
| Class (IATA) | : 3 - Flammable Liquids |
| Packing group (IATA) | : III - Minor Danger |
| 00 - \mathbf{r} () | U. |

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SECTION 15: Regulatory information

15.1. US Federal regulations

Pyrazine, propyl- (18138-03-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Pyrazine, propyl- (18138-03-9)

Listed on the Canadian NDSL (Non-Domestic Substances List)

EU-Regulations

Pyrazine, propyl- (18138-03-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Pyrazine, propyl- (18138-03-9)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

No additional information available

| Data sources | REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. |
|-------------------------|--|
| Other information | : None. |
| Full text of H-phrases: | |
| H226 | Flammable liquid and vapour |
| IFPA health hazard | : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury. |
| IFPA fire hazard | : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. |
| FPA reactivity | : 0 - Material that in themselves are normally stable, even under fire conditions. |
| Hazard Rating | |
| Health | : 2 Moderate Hazard - Temporary or minor injury may occur |
| Flammability | : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA) |
| Physical | : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |
| Personal protection | : G |
| | G - Safety glasses, Gloves, Vapor respirator |

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product