

1. IDENTIFICATION

Product Name: 1 Million Type Fragrance

Other Names:

Product Use Description: Fragrance for Consumer Product.

Contact Information:

Organisation	Location	Telephone	Ask For
Adelaide Moulding and Candle Supplies	7 Woodlands Terrace Edwardstown South Australia 5039	08 8294 0451	SDS Officer
Poisons Information Centre		13 11 26	

2. HAZARD IDENTIFICATION

Classification of Substance of Mixture:

Skin Irritation (Category 2)
Skin-Sensitisation (Category 1)
Eye Irritation (Category 2A)
Toxic to Reproduction (Category 2)
Hazardous to the Aquatic Environment Acute (Category 2)
Hazardous to the Aquatic Environment Chronic (Category 1)

Hazard Pictogram(s):



Signal Word:

WARNING

Hazard Statements (s):

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child (exposure route).
H401 Toxic to aquatic life
H410 Toxic to aquatic life with long lasting effects.

Precautionary Statements(s):

P302 + 352 IF ON SKIN: Wash with plenty of soap and 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.
P332 + P313 If skin irritation occurs: 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 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P391 Collect Spillage

3. Composition/Information on Ingredients

Mixtures:

CAS No	Description	GHS Classification	Concentration
84-66-2	diethyl benzene-1,2-dicarboxylate	-	30-60
54464-57-2	1-(1,2,3,4,5,6,7,8- octahydro-2,3,8,8- tetramethyl-2-naphthyl)ethan-1-one	H315, H317	10-<30
80-54-6	p-tert-butyl-alpha-methyl dihydrocinnamic aldehyde	H317, H361	1-<10
91-64-5	1,2-benzopyrone	H317	1-<10
165184-98-5	hexyl cinnamic aldehyde	-	1-<10
8008-57-9 / 8028-48-6	citrus sinensis	H317	1-<10
8016-20-4	citrus paradisi macfad. peel extract		1-<10

Substances with Community workplace exposure limits, not listed above:

Not Applicable

4. First Aid Measures

Skin Contact:	Remove any contaminated clothing or shoes. Wash skin with soap and water. If irritation persists obtain medical advice.
Eye Contact:	Flush immediately with clean water for at least 15 minutes. Contact a physician if irritation persists.
Ingestion:	Give plenty of water to drink. Seek medical attention is necessary.
Inhalation:	Remove from the exposure to fresh air. Contact a physician as necessary.
General:	IF exposed or concerned: Get medical advice/attention. Call a POISON CENTRE or doctor/physician if you feel unwell.

5. Fire Fighting Measures

Suitable extinguishing media:	Carbon dioxide, Dry chemical, foam.
Hazardous Combustion Products:	In case of fire, the following can released: Carbon monoxide, Unidentified organic compounds.
Advice for Fire Fighters:	In case of insufficient ventilation, wear suitable respiratory equipment.

6. Accidental Release Measures

Protective Equipment:	Avoid inhalation. Avoid contact with skin and eyes. Handle the product using protective gloves.
Personal Precautions:	Remove all ignition sources and ventilate area. Avoid contact with skin and inhalation of its vapours or smoke.

Contain spill and recover free product.

Emergency Procedures: No specific advice other than above.

Environmental Precautions: Keep away from drains, surface and ground water, and soil.
Do not discharge product into drains, surface water or ground water.

Methods and Suitable materials for spill containment: Remove ignition sources.
Provide adequate ventilation.
Avoid excessive inhalation of vapours.
Contain spillage immediately by use of sand or inert powder.
Dispose of according to local regulations.

7. Handling and Storage

Handling Care should be taken to observe any precautions given on the container.

Precautions for safe handling: Wash thoroughly after handling.
Keep away from heat, sparks, open flames and hot surfaces.
No smoking.
Use personal protective equipment as required.
Follow good manufacturing practices for housekeeping and personal hygiene.
Use in areas with adequate ventilation.
Do not eat, drink or smoke when using this product.
Contaminated clothing and shoes should be thoroughly cleaned before reuse.
Use in accordance with good manufacturing and industrial hygiene practices.

Storage

Technical measures and storage conditions: Keep container closed when not in use.
Store in a cool, dry, ventilated area away from sources of heat, moisture, and incompatible substances.
Ground/bond container and receiving equipment.
Use explosion-proof electrical, ventilating and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static charge.

8. Exposure Controls/Personal Protection

Exposure standards:

For diethyl benzene-1,2-dicarboxylate
TWA 5mg/m³

For hexyl cinnamic aldehyde

DNEL: Inhalation Systemic-long term 0.078mg/m³, Local-acute 6.3mg/m³, Dermal Systemic - long term 18mg/kgbw/day, Local long term 525ug/cm², local acute 525ug.cm²

For citrus sinensis

d-Limonene Maximum workplace concentration 5mL/m³, 28mg/m³

Engineering Controls: Not available.

Fire & Explosion Hazard: Keep away from heat and open flames.

Respiratory Protection: Use NIOSH approved respirator.

Ventilation Protection: Use adequate general or local exhaust ventilation.

Eye Protection: Use goggles or face shields.

Skin Protection: Wear appropriate protective gloves to prevent skin exposure.

Clothing Protection: Wear appropriate protective clothing to prevent skin exposure.

Other Information: Avoid inhalation and contact with skin and eyes. Good hygiene practices should be used. Wash after any contact, before breaks and meals or using the toilet, and at the end of the work period. Contaminated clothing and shoes should be cleaned before re-use.

9. Physical and Chemical Properties

Appearance: Liquid
Colour: Colourless to Yellow
Aroma/Odour: Perfumistic
Relative density: 1.00– 1.03
Flash Point (closed cup test): = 92.0 °C
pH: Not determined
Initial boiling point/range: Not determined
Vapour pressure: Not determined
Solubility(ies): Not determined

10. Stability and Reactivity

Reactivity Hazards: No significant reactivity hazard, by itself or in contact with water.

Chemical Stability: Stable under ordinary conditions of use and storage.

Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Conditions to Avoid: Avoid extreme heat, pressurising and impacting product.

Incompatibles: Avoid contact with strong acids, alkalis, or oxidising agents.

Hazardous Decomposition Products: Not expected.

11. Toxicological Information

Acute & Chronic health effects: Chronic, prolonged exposure to the product concentrate may result in irreversible effects.

Possible routes of exposure:

Ingestion: Accidental swallowing is unlikely in the industrial setting. Harmful if swallowed.

Skin/eye exposure: Contact with skin and eyes may result in irritation.

Inhalation: Where this material is used at elevated temperatures vapour may cause irritation to mucous membranes and respiratory tract, headache and nausea.

Range of effects following exposure: Not available

Dose concentration or conditions of exposure likely to cause injury: Not available

Delayed effects: Not available

Relevant negative data: None available

Toxicological Data:

For bis(2-ethylhexyl) hexanedioate
LD50 Dermal rabbit 14800 mg/kg
LD50 Oral rat 42600 mg/kg

For 1-(1,2,3,4,5,6,7,8- octahydro-2,3,8,8- tetramethyl-2- naphthyl)ethan-1-one
LD50 Dermal rat >5000 mg/kg
LD50 Oral rat >5000 mg/kg

For p-tert-butyl-alpha-methyl dihydrocinnamic aldehyde
LD50 Dermal rabbit >5250 mg/kg
LD50 Oral rat 1390 mg/kg

For 1,2-benzopyrone
LD50 Oral rat 300 mg/kg

For hexyl cinnamic aldehyde
LD50 Dermal rabbit >3000 mg/kg
LD50 Oral rat 3100 mg/kg

For citrus sinensis
LD50 Dermal rabbit >5000 mg/kg
LD50 Oral rat >5000 mg/kg

For citrus paradisi macfad. peel extract
No data available

12. Ecological Information

For bis(2-ethylhexyl) hexanedioate
Ecotoxicity Very toxic to aquatic life with long lasting effects
Aquatic

EC50 Algae Green algae (*Desmodesmus subspicatus*) > 500 mg/l, 72 hours
LC50 Crustacea Water flea (*Daphnia magna*) > 0.48 - < 0.85 mg/l, 48 hours
LC50 Fish Bluegill (*Lepomis macrochirus*) > 0.48 - < 0.85 mg/l, 96 hours
Rainbow trout, donaldson trout (*Oncorhynchus mykiss*) > 0.48 - < 0.85 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown
Persistence and degradability Bioaccumulative potential Bioconcentration factor (BCF)²⁷
No data is available on the degradability of this product.

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.

For 1-(1,2,3,4,5,6,7,8- octahydro-2,3,8,8- tetramethyl-2- naphthyl)ethan-1-one
Aquatic toxicity

Lepomis macrochirus, LC50 (96 h): 1.3 mg/L, Method: equivalent or similar to OECD Guideline 203 *Daphnia magna*,
EC50 (48 h): 1.38 mg/L, Method: equivalent or similar to OECD Guideline 202

Aquatic Chronic toxicity:

30d-LOEC and 30d-LC50 for body weight and length were found to be 0.29 and >0.30 mg/l respectively, in a study conducted on *Danio rerio* (fish) according to international guidelines (OPPTS 85.1400 / OECD Guideline 210) under GLP. 30d-NOEC was the NOEC for body weight and length.

21d-NOEC for reproduction of OTNE to *Daphnia magna* : 0.028 mg/l, OECD TG 211 (OPPTS 850.1300) in compliance with GLP

Persistence and degradability

Not readily biodegradable: 0% (BOD) / 11% (analysed test material concentration) in 28 days (OECD TG 301C). Biodegradation in soil: Half-life in soil: 6 d at 22 °C

The substance is photodegradable in air. The rate constant for the gas phase reaction of OH radicals was estimated at $9.85 \times 10^{-11} \text{ cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$. Assuming a daylight period of 12 h and $2.0 \times 10^6 \text{ OH cm}^{-3}$, the estimated atmospheric half-life is 1.4 hours. These data suggest that the atmospheric life time of substance is sufficiently short that it will not undergo long-range transport to any significant extent.

Bioaccumulative potential

Bioconcentration factor (BCF)

BCF: 391 (OECD TG 305, normalised to 5% fat)

Partition coefficient n-octanol/water (log PO/W)

Log Kow (Pow): 5.65 at 30 °C, method: OECD Guideline 117 (HPLC method) Based on the n-octanol/water partition coefficient accumulation in organisms is expected.

Mobility in soil

Log Koc: 4.12

For p-tert-butyl-alpha-methyl dihydrocinnamic aldehyde:

Algae Growth Inhibition Test - EC50 32.5mg/l – 72h (growth rate), OECD 201.

Acute immobilisation Test - *Daphnia* sp EC50 9.84mg/l, OECD 202

Activated sludge micro-organism - Activated sludge Acute EC50 104mg/l – 3h, OECD 209.

Respiration inhibition Test - Fish Acute Toxicity Test Acute LC50 2.04mg/l – 96h, OECD 203.

Activated Sludge respiration inhibition test NOEC 0.03mg/l – 3h, OECD 209
Biodegradability CO2 Evolution Test – 80.7% Readily – 28 days, Readily biodegradable.
Bioaccumulative potential: Low
Mobility in soil:
Soil/water partition coefficient (Koc) – 1281
Mobility – Not available.

For 1,2-benzopyrone:
LC50 Fish 2.94 mg/l - 96h
EC50 Daphnia magna – 24.3- <36.9 mg/l - 48h
EC50 Algae 1.45mg/l - 72h
Persistence and degradability:
Readily degradation (GLP testing report)
Bioaccumulative potential:
No bioaccumulative potential due to low Kow (LogKow=1.39).
Mobility in soil: Not likely due to low Kow (LogKow=1.39).
Results of PBT&vPvB assessment: The substance is not considered a PBT/vPvB.
Bioconcentration factor (BCF) <10 Leuciscus idus (Golden orfe) 3 days

For hexyl cinnamic aldehyde:
Acute aquatic toxicity:
LE(C)₅₀ 0.1 < L(E)C50 ≤ 1
M factor (Acute) 1
Acute toxicity - fish LC₅₀, 96 hours: 1.7 mg/l, Pimephales promelas (Fat-head Minnow) OECD 203.
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.247 mg/l, Daphnia magna OECD 202.
Acute toxicity - aquatic plants NOEC, 72 hours: 0.065 mg/l, Desmodemus subspicatus OECD 201.
Acute toxicity microorganisms NOEC, 28 days: 32 mg/kg, Lumbriculus variegatus OECD 225.
Chronic aquatic toxicity:
Aquatic invertebrates NOEC, 21 days: 0.069 mg/l, Daphnia magna OECD 211.
Persistence and degradability: the substance is readily biodegradable.
Biodegradation Water - Degradation 97%: 28 days OECD 301 F.
Bioaccumulative potential: no data available on bioaccumulation.
Partition coefficient log Kow: 5.3
Mobility: The product is insoluble in water.
Adsorption/desorption coefficient Soil - Log Koc: 4.2 @ 25°C/77°F OECD 121.

For citrus sinensis
Ecotoxicity: Very toxic to aquatic organisms.
LC50 Eisenia foetida Savigny (Earthworm) 6.0ppm/48hr, Concise International Chemical Assessment Documents Number 5: Limonene p.17 (1998).
LD50 Daphnia magna (Water flea) 0.577 mg/L/48hr, Programme on Chemical Safety; Concise International Chemical Assessment Documents Number 5: Limonene p.16 (1998).
Persistence and degradability: The material is partially biodegradable.
Bioaccumulative Potential: Risk of bioaccumulation in an aquatic species is high. May cause long term effects in the aquatic environment.
Other adverse effects: Organic product: will increase COD demands of environmental water.

For citrus paradisi macfad. peel extract:
No data available

Toxicity:	No specific data available. Avoid release into the environment.
Persistence and degradability:	No specific data available. Avoid release into the environment.
Bioaccumulative potential:	No specific data available. Avoid release into the environment.
Mobility in soil:	No specific data available. Avoid release into the environment.
PBT and vPvB Assessment:	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII
Other Adverse Effects:	Not Available

13. Disposal Considerations

Disposal: Dispose of according to local regulations.
Avoid disposing into drainage systems and into the environment.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

UN Number: N/A

UN Proper Shipping Name: N/A

Transport Hazard Class(es): N/A

Sub Risk: N/A

Packing Group: N/A

15. Regulatory Information

All ingredients listed on AICS.

16. Other Information

Concentration % Limits: EH A1=49.63% EH A2=4.68% EH A3=0.46701911% EH C2=13.81% EH C3=1.38% EH C4=34.98%
SCI 2=37.17% SCI 3=3.34% EDI 2A=39.53% SS 1=15.38% REP 2=52.63%

Total Fractional Values: EH A1=2.01 EH A2=21.36 EH A3=214.12 EH C2=7.24 EH C3=72.69 EH C4=2.86 SCI 2=2.69 SCI 3=29.91
EDI 2A=2.53 SS 1=6.50 REP 2=1.90

Further Information

Abbreviation	Meaning
Acute Tox. 3	Acute Toxicity – Oral Category 3
Acute Tox. 3	Acute Toxicity – Dermal Category 3
Acute Tox. 3	Acute Toxicity – Inhalation Category 3
Acute Tox. 4	Acute Toxicity – Oral Category 4
Acute Tox. 4	Acute Toxicity – Dermal Category 4
Acute Tox. 4	Acute Toxicity – Inhalation Category 4
Acute Tox. 5	Acute Toxicity – Oral Category 5
Acute Tox. 5	Acute Toxicity – Dermal Category 5
Aquatic Acute 1	Hazardous to the Aquatic Environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the Aquatic Environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the Aquatic Environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the Aquatic Environment - Long-term Hazard Category 1
Aquatic Chronic 2	Hazardous to the Aquatic Environment - Long-term Hazard Category 2
Aquatic Chronic 3	Hazardous to the Aquatic Environment - Long-term Hazard Category 3
Asp. Tox 1	Aspiration Hazard Category 1
Eye Dam. 1	Eye Damage / Irritation Category 1
Eye Irrit. 2A	Eye Damage / Irritation Category 2
Eye Irrit. 2B	Eye Damage / Irritation Category 2B
Flam. Liq. 3	Flammable Liquid, Hazard Category 3
Flam. Liq. 4	Flammable Liquid, Hazard Category 4
Flam. Sol. 2	Flammable Solid, Hazard Category 2
H226	Flammable liquid and vapour.
H227	Combustible liquid.
H228	Flammable solid.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.

H312	Harmful in contact with skin.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H361	Suspected of damaging fertility or the unborn child (exposure route).
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing vapour or dust.
P264	Wash hands and other contacted skin thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
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.
P281	Use personal protective equipment as required.
P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301/312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
P302/352	IF ON SKIN: Wash with plenty of soap and water.
P303/361/353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304/340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305/351/338	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.
P310	Immediately call a POISON CENTER or doctor/physician.
P311	Call a POISON CENTRE or doctor/physician.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P330	Rinse mouth.
P331	Do not induce vomiting.
P332/313	If skin irritation occurs: Get medical advice/attention.
P333/313	If skin irritation or rash occurs: Get medical advice/attention.
P337/313	If eye irritation persists: Get medical advice/attention.
P361	Remove/Take off immediately all contaminated clothing.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P370/378	In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
P391	Collect spillage.
P403/235	Store in a well-ventilated place. Keep cool.

P405	Store locked up.
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.
Repr. 2	Toxic to Reproduction Category 2
Skin Irrit. 2	Skin Corrosion / Irritation Category 2
Skin Irrit. 3	Skin Corrosion / Irritation Category 3
Skin Sens. 1A	Sensitization - Skin Category 1A
Skin Sens. 1B	Sensitization - Skin Category 1B

The information in this safety data sheet is to the best of our knowledge true and accurate, but all data, instructions, and recommendations and/or suggestions are made without guarantee.

The Material Safety Data Sheet is intended to provide information for a health and safety assessment of the material. This document is not intended for quality assurance purposes.