

CERTIFICATE OF ANALYSIS

PRODUCT IDENTIFICATION AND COMPOSITION

Product Name: Energy – Essential Massage Blend

Botanical Name: Not applicable Product Code: MBENER
Batch Number: 4363305
Country of Origin: UK

Expiry Date: June 2021

Ingredients:

Component Entity	CAS Number	EINECS Number	Proportions [%w/w]
Soya Bean Oil	8001-22-7	232-274-4	85% to 95%
Lemon Oil	94266-47-4 [EU] 8008-56-8 [AICS]	304-454-3	< 3%
Rosemary Oil	8000-25-7	Not allocated	< 3%
Wheatgerm Oil	84012-44-2 [EU] 68917-73-7 [TSCA; AICS]	281-689-7	< 3%
Natural Vitamin E	59-02-9	200-412-2	< 1%
Peppermint Oil	68917-18-0	Not allocated	< 1%
Eucalyptus Blue Gum Oil	8000-48-4	Not allocated	< 1%
Main Constituents:	CAS Number	EINECS Number	Proportions [%w/w]
Eucalyptol	470-82-6	207-431-5	< 2%
d-Limonene	5989-27-5	227-813-5	< 2%

Uses: Body Massage Oil.

PHYSICAL AND CHEMICAL PROPERTIES				
TEST	SPECIFICATION	RESULT		
Appearance: Odour:	Clear, pale yellow oily liquid Characteristic aroma	Conforms Conforms		



Issue/Revision Date: 14th July 2015

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product Name: Energy - Massage Blend

1.2 Product Code: **MBENER** 1.3 Synonyms: None identified 1.4 AUSTRALIAN AICS Name: Not allocated 1.5 USA INCI Name: Not allocated Not allocated 1.6 EU [Cosing] INCI Name: 1.7 EU [CosIng] Perfuming Name: 1.8 UN Proper Shipping Name: Not allocated Not applicable 1.9 UN Technical Shipping Name: Not applicable 1.10 UN Number: Not applicable 1.11 AUSTRALIAN Schedule Name: Lemon Oil

1.12 Recommended Product Use: Massage oil.

1.13 Company: MADAR Corporation Limited

1.14 Address: 19-20 Sandleheath Industrial Estate, Fordingbridge, SP6 1PA

1.15 Telephone Number: 01425 655555

1.16 Email: sales@madarcorporation.co.uk

1.17 Approved Sellers: Cosmetic Butters, Mystic Moments, New Directions, World of

Moulds

SECTION 2 - HAZARDS IDENTIFICATION

Hazardous according to criteria of Safe Work Australia

Classified as Hazardous according to European Commission Regulation EC 1272/2008

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code

Not a Dangerous Good according to the International Maritime Dangerous Goods (IMDG)

Not a Dangerous Good according to the IATA Dangerous Goods Regulations

Class: C1 Combustible Liquid SUSMP Scheduled 5 Poison

2.1 Hazardous Categories:

PhysicalFlammable LiquidCategory 4HealthEye IrritationCategory 2ASkin IrritationCategory 3

Specific Target Organ Toxicity Category 3 (respiratory tract

(Single Exposure) irritation)

Environmental No Category

2.2 Signal Word:

Warning



Exclamation mark GHS07

2.3 Hazard Statements:

H227Combustible liquid.H242Heating may cause a fire.H316Causes mild skin irritation.H319Causes serious eye irritation.H335May cause respiratory irritation.

EUH044 Risk of explosion if heated under confinement.

SECTION 2 – HAZARDS IDENTIFICATION CONTINUED

2.4 Precautionary Statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of the reach of children.

P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical, ventilating, lighting, ..., equipment.

P243 Take precautionary measures against static discharges.

P261 Avoid breathing fumes / mist / vapours / spray.
P262 Do not get in eyes, on skin, or on clothing.

P264 Wash face, hands and any exposed 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/protective clothing/eye protection/face protection.

P285 In case of inadequate ventilation wear respiratory protection.

2.5 Response Precautionary Statements:

P301+P310+P330+P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Do NOT induce vomiting.

P303+P352+P362 IF ON SKIN (or hair): Wash with plenty of soap and water. Take off contaminated clothing

and wash before reuse.

P304+P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P309+P311 IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P370+P378+P260 In case of fire: Use Carbon Dioxide, Dry Chemical or Universal-Type Foam for extinction.

Do not breathe fumes.

P391 Collect spillage.

2.6 Storage Precautionary Statements:

P403+P233+P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.

P405+P410 Store locked up. Protect from sunlight.

2.7 Disposal Precautionary Statements:

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

2.8 Other:

Combustion Products are harmful if inhaled and can irritate the eyes & respiratory system.

Contact with heated material may result in burns.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Ingredients:

Component Entity	CAS Number	EINECS Number	Proportions [%w/w]
Soya Bean Oil	8001-22-7	232-274-4	85% to 95%
Lemon Oil	94266-47-4 [EU]	304-454-3	< 3%
	8008-56-8 [AICS]		
Rosemary Oil	8000-25-7	Not allocated	< 3%
Wheatgerm Oil	84012-44-2 [EU]	281-689-7	< 3%
	68917-73-7 [TSCA; AICS]		
Natural Vitamin E	59-02-9	200-412-2	< 1%
Peppermint Oil	68917-18-0	Not allocated	< 1%
Eucalyptus Blue Gum Oil	8000-48-4	Not allocated	< 1%
Main Constituents:	CAS Number	EINECS Number	Proportions [%w/w]
Eucalyptol	470-82-6	207-431-5	< 2%
d-Limonene	5989-27-5	227-813-5	< 2%

SECTION 4 - FIRST AID MEASURES

4.1 Eye Contact: Flush immediately with clean water for at least 15 minutes. Ensure irrigation

under evelids. Do not try to remove contact lenses unless trained.

Contact a physician immediately.

4.2 Skin Contact: Remove any contaminated clothing and footwear. Clean before re-use.

Wash affected areas thoroughly with soap and water for at least 15 minutes.

Contact a physician as necessary.

4.3 Inhalation: Remove from the exposure to fresh air. If breathing has stopped, administer

artificial respiration and oxygen if available.

Contact a physician as necessary.

4.4 Ingestion: Do Not induce vomiting.

Wash out mouth with water and give water slowly to dilute [as much as

casualty can comfortably drink] provided person is conscious.

Never give liquid to a person showing signs of being sleepy or with reduced

awareness; i.e. becoming unconsciousness.

Contact a physician or local poison control centre immediately.

If vomiting occurs, lean patient forward or place on left side [head-down position, if possible] to maintain open airway and prevent aspiration.

Quickly immerse affected area in cold water for at least 20 minutes.

Contact a physician immediately.

Bandage lightly with a sterile dressing. Treat for shock if required.

4.6 For Advice: Lay patient down. Keep warm and rested. Transport to hospital, or doctor.

Contact a Poisons Information Centre or a doctor at once. 4.7 Advice to Doctor: Treat symptomatically. Note the nature of this product.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing Media: Carbon Dioxide; Dry Chemical; Universal-Type Foam.

5.2 Unsuitable Extinguishing Media: Water Spray; Others not established.

5.3 Unusual Firefighting Hazards:

4.5 Burns:

5.4 Special Procedures: Determine the need to evacuate or isolate the area according to your local

None identified. emergency plan.

5.5 Protective Equipment: Self-contained breathing apparatus and protective clothing should be worn

when fighting fires involving essential oils or chemicals.

5.6 Combustion Products: Oxides of carbon.

5.7 Contact Point: Dial Local Emergency Authority.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Use of self-contained breathing apparatus is recommended for any major

chemical spill. Refer also to section 8.

6.2 Safety Precautions: Eliminate ALL ignition sources. Ventilate area. Determine the need to

evacuate or isolate the area according to your local emergency plan;

6.3 Environmental Precautions: Keep away from drains, surface and ground water.

Report spills to appropriate Authorities if required.

Contain spill and recover free product. Absorb remainder on vermiculite or 6.4 Methods For Cleaning Up:

other suitable absorbent material. Wipe small spills with cloth. Clean with hot water and detergent. Refer also to Section 13. for disposal procedures.

SECTION 7 – HANDLING AND STORAGE

7.1 Handling: Avoid inhalation and contact with skin and eyes. Good personal hygiene

practices should be used. Wash after any contact, before breaks and meals, and at the end of the work period. Contaminated clothing and shoes should

be cleaned before re-use. No smoking.

7.2 Storage: Containers should be kept closed in order to minimise contamination.

Store in a cool, dry, well ventilated place protected from light. Keep from extreme heat and away from ALL sources of ignition.

Make sure the material does not come into contact with substances listed as:

"Materials to Avoid". Refer to Section 10.

Store in stainless steel drums or amber glass containers. For short term storage only: epoxy phenolic lined steel drums.

7.3 Unsuitable Packaging Materials: None established.

7.4 Special Procedures: Protect against electrostatic charges, Others not established.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure Limits There is a blanket recommendation of 10 mg/m³ for inspirable dusts or mists

when limits have not otherwise been established.

OSHA TWA:
OSHA STEL:
None established.
ACGIH TWA:
NOHSC TWA:
NOHSC STEL:
NOHSC STEL:
None established.
NohSC STEL:
None established.
NohSc STEL:
None established.

8.2 Respiratory Protection: None generally required. Use NIOSH approved respirator in confined areas or

if ventilation is inadequate.

8.3 Ventilation Protection: Ensure adequate ventilation to keep exposure levels to a minimum.

Local exhaust meeting ACGIH criteria is required.

General exhaust is recommended.

8.4 Eye Protection:
8.5 Protective Gloves:
8.6 Protective Clothing:
Using goggles or face shield is recommended.
Using chemical resistant gloves is recommended.
Using chemical resistant clothing is recommended.

8.7 Protective Equipment: An eyewash fountain and / or safety shower should be available in the work

area.

8.8 Special Engineering Controls: None established.

8.9 Other Personal Protection: Consult the following Australian Standards for general advice regarding safety

clothing and equipment: Respiratory Equipment: AS/NZS 1715, Protective Gloves: AS 2161, Industrial Clothing: AS 2919, Industrial Eye Protection: AS 1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS 2210.

8.10 Note: These precautions are for room temperature handling. Use at elevated

temperature or aerosol / spray applications may require additional

precautions.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance: Liquid 9.2 Odour: Characteristic 9.3 Specific Gravity: Not available. 9.4 Refractive Index: Not available. Not available. 9.5 Optical Rotation: Not available. 9.6 pH: 9.7 Solubility: Not available. 9.8 Solubility in Water: Insoluble 9.9 Flash Point: Not available.

9.10 Flammability Limits [as % v/v in Air]

Lower Explosion Limit: Not available. **Upper Explosion Limit:** Not available. 9.11 Autoignition Temperature: Not available. 9.12 Melting Point: Not available. 9.13 Boiling Range: Not available. Not available. 9.14 Vapour Pressure: 9.15 Vapour Density: Not available. 9.16 Viscosity: Not available.

SECTION 10 - STABILITY AND REACTIVITY

10.1 Stability: Chemically stable, hazardous material.

This material presents no significant reactivity hazard.

10.2 Conditions to Avoid: None established.

10.3 Materials to Avoid: Strong acids, strong alkalis and oxidizing agents.

10.4 Flammability: 10.5 Hazardous Polymerization:Combustible liquid.
Will not occur.

10.6 Hazardous Combustion or Carbon monoxide and unidentified organic compounds may be formed during

Decomposition Products: combustion.

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Health Hazards

Chronic Effects:

Acute Effects: May be harmful. Swallowed: May be irritating. Eye:

May be irritating.
May be irritating.
May be harmful.
None identified. Skin: Inhalation: **Mutagenic Effects:** None identified.

Reproductive Effects: None identified. Carcinogenic Effects: None identified. Sensitisation: None identified. Infectious: Not applicable.

11.2 Acute Toxicity			
Significant Components	LD50 [Oral]	LD50 [Dermal]	LC50 [Inhalation]
Soya Bean Oil	Not available.	Not available.	Not available.
Lemon Oil	> 3,000 mg/Kg [Calc.].	Not available.	Not available.
Rosemary Oil	5,000 mg/Kg [Rat].	> 10,000 mg/Kg [Rabbit].	Not available.
Wheatgerm Oil	Not available.	Not available.	Not available.
Natural Vitamin E	> 25,000 μL/Kg [Mouse].	Not available.	Not available.
Peppermint Oil	1,240 mg/Kg [Rat].	> 5,000 mg/Kg [Rabbit].	Not available.
Eucalyptus Blue Gum Oil	2,480 mg/Kg [Rat].	2,480 mg/Kg [Rabbit].	Not available.
	3,320 mg/Kg [Mouse].		
Main Constituents			
Eucalyptol	2,480 mg/Kg [Rat].	> 5,000 mg/Kg [Rabbit].	Not available.
d-Limonene	4,400 mg/Kg [Rat].	> 5,000 mg/Kg [Rabbit].	Not available.
	5,600 mg/Kg [Mouse].		
Energy – Massage Blend	Not available.	Not available.	Not available.

11.3 Short Term Toxicity: 11.4 Long Term Toxicity: 11.5 Human Exposure Tests: Not available. Not available. Not available.

11.6 SCCNFP Allergens Annex III – Cosn					
CONSTITUENT	IFRA	EFFA	CAS Number	EINECS Number	RANGE
Amyl Cinnamal:	YES	NO	122-40-7	204-541-5	Not Detected
Amylcinnamyl Alcohol:	YES	NO	101-85-9	202-982-8	Not Detected
Anise Alcohol:	NO	YES	105-13-5	203-273-6	Not Detected
Benzyl Alcohol:	NO	YES	100-51-6	202-859-9	Not Detected
Benzyl Benzoate:	NO	YES	120-51-4	204-402-9	Not Detected
Benzyl Cinnamate:	NO	YES	103-41-3	203-109-3	Not Detected
Benzyl Salicylate:	NO	YES	118-58-1	204-262-9	Not Detected
Cinnamal:	YES	YES	104-55-2	203-213-9	Not Detected
Cinnamyl Alcohol:	YES	YES	104-54-1	203-212-3	Not Detected
Citral:	YES	YES	5392-40-5	226-394-6	< 0.06%
Citronellol:	NO	YES	106-22-9	203-375-0	< 0.002%
Coumarin:	NO	YES	91-64-5	202-086-7	Not Detected
Eugenol:	YES	YES	97-53-0	202-589-1	Not Detected
Farnesol:	YES	YES	4602-84-0	225-004-1	Not Detected
Geraniol:	NO	YES	106-24-1	203-377-1	< 0.004%
Hexyl Cinnamal:	YES	NO	101-86-0	202-983-3	Not Detected
Hydroxycitronellal:	YES	NO	107-75-5	203-518-7	Not Detected
Isoeugenol:	YES	YES	97-54-1	202-590-7	Not Detected
Butylphenyl Methylpropional:	YES	NO	80-54-6	201-289-8	Not Detected
d-Limonene:	YES	YES	5989-27-5	227-813-5	< 2.0%
Linalool:	YES	YES	78-70-6	201-134-4	< 0.02%
Hydroxyisohexyl 3-Cyclohexene	NO	NO	31906-04-4	250-863-4	Not Detected
Carboxaldehyde:					
Methyl 2-Octynoate:	YES	NO	111-12-6	203-836-6	Not Detected
alpha-Isomethyl lonone:	YES	NO	127-51-5	204-846-3	Not Detected
			90028-68-5	289-861-3	
Evernia Prunastri Extract [Oakmoss]:	YES	NO	9000-50-4		Not Detected
			68917-10-2		
			90028-67-4	289-860-8	
Evernia Furfuracea Extract [Treemoss]:	YES	NO	68648-41-9		Not Detected
RiOrigins 10 20 Sandlahoatl		l Catata	-68917-40-8	Hampshire SD6 1DA LIK	

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Eco-toxicity: None established. Avoid pollution to soil, rivers and the ocean.

12.2 Persistence & Degradability: Low persistence level and readily biodegradable.

12.3 Mobility:Low mobility in the soil.12.4 Bio-accumlative Potential:None established.12.5 Other Adverse Effects:None established.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Material: Place material and / or absorbent into sealed containers and dispose of in

accordance with current applicable laws and regulations.

Refer to local Authority advice.

13.2 Contaminated Packaging: Dispose of in accordance with current applicable laws and regulations.

Refer to local Authority advice.

13.3 Note: Empty containers can have residues, gases and mists.

Use the proper Waste Disposal Methods & Procedures for Empties as well.

SECTION 14 - TRANSPORT INFORMATION

14.1 Transportation: Not Dangerous Goods according to criteria of the Australian Dangerous Goods

Code for Transport by Road and Rail. No special transport required.

Not to be transported with Classes 1 [Explosives], 2.1 [Flammable Gases] [nb this applies only when the capacity of individual container exceeds 500 Lt], 2.3 [Toxic Gases], 4.2 [Spontaneously Combustible Substances], 5.1 [Oxidising Agents], 5.2 [Organic Peroxides], 7 [Radioactive Substances], and Foodstuffs or

Foodstuff empties.

14.2 UN Number: Not allocated. 14.3 Proper Shipping Name: Not Regulated. 14.4 Technical Shipping Name: Not applicable 14.5 DG Class / Subsidiary Risk: Not allocated. 14.6 Label(s): Not allocated. 14.7 Packaging Group: Not allocated. 14.8 Special Precautions: None established. 14.9 Hazchem Code: Not allocated.

14.10 Maritime Transportation IMDG		14.11 Air Transportation I	14.11 Air Transportation ICAO-TI and IATA-DGR		
IMDG Class:	Not allocated.	ICAO / IATA Class:	Not allocated.		
Label(s):	Not allocated.	Label(s):	Not allocated.		
UN Number:	Not allocated.	UN Number:	Not allocated.		
Packaging Group:	Not allocated.	Packaging Group:	Not allocated.		
EMS Number:	Not allocated.				
Marine Pollutant:	Not allocated.				
Proper Shipping Name:	Not Regulated.	Proper Shipping Name:	Not Regulated.		

SECTION 15 - REGULATORY INFORMATION

Technical Shipping Name:

15.1 SUSMP Schedule: 5 CAUTION. 15.2 SUSMP Name: Lemon Oil

15.3 Warning Statements: 89 Application to skin may increase sensitivity to sunlight.

15.4 Safety Directions: 1 Avoid contact with eyes.

Wear eye protection when mixing or using.Wear protective gloves when mixing or using.

6 Wash hands after use.

11 No smoking.

Not applicable

15 Store under cover in a dry, clean, cool, well ventilated place away from sunlight.

Technical Shipping Name:

Not applicable

23 Keep away from heat, sparks and naked flames.

25 Avoid contact with food.

15.5 Standard Statements: A For advice, contact a Poisons Information Centre or a doctor at once.

G3 If swallowed, do NOT induce vomiting.

15.6 AICS: This product's ingredients are listed on the Public AICS Database. **15.7 NZIoC:** This product's ingredients are listed on the NZIoC Database.

15.8 HSNO: Not allocated

16. ADDITIONAL INFORMATION

16.1 Issue Date: 14th July 2015 First issue according to Safe Work Australia GHS Code of Practice

16.2 Revision Date: Not applicable

16.3 QUALITY DECLARATION

At MADAR Corporation Ltd we firmly believe that Quality Control is of the utmost importance and it is imperative that the most meticulous tests are carried out for every product in our range.

Uncompromising quality is a responsibility, which we take seriously.

This Energy – Massage Blend has been tested and it conforms to our High Standard Quality requirements.

16.4 ANIMAL TESTING POLICY DECLARATION

MADAR Corporation Ltd does not test raw materials on animals, neither initially or as a routine test, [nor by outside sources our behalf].

The product Suppliers for MADAR Corporation Ltd do not test their products on animals, neither initially or as a routine test.

None of MADAR Corporation Ltd finished formulations are tested on animals, either initially or as a routine test, except, of course, humans in controlled efficacy tests and against bacteria in preservative efficacy testing.

16.5 DISCLAIMER

of third parties.

This Safety Data Sheet was prepared according to: Safe Work Australia's Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals, [Publication date: 23/12/2011].

The information contained in this Safety Data Sheet is obtained from current and reliable sources. MADAR Corporation Ltd provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This Safety Data Sheet summarises our best current knowledge of the health and safety hazard information of the product, but does not claim to be all inclusive. This document is thus, intended only as a guide to the appropriate precautionary handling of the material by properly trained personnel using this product. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. As the ordinary or otherwise use(s) of this product is outside the control of MADAR Corporation Ltd., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. MADAR Corporation Ltd expressly disclaims responsibility as to the ordinary or otherwise use(s). Furthermore, nothing contained herein should be considered as a recommendation by MADAR Corporation Ltd as to the fitness for any use. The liability of MADAR Corporation Ltd is limited to the value of the goods and does not include any consequential loss. MADAR Corporation Ltd shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. MADAR Corporation Ltd shall not be responsible for any damages resulting from use of or reliance upon this information. The user of the product is solely responsible

16.6 MANUFACTURED PRODUCTS INGREDIENT DISCLAIMER

As the availability of ingredients and raw materials is not always certain whether due to changes in nature or otherwise, MADAR Corporation Ltd reserves the right to substitute alternate ingredients/raw materials in the manufacture of its products and bases in order to maintain supply to its customers. Customers should always refer to the ingredients label as affixed to each product or to specification sheets which are current at the time of supply of the product.

for compliance with all laws and regulations applying to the use of the products, including intellectual property rights

16.7 LABELLING DISCLAIMER

MADAR Corporation Ltd is a wholesaler of natural skin care products. If you intend to re-label our products under your own name/brand for the purpose of on-selling or retailing, we thoroughly recommend that you keep up to date with constant changing labelling laws. Please visit www.nicnas.gov.au. MADAR Corporation Ltd cannot be held responsible for consequential loss/product recall due to incorrect labelling.

16.8 ACRONYMS

ACCC Australian Competition and Consumer Commission

ADG Australian Dangerous Goods

AICS Australian Inventory of Chemical Substances

ACGIH American Conference of Governmental Industrial Hygienists

AS Australian Standard

BOD Biochemical Oxygen Demand

CAS Chemical Abstracts Service (Registry Number)

cm³ cubic centimetres

COD Chemical Oxygen Demand

CosIng The European Commission database with information on Cosmetic Ingredients & Substances

DG Dangerous Goods
EC European Commission

EC stands for effective concentration. EC50 refers to the concentration of a toxicant which induces

a response halfway between the baseline and maximum after a specified exposure time.

EFFA European Flavour Association

European Inventory of Existing Commercial Chemical Substances (Identifying Number)

EU Europe / European Union

g gram

GHS The Globally Harmonized System of Classification and Labelling of Chemicals

GMO Genetically modified organism

especially fire fighters

hr Hour

HSIS The Safe Work Australia Hazardous Substances Information System

HSNO
IATA
The International Air Transport Association
ICAO
IFRA
The International Civil Aviation Organization
IFRA
The International Fragrance Association
IMDG
International Maritime Dangerous Goods

INCI The International Nomenclature of Cosmetic Ingredients

ISO International Organization for Standardization

kg kilogram

LDLo

mm

LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the

death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time,

usually 1 or 4 hours. This is normally quoted in mg/kg body weight.

LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the

death of 50% (one half) of a group of test animals. This is normally quoted in mg/kg body weight. LDLO stands for Lethal Dose Low, the minimum amount of a material which tests have shown will

be lethal to a specified type of animal. This is normally quoted in mg/kg body weight.

Lt Litre
Max. maximum
mg milligram
Min. minimum
ml millilitre
m³ cubic metre

mm Hg millimetre of Mercury N/A Not Applicable

millimetre

NICNAS The National Industrial Chemicals Notification and Assessment Scheme (AUSTRALIA)

NIOSH
NOHSC
The National Institute for Occupational Safety and Health (USA)
National Occupational Health and Safety Commission (AUSTRALIA)

n.o.s. Not otherwise specifiedNZS New Zealand Standard

NZioC New Zealand Inventory of Chemicals

OECD Organization for Economic Co-operation and Development (Test Method number)

OSHA The Occupational Safety and Health Administration (USA)

PEL Permissible Exposure Limit

16.8 ACRONYMS CONTINUED

RTECS The Registry of Toxic Effects of Chemical Substances

SCCNFP Scientific Committee on Cosmetic Products and Non-Food Products (EUROPE)

SDS Safety Data Sheet

STEL Short Term Exposure Limit

Subsp. Subspecies

SUSMP Standard for the Uniform Scheduling of Medicine & Poisons (AUSTRALIA)

TD stands for Toxic Dose. TD is the amount of a material, given all at once, which causes the

untoward symptoms in the majority of persons, or in the majority of a group of test animals. This is

normally quoted in mg/kg body weight.

TGA Therapeutic Goods Administration (AUSTRALIA)

TLV Threshold Limit Value
TWA Time Weighted Average
UK United Kingdom

UN United Nations

USA The United States of America

μg microgram μl microlitre