

| | |
|--------------|---|
| HEALTH | 2 |
| FLAMMABILITY | 2 |
| REACTIVITY | 0 |

Section 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

| | |
|----------------|---|
| Product Name | Isobutyl Caproate (Isobutyl Hexanoate), Natural |
| Product Number | 0220200 |
| CAS-No. | 105-79-3 |

1.2 Product Recommended Use

Flavorings

1.3 Preparation Information

| | |
|-----------|---|
| Company | Aurochemicals 7 Nicoll Street Washingtonville, NY 10992 |
| Telephone | 845-496-6065 |
| Fax | 845-496-6248 |

1.4 Emergency Telephone Number

1-800-535-5053
International - 1-352-323-3500 collect

Section 2: HAZARD(s) IDENTIFICATION

2.1 Classification of substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319

2.2 GHS Label Elements, Including precautionary statements

Pictogram



Signal Statement Warning

| | |
|---------------------|---|
| Hazard Statement(s) | H227 Combustible liquid H315 Cause skin irritation H319 Causes serious eye irritation |
|---------------------|---|

Precautionary Statement(s)

| | |
|---------------|--|
| P210 | Keep away from heat/sparks/open flames/hot surfaces-No Smoking |
| P264 | Wash skin thoroughly after handling |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water |
| 305+P351+P338 | IF IN EYES: Rinse cautiously with water to several minutes. Remove contact lenses if present and easy to do. Continue rinsing. |
| P332+P313 | If skin irritation occurs: Get medical advice/attention |
| P337+P313 | If eye irritation persists: Get medical advice/attention |
| P362 | Take off contaminated clothing and wash before reuse |
| P370+P378 | In case of fire: Use dry sand, dry chemical or alcohol resistant foam for extinction |
| P403+P235 | Store in a well ventilated place. Keep cool |

P501 Dispose of contents/container to an approved waste disposal plant

2.3 HNOC (Hazards not otherwise classified or not covered by GHS –None)

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| | |
|------------------|--|
| 3.1 Substances | Isobutyl Caproate |
| Synonyms | |
| Formula | C ₁₀ H ₂₀ O ₂ |
| Molecular Weight | 172.26 g/mol |
| CAS-No | 105-79-3 |
| EC-No. | 203-332-6 |

Hazardous Components

| Component | Classification | Concentration |
|--------------------|--|---------------|
| Isobutyl hexanoate | Flammable liquids (Category 4), H227 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 | |

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

| | |
|-------------------------|---|
| General advice | Consult physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area |
| Inhalation | Provide fresh air; keep at rest and at a comfortable position to breathe. Consult a physician |
| Contact with skin: | Remove contaminated clothing. Rinse skin with cool water then wash with mild soap and warm water and contact a physician. |
| Contact with eyes: | Rinse thoroughly with plenty of water for at least 15 as a precaution and consult a physician. |
| Ingestion | DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |
| Clothing contamination: | Remove contaminated clothing and wash before reuse. |

4.2 Most important symptoms and effects both acute and delayed See section 2.2 and or section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

Section 5: FIREFIGHTING MEASURES

| | |
|---|--|
| 5.1 Extinguishing Media | |
| Suitable Extinguishing Media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide |
| 5.2 Special hazards arising from the substance or mixture | Carbon oxides |
| 5.3 Advice for fire fighters | Wear self contained breathing apparatus for firefighting if necessary. Emits toxic fumes under fire conditions |
| 5.4 Further information | Use water spray to cool unopened containers. |

Section 6: ACCIDENTIAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe area.

- 6.2 Environment precautions Beware of vapors accumulating to form explosive concentrations. **Vapors can accumulate in low areas.**
Prevent further leakage or spillage if safe to do so. Do not allow to enter drains or sewage system.
- 6.3 Methods and materials for containment and clean up Contain spillage. Soak up with absorbent material. Sweep up with broom and shovel. Place in a suitable, closed container for disposal.
- 6.4 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

Section 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling Avoid contact with skin and eyes. Avoid Inhalation of vapor or mist. Normal measures for preventive fire protection.
- 7.2 Conditions for Safe storage Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- 7.3 Specific End use(s) Flavorings

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
Components with workplace control parameters: Controls no substances with occupational exposure limit values.
- 8.2 Exposure Controls
Appropriate Engineering Controls Avoid contact with skin, eyes and clothing.
Handle in accordance with good industrial hygiene and safety practices.
Wash hands immediately after handling the product; before breaks and at the end of the day.
- Personal protective equipment
These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. They should not be construed as offering an approval for any specific use scenario.
- Eye/face protection Wear appropriate safety glasses with side shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- Skin protection Wear chemically resistant, rubber gloves, when handling this product.. Use proper glove removal techniques (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.
- Body protection Impervious clothing protecting against chemicals, should be selected specifically for the work place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
- Respiratory protection Where risk assessment shows air purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a back up to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate governmental standards such as NIOSH (US) or CEN (EU).
- Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | | |
|---|--|-------------------------------|
| a | Appearance | Colorless to yellowish liquid |
| b | Odor | Fruity, wine-like |
| c | Odor Threshold | No data available |
| d | pH | No data available |
| e | Melting Point /Freezing Point | No data available |
| f | Boiling Point | 200°C |
| g | Flash Point | 76°C closed cup |
| h | Evaporation Rate | No data available |
| i | Flammability (Solid, Gas) | No data available |
| j | Upper/lower Flammability Limit | No data available |
| k | Vapor pressure | No data available |
| l | Vapor density | No data available |
| m | Relative density at 25°C | 0.854-0.861 |
| n | Solubility | 1:2 in 80% alcohol |
| o | Partition coefficient: n-octanol/water | No data available |
| p | Auto-ignition Temp. | No data available |
| q | Decomposition Temp. | No data available |
| r | Viscosity | No data available |
| s | Explosive properties | No data available |
| t | Oxidizing properties | No data available |

9.2 Other Safety Information No data available

Section 10: STABILITY AND REACTIVITY

| | | |
|------|------------------------------------|---|
| 10.1 | Reactivity | No data available |
| 10.2 | Chemical Stability | Stable under recommended storage conditions |
| 10.3 | Possibility of Hazardous reactions | No data available |
| 10.4 | Conditions to avoid | Heat, Flames, Sparks |
| 10.5 | Incompatible materials | Strong oxidizing agents, Strong bases |
| 10.6 | Hazardous decomposition products | No data available |
| 10.7 | Further Information | No data available |

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| | |
|-----------------------------------|--|
| Acute Toxicity | |
| LD50-Oral | No data available |
| LC50-Inhalation | No data available |
| LD50-Dermal | No data available |
| Skin corrosion/irritation | Results: Rabbit: Moderate Skin Irritation - 24 h (Draize Test) |
| Serious eye damage/eye irritation | No data available |
| Respiratory or skin sensitization | No data available |
| Germ Cell mutagenicity | No data available |

Carcinogenicity

| | |
|---|---|
| IARC | No component of this product, present levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| ACGIH | No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| NTP | No component of this product, present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA | No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |
| Reproductive toxicity | No data available |
| Specific target organ toxicity-single exposure (GHS) | No data available |
| Specific target organ toxicity-repeated exposures (GHS) | No data available |
| Aspiration Hazards | No data available |
| Signs and Symptoms of Exposure | To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated |
| Synergistic effect | No data available |
| RTECS: | MO8389000 |

Section 12: ECOLOGICAL INFORMATION

| | |
|---|--|
| 12.1 Toxicity | No data available |
| 12.2 Persistence and degradability | No data available |
| 12.3 Bioaccumulative potential | No data available |
| 12.4 Mobility in soil | No data available |
| 12.5 Results of PBT and vPvB assessment | PBT/vPvB assessment not available as chemical safety assessment not required / not conducted |
| 12.6 Other adverse effects | No data available |

Section 13: DISPOSAL CONSIDERATIONS

| | |
|-----------------------|--------------------------------|
| 13.1 Disposal methods | |
| Product: | According to local regulations |
| Packaging | According to local regulations |

Section 14: TRANSPORT INFORMATION

| | |
|---------------------------|---|
| DOT (US) | NA-Number: 1993 Class: None Packing Group: III |
| Proper shipping name: | Combustible liquid, n.o.s. (Isobutyl hexanoate) |
| Marine Pollutant: | No |
| Poison Inhalation Hazard: | No |
| IMDG | Not dangerous goods |
| IATA | Not dangerous goods |

Section 15: REGULATORY INFORMATION

Safety Data Sheet



| | | | |
|--|---|---------------|------------|
| Reach No. | A registration number is not available for this substance as its uses are exempted from registration, the annual tonnage not require a registration or the registration is envisaged for a later registration deadline. | | |
| SARA 302 Components | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302 | | |
| SARA 313 Components | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. | | |
| SARA 311/312 Hazards | Fire Hazard, Acute health hazard | | |
| Massachusetts Right to Know components | No components are subject to the Massachusetts Right to Know Act | | |
| Pennsylvania Right to Know components | Isobutyl hexanoate | CAS# 105-79-3 | Rev. Date: |
| New Jersey Right to Know components | Isobutyl hexanoate | CAS# 105-79-3 | Rev. Date: |
| California Prop. 65 components | This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. | | |

Section 16: OTHER INFORMATION

HMIS Rating

| | |
|-----------------------|---|
| Health hazard | 2 |
| Chronic Health Hazard | |
| Flammability | 2 |
| Physical Hazard | 0 |

Further Information

Aurochemicals provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Aurochemicals makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Aurochemicals will not be responsible, nor held liable, for damages resulting from use of or reliance upon this information.

| | |
|-------------------------------|--------------------------|
| Issued by: | Contact Person: |
| Aurochemicals | Deo N. Persaud |
| 7 Nicoll Street | Revised Date: 03/06/2019 |
| Washingtonville, NY 10992 USA | |