



Safety Data Sheet (SDS) Statement

Vigon International, Inc. recently changed our item numbering system. We are still in the process of transitioning our Safety Data Sheets to our new product code so in the interim we wanted to provide you with the below to avoid any confusion.

Product Description: PASSION FRUIT BASE 109223

Old Vigon Code: P-001566

New Vigon Code: 502829

We apologize for the inconvenience. If you have any questions or concerns, please email regulatory@vigon.com.

Sincerely,

Felicia Perryman
Director of Quality

Date: November 11, 2015

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1. IDENTIFICATION

| | |
|--------------------------------------|--|
| Product Description: | PASSION FRUIT BASE 109223 |
| CAS # | MIXTURE |
| Other means of identification | |
| Vigon Item # | 502829 |
| Recommended use | Concentrated aromatic ingredient which may be used fragrance compounds according to legal and IFRA guidelines. |
| Recommended restrictions | For Manufacturing Use Only |
| <u>Company</u> | <u>24 Hour Emergency Response Information</u> |
| Vigon International, Inc. | INFOTRAC (ACCT# 78928); |
| 127 Airport Road | 1-800-535-5053 WITHIN THE U.S.A. |
| E. Stroudsburg, PA 18301 | 1-352-323-3500 OUTSIDE THE U.S.A. |
| For information call: 570-476-6300 | |
| Web Site: www.vigon.com | |

2. HAZARD(S) IDENTIFICATION

| | | |
|------------------------------|--|-------------|
| Physical hazards | Flammable liquids | Category 4 |
| Health hazards | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2A |
| | Sensitization, skin | Category 1 |
| | Reproductive toxicity | Category 2 |
| Environmental hazards | Hazardous to the aquatic environment, long-term hazard | Category 2 |

Label elements



Signal word Warning

Hazard statement

| | |
|-------------|--|
| H227 | Combustible liquid. |
| H315 | Causes skin irritation. |
| H315 + H320 | Causes skin and eye irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary statement

Prevention

| | |
|------|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |

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| | |
|------|--|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P261 | Avoid breathing mist or vapor. |
| P264 | Wash thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/eye protection/face protection. |

Response

| | |
|-----------------------|--|
| P302 + P352 | IF ON SKIN: Wash with plenty of water. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/attention. |
| P333 + P313 | If skin irritation or rash 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. |
| P370 + P378 | In case of fire: Use appropriate media to extinguish. |
| P391 | Collect spillage. |

Storage

| | |
|-------------|--|
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |

Disposal

| | |
|------|---|
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |
|------|---|

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

30.25% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|------------------|--|------------|------------|
| LINALYL ACETATE | 3,7- dimethylocta-1,6-dien-3-yl acetate (1)-1,5-dimethyl-1-vinyl hex-4-enyl acetate LINALOOL ACETATE | 115-95-7 | 20 - < 30 |
| TERPINYL ACETATE | 2-(4- methyl-1-cyclohex- 3-enyl) propan-2-yl acetate ALPHA- TERPINEOL ACETATE para- menth-1-en-8-ol acetate ALPHA,ALPHA, 4- TRIMETHYL-3-CYCLOHEXENE- 1-METHANOL ACETATE | 80-26-2 | 10 - < 15 |
| DIPENTENE | p- mentha-1,8-diene D,L- limonene 1- methyl-4-prop-1-en-2-ylcyclohexene | 138-86-3 | 7.5 - < 10 |

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| Chemical name | Common name and synonyms | CAS number | % |
|---|--|-------------|-----------|
| TRICYCLODECENYL PROPIONATE | 4,7-Methano-1H-inden-6-ol, 3a,4,5,6,7,7a-hexahydro-, propanoate 3a,4,5,6,7,7a-Hexahydro-4,7-methano-1H-in den-6-yl propionate | 17511-60-3 | 5 - < 7.5 |
| 1-NAPHTHALENOL, 1,2,3,4,4A,5,8,8A-OCTAHYDRO-2, 2,6,8-TETRAMETHYL- | 1,2,3,4,4A,5,8,8A-OCTAHYDRO-2,2,6,8- TETRAMETHYL-1-NAPHTHALENOL octahydrotetramethyl-1-naphthalenol | 103614-86-4 | 1 - < 2.5 |
| 2,4-DIMETHYLCYCLOHEX-3-ENE- 1-CARBALDEHYDE | 4-formyl-1,3-dimethylcyclohex-1-ene 2,4-DIMETHYL-3-CYCLOHEXEN-1- CARBOXALDEHYDE 3-Cyclohexene-1-carboxaldehyde, 2,4-dimethyl- DIMETHYLCYCLOHEX-3-ENE-1- CARBALDEHYDE (MIXED ISOMERS) | 68039-49-6 | 1 - < 2.5 |
| 2-PHENYLPROPIONALDEHYDE DIMETHYL ACETAL | 1,1- dimethoxy-2-phenyl propane benzene, (2,2-dimethoxy-1-methylethyl)- | 90-87-9 | 1 - < 2.5 |
| DIMETHYL BENZYL CARBINOL | 2-methyl-1-phenylpropan-2-ol ALPHA,ALPHA-DIMETHYLPHENETHYL ALCOHOL 2- hydroxy-2-methyl-1-phenyl propane 1,1- dimethyl-2-phenylethanol | 100-86-7 | 1 - < 2.5 |
| HEXYL ACETATE | 1-HEXYL ACETATE N- hexyl ethanoate HEXYL ETHANOATE | 142-92-7 | 1 - < 2.5 |
| UNDECALACTONE GAMMA | 1,4-UNDECANOLIDE undecylene methyl lactone 4- hydroxyundecanoic acid lactone 5- heptyloxolan-2-one dihydro-5-heptyl-2(3H)-furanone 1,4- hendecanolide | 104-67-6 | 1 - < 2.5 |
| 3-METHYLBUTYL ACETATE | 3-Methylbutyl acetate 3-Methylbutyl ethanoate ISOAMYL ETHANOATE Isopentylacetate | 123-92-2 | 0.1 < 0.5 |
| ALLYL CAPROATE | prop-2-enyl hexanoate allyl capronate allyl hexanoate 2-propenyl N-hexanoate | 123-68-2 | 0.1 < 0.5 |
| TETRAHYDRO-4-METHYL-2- (2-METHYLPROP-1-ENYL)PYRAN | 2H-Pyran, tetrahydro-4-methyl-2- (2-methyl-1-propen-1-yl)- 2-ISO BUTENYL-4-METHYL TETRAHYDRO PYRAN 4-methyl-2-(2-methylprop-1-enyl)oxane | 16409-43-1 | 0.1 < 0.5 |

Other components below reportable levels

30 - < 40

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4. FIRST-AID MEASURES

| | |
|---|---|
| Inhalation | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist. |
| Skin contact | Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes. |
| Eye contact | Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids. |
| Ingestion | Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. |
| Most important symptoms/effects, acute and delayed | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. |
| Indication of immediate medical attention and special treatment needed | Not available. |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |

5. FIRE-FIGHTING MEASURES

| | |
|--|--|
| Suitable extinguishing media | Water spray, fog, CO ₂ , dry chemical, or alcohol resistant foam. |
| Unsuitable extinguishing media | Do not use a solid water stream as it may scatter and spread fire. |
| Specific hazards arising from the chemical | Fire may produce irritating, corrosive and/or toxic gases. |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires. |
| Fire fighting equipment/instructions | In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control. |
| Specific methods | Use water spray to cool unopened containers. |
| General fire hazards | Static charges generated by emptying package in or near flammable vapor may cause flash fire. |

6. ACCIDENTAL RELEASE MEASURES

| | |
|--|---|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. |
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Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Do not allow material to contaminate ground water system. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid release to the environment. Retain and dispose of contaminated wash water. Contact local authorities in case of spillage to drain/aquatic environment.

7. HANDLING AND STORAGE

Precautions for safe handling

Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling. Take precautionary measures against static discharges. Avoid breathing vapor.

Conditions for safe storage, including any incompatibilities

Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value |
|--------------------------------------|------|-----------------------|
| 3-METHYLBUTYL ACETATE (CAS 123-92-2) | PEL | 525 mg/m ³ |
| | | 100 ppm |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|--------------------------------------|------|---------|
| 3-METHYLBUTYL ACETATE (CAS 123-92-2) | STEL | 100 ppm |
| | TWA | 50 ppm |



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US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|---|------|----------------------|
| 3-METHYLBUTYL ACETATE (CAS 123-92-2) | REL | 525 mg/m3 |
| | | 100 ppm |
| | TWA | 525 mg/m3 100 ppm |

US. Workplace Environmental Exposure Level (WEEL) Guides

| Components | Type | Value |
|-----------------------------|------|-------------|
| DIPENTENE (CAS 138-86-3) | TWA | 165.5 mg/m3 |
| | | 30 ppm |

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Use explosion-proof ventilation equipment to stay below exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes.

Skin protection

Hand protection Chemical resistant gloves.

Other Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|-------------------------------|
| Appearance | Refer to Spec Sheet |
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Refer to Spec Sheet |
| Odor | Characteristic. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | 167.0 °F (75.0 °C) Closed Cup |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |

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Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.2 mm Hg at 20 °C

Vapor density Not available.

Relative density 0.95 at d 20/20

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Flammability class Combustible IIIA estimated

Specific gravity 0.95 at 25 °C

VOC (Weight %) < 46 %

10. STABILITY AND REACTIVITY

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation No adverse effects due to inhalation are expected.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

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Information on toxicological effects

Acute toxicity May cause an allergic skin reaction.

| Components | Species | Test Results |
|--|---------|---|
| 2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE (CAS 68039-49-6) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 2500 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 2500 mg/kg |
| 2-PHENYLPROPIONALDEHYDE DIMETHYL ACETAL (CAS 90-87-9) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 1850 mg/kg |
| 3-METHYLBUTYL ACETATE (CAS 123-92-2) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| ALLYL CAPROATE (CAS 123-68-2) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 300 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 218 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). |
| DIMETHYL BENZYL CARBINOL (CAS 100-86-7) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 1280 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Coma. |

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| Components | Species | Test Results |
|--|---------|---|
| DIPENTENE (CAS 138-86-3) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 5 g/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 5 g/kg |
| HEXYL ACETATE (CAS 142-92-7) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| LINALYL ACETATE (CAS 115-95-7) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 14.55 g/kg Remarks: Behavioral:General anesthetic. Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia. |
| TERPINYL ACETATE (CAS 80-26-2) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Rat | 5075 mg/kg Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other. Behavioral:Somnolence (general depressed activity). |
| TETRAHYDRO-4-METHYL-2- (2-METHYLPROP-1-ENYL)PYRAN (CAS 16409-43-1) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 4300 mg/kg |



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| Components | Species | Test Results |
|---|---------|---|
| TRICYCLODECENYL PROPIONATE (CAS 17511-60-3) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| UNDECALACTONE GAMMA (CAS 104-67-6) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Rat | 18500 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Skin and Appendages: Other: Hair. |

* Estimates for product may be based on additional component data not shown.

| | |
|---|--|
| Skin corrosion/irritation | Causes skin irritation. |
| Serious eye damage/eye irritation | Causes serious eye irritation. |
| Respiratory or skin sensitization | |
| Respiratory sensitization | Not a respiratory sensitizer. |
| Skin sensitization | May cause an allergic skin reaction. |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity | |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | |
| Not listed. | |
| Reproductive toxicity | Suspected of damaging fertility or the unborn child. |
| Specific target organ toxicity - single exposure | Not classified. |
| Specific target organ toxicity - repeated exposure | Not classified. |
| Aspiration hazard | Not an aspiration hazard. |
| Further information | This mixture has not been subjected to full toxicological testing. According to available data on the constituents the health classification criteria are met. |

12. ECOLOGICAL INFORMATION

| | |
|--------------------|---|
| Ecotoxicity | Toxic to aquatic life with long lasting effects. This mixture has not been subjected to ecotoxicological testing as an entity. According to available data on the constituents the environmental classification criteria are met. |
|--------------------|---|

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| Components | Species | | Test Results |
|---|---------|--|---|
| 2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE (CAS 68039-49-6) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Algae | EC50 | Green algae (<i>Desmodesmus subspicatus</i>) | 31 mg/l, 72 hours (based on growth rate - nominal concentration - OECD 201) |
| Crustacea | EC50 | <i>Daphnia magna</i> | 22.4 mg/l, 48 hours (measured concentration - similar to OECD 202) |
| Fish | LC50 | <i>Oncorhynchus mykiss</i> (reported as <i>Salmo gairdneri</i>) | 7.5 mg/l, 96 hours (measured concentration - OECD 203) |
| 3-METHYLBUTYL ACETATE (CAS 123-92-2) | | | |
| Aquatic | | | |
| Algae | EC50 | Algae Green algae (<i>Chlamydomonas variabilis</i>) | 450 mg/l, 72 hours 539 mg/l, 72 hours DIN 38412 Part 9 static. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration. |
| Crustacea | EC50 | <i>Daphnia magna</i> | 42 mg/l, 48 hours DIN 38412 Part 11 static. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration. |
| Fish | LC100 | <i>Leuciscus idus</i> (Golden orfe) | 148 mg/l, 48 hours |
| | LC50 | <i>Danio rerio</i> | 22 - 46 mg/l, 96 hours OECD 203, ISO 7346, 84/449/EEC, C.1 static. The details of the effect relate to the nominal concentration. |
| | | <i>Leuciscus idus</i> (Golden orfe) | 36 - 131 mg/l, 48 hours |
| Other | EC10 | Bacterium | 674 mg/l, 30 minutes DIN 38412 Part 27 (draft) aerobic. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration. |
| | EC20 | Activated Sludge | > 1000 mg/l, 30 minutes DIN EN ISO 8192-OECD 209-88/302/EEC,P. C aerobic |

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| Components | Species | Test Results |
|---|---------|--|
| ALLYL CAPROATE (CAS 123-68-2) | | |
| Aquatic | | |
| Crustacea | EC50 | Daphnia magna 2 mg/l, 48 hours |
| Fish | LC50 | Pimephales promelas 2 mg/l, 96 hours |
| DIPENTENE (CAS 138-86-3) | | |
| Aquatic | | |
| Fish | LC50 | Carp (Leuciscus idus melanotus) 34 mg/l, 48 hours |
| HEXYL ACETATE (CAS 142-92-7) | | |
| Aquatic | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) 3.7 - 4.4 mg/l, 96 hours |
| TETRAHYDRO-4-METHYL-2- (2-METHYLPROP-1-ENYL)PYRAN (CAS 16409-43-1) | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Algae | EC50 | Green algae (Desmodesmus subspicatus) 79.7 mg/l, 72 hours Test Type: static test |
| Crustacea | EC50 | Daphnia magna 33.2 mg/l, 48 hours Test Type: static test |
| Fish | LC50 | Zebrafish (Brachydanio rerio) 77.6 mg/l, 96 hours Test Type: semi-static test |
| Other | EC50 | Activated Sludge > 1000 mg/l, 3 hours Test Type: static test |
| UNDECALACTONE GAMMA (CAS 104-67-6) | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Crustacea | EC50 | Daphnia magna 17 mg/l, 48 hours |
| Fish | LC50 | Oncorhynchus mykiss 569 mg/l, 96 hours |

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

DIPENTENE 4.232

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

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| | |
|--|--|
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | Not established. |
| Waste from residues / unused products | Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. TRANSPORT INFORMATION

ADN

| | |
|-----------------------------------|--|
| UN number | 3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TERPINYL ACETATE,DIPENTENE) |
| Transport hazard class(es) | 9 |
| Subsidiary class(es) | - |
| Packing group | III |
| Environmental hazards | Yes |
| Labels required | 9 |

ADR

| | |
|-----------------------------------|--|
| UN number | 3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TERPINYL ACETATE,DIPENTENE) |
| Transport hazard class(es) | 9 |
| Subsidiary class(es) | - |
| Packing group | III |
| Environmental hazards | Yes |
| Labels required | 9 |

RID

| | |
|-----------------------------------|--|
| UN number | 3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TERPINYL ACETATE,DIPENTENE) |
| Transport hazard class(es) | 9 |
| Subsidiary class(es) | - |
| Packing group | III |
| Environmental hazards | Yes |
| Labels required | 9 |

DOT

BULK

| | |
|------------------------------|---|
| UN number | NA1993 |
| Proper shipping name | COMBUSTIBLE LIQUID, N.O.S. (DIPENTENE,TERPINYL ACETATE) |
| Hazard class | Combustible liq |
| Packing group | III |
| Environmental hazards | |
| Marine pollutant | Yes |
| Packaging exceptions | 150 |
| Packaging bulk | 242 |

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Labels required None

DOT

NON-BULK

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

| | |
|---|--|
| UN number | 3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TERPINYL ACETATE,DIPENTENE) |
| Transport hazard class(es) | 9 |
| Subsidiary class(es) | - |
| Packing group | III |
| Environmental hazards | |
| Marine pollutant | Yes |
| Labels required | 9 |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |

ADN; ADR; IMDG; RID



DOT BULK



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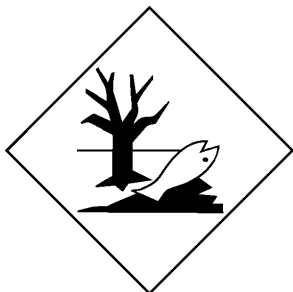
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Marine pollutant



15. REGULATORY INFORMATION

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA Hazardous Substance List (40 CFR 302.4)

3-METHYLBUTYL ACETATE (CAS 123-92-2) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.



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US state regulations

US - Minnesota Haz Subs: Hazardous substance

3-METHYLBUTYL ACETATE (CAS 123-92-2) Hazardous substance.

US. Massachusetts RTK - Substance List

3-METHYLBUTYL ACETATE (CAS 123-92-2)

US. New Jersey Worker and Community Right-to-Know Act

3-METHYLBUTYL ACETATE (CAS 123-92-2)

DIPENTENE (CAS 138-86-3)

US. Pennsylvania Worker and Community Right-to-Know Law

3-METHYLBUTYL ACETATE (CAS 123-92-2)

US. Rhode Island RTK

3-METHYLBUTYL ACETATE (CAS 123-92-2)

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

| | |
|---------------|---|
| Issue date | 09-16-2015 |
| Revision date | 09-16-2015 |
| Version # | 01 |
| HMIS® ratings | Health: 2* Flammability: 2 Physical hazard: 0 |



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Disclaimer

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