

Valerophenone Safety Data Sheet 2617115 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 02/11/2016 Version: 1.0

| SECTION 1: Identification | |
|---|---|
| 1.1. Identification | |
| Product form | : Substance |
| Substance name | : Valerophenone |
| CAS No | : 1009-14-9 |
| Product code | : 2617-1-15 |
| Formula | : C11H14O |
| Other means of identification | : MFCD00009480 |
| 1.2. Relevant identified uses of the s | ubstance or mixture and uses advised against |
| Use of the substance/mixture | : Laboratory chemicals Manufacture of substances Scientific research and development |
| 1.3. Details of the supplier of the safe | ety data sheet |
| SynQuest Laboratories, Inc. P.O. Box 309 Alachua, FL 32615 - United States of Americ T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs | |
| 1.4. Emergency telephone number | (0.44) 502 4000 (25 Octoberry Account 40000) |
| Emergency number | : (844) 523-4086 (3E Company - Account 10069) |
| SECTION 2: Hazard(s) identificati | on |
| 2.1. Classification of the substance of | |
| Classification (GHS-US) | |
| | |
| Skin Irrit. 2 H315 - Causes skin irritation Eye Irrit. 2A H319 - Causes serious eye in | rritation |
| STOT SE 3 H335 - May cause respirator | |
| Full text of H-phrases: see section 16 | |
| | |
| 2.2. Label elements | |
| GHS-US labeling | |
| Hazard pictograms (GHS-US) | |
| | |
| | |
| | |
| | GHS07 |
| Signal word (GHS-US) | : Warning |
| Hazard statements (GHS-US) | : H315 - Causes skin irritation |
| | H319 - Causes serious eye irritation |
| | H335 - May cause respiratory irritation |
| Precautionary statements (GHS-US) | : P261 - Avoid breathing fumes, mist, spray, vapors |
| | P264 - Wash skin thoroughly after handling |
| | |
| | P271 - Use only outdoors or in a well-ventilated area |
| | P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water |
| | P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing |
| | P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact |
| | P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep 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 |
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| | P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep 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 P312 - Call a POISON CENTER or doctor/physician if you feel unwell P32+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention |
| | P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep 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 P312 - Call a POISON CENTER or doctor/physician if you feel unwell P32+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse |
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| | P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep 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 P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up |

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| 2.3. Other hazards No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable SECTION 3: Composition/information on ingredients 3.1. Substance Substance type : Mono-constituent Name Product identifier % Classification (GHS-US) Valerophenone (CAS No) 1009-14-9 <= 100 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Full text of H-phrases: see section 16 3.2. Mixture Nat applicable Nat applicable | | | | | |
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| | I text of H-phrases: see section 16 | | | | |
| Net applicable | • | | | | |
| Not applicable | t applicable | | | | |
| SECTION 4: First aid measures | CTION 4: First aid measures | | | | |
| 4.1. Description of first aid measures | | | | | |
| First-aid measures general : In case of accident or if you feel unwell, seek medical advice immediately (show the label | st-aid measures general | | | | |
| where possible). Move the affected personnel away from the contaminated area. | | | , , , | , | |
| First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificia respiration. Get medical advice/attention. | st-aid measures after inhalation | | | ble for breathin | g. If not breathing, give artificial |
| First-aid measures after skin contact : Wash with plenty of soap and water. Get medical advice/attention. | | | | | |
| First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses present and easy to do. Continue rinsing. Get medical advice/attention. | st-aid measures after eye contact | | | | |
| First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse | st-aid measures after ingestion | : Do No | OT induce vomiting. Never give anything | by mouth to an | |
| | | | mouth out with water. Get medical advice/attention. | | |
| 4.2. Most important symptoms and effects, both acute and delayed | | | | | |
| Symptoms/injuries: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11. | nptoms/injuries | : The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11. | | | |
| 4.3. Indication of any immediate medical attention and special treatment needed | | | | | |
| Treat symptomatically. | at symptomatically. | | | | |
| SECTION 5: Firefighting measures | CTION 5: Firefighting measures | | | | |
| 5.1. Extinguishing media | | | | | |
| Suitable extinguishing media : Alcohol resistant foam. Carbon dioxide. Dry powder. Water spray. Use extinguishing media appropriate for surrounding fire. | table extinguishing media | | | | |
| 5.2. Special hazards arising from the substance or mixture | | | | | |
| Fire hazard : Thermal decomposition generates: Carbon oxides. | | | | des. | |
| Explosion hazard : Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed containers. May form flammable/explosive vapor-air mixture. | olosion hazard | | Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed | | |
| 5.3. Advice for firefighters | Advice for firefighters | | | | |
| Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. | afighting instructions | : In cas | e of fire: Evacuate area. Fight fire remote | ely due to the ris | sk of explosion. |
| Protection during firefighting : Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection". | tection during firefighting | | | | |
| SECTION 6: Accidental release measures | CTION 6: Accidental release measu | ures | | | |
| 6.1. Personal precautions, protective equipment and emergency procedures | . Personal precautions, protective equi | pment | and emergency procedures | | |
| General measures : Evacuate unnecessary personnel. Ensure adequate air ventilation. Do not breathe gas, fume vapor or spray. | neral measures | : Evacuate unnecessary personnel. Ensure adequate air ventilation. Do not breathe gas, fumes, | | | |
| 6.1.1. For non-emergency personnel | .1. For non-emergency personnel | | | | |
| Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. | ergency procedures | : Only qualified personnel equipped with suitable protective equipment may intervene. | | | |
| 6.1.2. For emergency responders | δ.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". | tective equipment | | | | |

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| Emerge | ncy procedures | : Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level. Consider the risk of potentially explosive atmospheres. Eliminate every possible source of ignition. | | |
|---|-------------------------------------|---|--|--|
| 6.2. | Environmental precautions | | | |
| Avoid release to the environment. Notify authorities if product enters sewers or public waters. | | | | |
| 6.3. | Methods and material for containm | ent and cleaning up | | |
| For con | tainment | : Stop leak if safe to do so. Dike for recovery or absorb with appropriate material. | | |
| Method | s for cleaning up | : Take up large spills with pump or vacuum and finish with dry chemical absorbent. Use explosion-proof equipment. Take up small spills with dry chemical absorbent. Sweep or shovel spills into appropriate container for disposal. Ventilate area. | | |
| Other in | formation | : For disposal of solid materials or residues refer to section 13 : "Disposal considerations". | | |
| 6.4. | Reference to other sections | | | |
| No addi | tional information available | | | |
| SECT | ION 7: Handling and storage | | | |
| 7.1. | Precautions for safe handling | | | |
| Additior | al hazards when processed | : Handle empty containers with care because residual vapors are flammable. | | |
| Precaut | ions for safe handling | : Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe fumes, mist, spray, vapors. Wear personal protective equipment. Avoid contact with skin and eyes. Keep away from ignition sources (including static discharges). Proper grounding procedures to avoid static electricity should be followed. Use only non-sparking tools. | | |
| Hygiene measures : | | : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink smoke when using this product. Always wash hands after handling the product. | | |
| 7.2. | Conditions for safe storage, includ | ing any incompatibilities | | |
| Technic | al measures | : Comply with applicable regulations. | | |
| Storage | conditions | : Keep container closed when not in use. Keep away from ignition sources. | | |
| Incompatible materials : | | Refer to Section 10 on Incompatible Materials. | | |
| | | | | |

Storage area : Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**

No additional information available

| 8.2. Exposure controls | |
|----------------------------------|---|
| Appropriate engineering controls | : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. |
| Hand protection | : Protective gloves. 29 CFR 1910.138: Hand Protection. |
| Eye protection | : Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection. |
| Skin and body protection | : Wear suitable protective clothing. |
| Respiratory protection | : In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection. |
| Other information | : Safety shoes. 29 CFR 1910.136: Foot Protection. |

| SECTION 9: Physical and chemical properties | | | | |
|---|--|--|--|--|
| 9.1. Information on basic physical and | 1. Information on basic physical and chemical properties | | | |
| Physical state | : Liquid | | | |
| Color | : No data available | | | |
| Odor | : No data available | | | |
| Odor threshold | : No data available | | | |
| рН | : No data available | | | |
| Melting point | : No data available | | | |
| Freezing point | : No data available | | | |
| Boiling point | : No data available | | | |
| Flash point | : 102 °C | | | |
| Relative evaporation rate (butyl acetate=1) | : No data available | | | |

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| Flammability (solid, gas) | : No data available |
|---------------------------------|---------------------|
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Vapor pressure | : No data available |
| Relative density | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Molecular mass | : 162.23 g/mol |
| Solubility | : No data available |
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| | |

9.2. **Other information**

No additional information available

| SECT | ION 10: Stability and reactivity |
|---------|---|
| 10.1. | Reactivity |
| No addi | itional information available |
| 10.2. | Chemical stability |
| The pro | duct is stable at normal handling and storage conditions. |
| 10.3. | Possibility of hazardous reactions |
| No addi | tional information available |
| 10.4. | Conditions to avoid |
| Keep av | way from heat, sparks and flame. |
| 10.5. | Incompatible materials |
| Strong | acids. Strong bases. Strong oxidizing agents. |
| 10.6. | Hazardous decomposition products |
| | normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of e Section 5. |

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity | : Not classified |
|--|-------------------------------------|
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : May cause respiratory irritation. |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |

| SECTIC | DN 12: Ecological information |
|------------|-------------------------------|
| 12.1. | Toxicity |
| No additio | onal information available |

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| 12.2. | Persistence and degradability | | |
|---------|-------------------------------|--|--|
| | | | |
| No addi | tional information available | | |
| 12.3. | Bioaccumulative potential | | |
| No addi | tional information available | | |
| 12.4. | Mobility in soil | | |
| No addi | tional information available | | |
| | | | |
| 12.5. | Other adverse effects | | |
| No addi | itional information available | | |

| SECTION 13: Disposal considera | ations |
|---------------------------------------|---|
| 13.1. Waste treatment methods | |
| Waste treatment methods | : Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. |
| Waste disposal recommendations | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Additional information | : Recycle the material as far as possible. |
| | teau |
| SECTION 14: Transport informat | lon |

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

| SECTION 15: Regulatory information | |
|---|--|
| 15.1. US Federal regulations | |
| Valerophenone (1009-14-9) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Valerophenone (1009-14-9)

Listed on the Canadian DSL (Domestic Sustances List)

EU-Regulations

No additional information available

National regulations

Valerophenone (1009-14-9)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

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SECTION 16: Other information

Full text of H-phrases:

| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
|--------------------|--|
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| NFPA health hazard | : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given. |
| NFPA fire hazard | : 1 - Must be preheated before ignition can occur. |
| NFPA reactivity | : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. |
| HMIS III Rating | |
| Health | : 2 Moderate Hazard - Temporary or minor injury may occur |
| Flammability | : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB) |
| Physical | : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NO react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |

SDS US (GHS HazCom 2012)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.