

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Sales No. : Lemonile - GIVAUDAN

Substance name : 3,7-DIMETHYL-2(3),6-NONADIENONITRILE
Identifier

CAS-No. : 61792-11-8

EC-No. : 263-214-5

Formula : C₁₁H₁₇N

1.2 Relevant identified uses of the substance or mixture and uses advised against

Intended Use Fragrances : Perfumery ingredient

1.3 Details of the supplier of the safety data sheet

Company :
Givaudan Suisse SA
Chemin de la Parfumerie 5
CH-1214 VERNIER

Telephone : +41227809111

Telefax : +41227809150

E-mail address : global.msds_fragrances_raps@givaudan.com

Responsible/issuing person

1.4 Emergency telephone number

+33172110003

Please refer to section 16 for a full list of emergency phone numbers.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 2

H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Hazard statements : H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.
Response:
P391 Collect spillage.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

Hazards not Otherwise Classified : None

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. Composition/information on ingredients

3.1 Substances

Chemical name	CAS-No. EC-No. REACH Registration Number	Concentration [Percent by weight]
3,7-dimethyl-2(3),6-nonadienonitrile	61792-11-8 263-214-5 01-2119967769-11-0000	>= 90 - <= 100

SECTION 4. First aid measures

4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

Administrative information:
Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20
Sales & Distribution Information: VE01/FR/CH11/01
Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

- | | |
|-------------------------|---|
| In case of skin contact | : Take off contaminated clothing and shoes immediately.
If on skin, rinse well with water. |
| In case of eye contact | : Remove contact lenses.
Immediately flush eyes for at least 15 minutes. Get medical attention. |
| If swallowed | : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician. |

4.2 Most important symptoms and effects, both acute and delayed

- | | |
|----------|---------------------|
| Symptoms | : no data available |
| Risks | : no data available |

4.3 Indication of any immediate medical attention and special treatment needed

- | | |
|-----------|---------------------|
| Treatment | : no data available |
|-----------|---------------------|

SECTION 5. Firefighting measures

5.1 Extinguishing media

- | | |
|------------------------------|--|
| Suitable extinguishing media | : Dry chemical
Alcohol-resistant foam
Carbon dioxide (CO ₂)
Water spray |
|------------------------------|--|

- | | |
|--------------------------------|-------------------------|
| Unsuitable extinguishing media | : High volume water jet |
|--------------------------------|-------------------------|

5.2 Special hazards arising from the substance or mixture

- | | |
|--------------------------------------|---|
| Specific hazards during firefighting | : Do not allow run-off from fire fighting to enter drains or water courses. |
|--------------------------------------|---|

5.3 Advice for firefighters

- | | |
|---|---|
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for firefighting if necessary. |
| Further information | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : no data available

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
If the product contaminates rivers and lakes or drains inform
respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Not applicable

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the
application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Temperature class : no data available

Fire-fighting class : no data available

Dust explosion class : no data available

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Containers which are opened must be carefully resealed and
kept upright to prevent leakage.
Electrical installations / working materials must comply with
the technological safety standards.

Further information on storage conditions : Ambient / 10-30°C (50-85°F)
Dry, well ventilated, preferably full, hermetically sealed

Advice on common storage : Protect against light.

German storage class : no data available

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Please refer to attached exposure scenarios.

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

61792-11-8

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 5,29 mg/m3

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Acute systemic effects
Value: 10,58 mg/m3

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 13,22 mg/m3

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 26,45 mg/m3

End Use: Workers
Exposure routes: Dermal
Potential health effects: Long-term systemic effects
Value: 1,5 mg/kg bw/day

End Use: Workers
Exposure routes: Dermal
Potential health effects: Acute systemic effects
Value: 3 mg/kg bw/day

End Use: Workers
Exposure routes: Dermal
Potential health effects: Long-term local effects
Value: 3,75 mg/cm2

End Use: Workers
Exposure routes: Dermal
Potential health effects: Acute local effects
Value: 7,5 mg/cm2

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

End Use: Consumer use
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 1,3 mg/m³

End Use: Consumer use
Exposure routes: Inhalation
Potential health effects: Acute systemic effects
Value: 2,61 mg/m³

End Use: Consumer use
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 3,26 mg/m³

End Use: Consumer use
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 6,52 mg/m³

End Use: Consumer use
Exposure routes: Dermal
Potential health effects: Long-term systemic effects
Value: 0,75 mg/kg bw/day

End Use: Consumer use
Exposure routes: Dermal
Potential health effects: Acute systemic effects
Value: 1,5 mg/kg bw/day

End Use: Consumer use
Exposure routes: Dermal
Potential health effects: Long-term local effects
Value: 1,88 mg/cm²

End Use: Consumer use
Exposure routes: Dermal
Potential health effects: Acute local effects
Value: 3,75 mg/cm²

End Use: Consumer use
Exposure routes: Oral
Potential health effects: Long-term systemic effects
Value: 0,75 mg/kg bw/day

PNEC
61792-11-8

: Fresh water

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Value: 0,0024 mg/l

Fresh water sediment

Value: 0,248 mg/kg dry weight (d.w.)

Marine water

Value: 0,00024 mg/l

Marine sediment

Value: 0,025 mg/kg dry weight (d.w.)

Sewage treatment plant

Value: 0,9 mg/l

Soil

Value: 0,05 mg/kg dry weight (d.w.)

8.2 Exposure controls

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practice.

Environmental exposure controls

General advice : Prevent product from entering drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid
Form : liquid
Colour : colorless to Pale yellow
Taste : not determined
Odour : Citrus-like, fatty odour, Warm, Powerful
Odour Threshold : 2,3567 ng/l
Flash point : 78 °C Method: Pensky-Martens closed cup

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Lower explosion limit	: not determined
Upper explosion limit	: not determined
Flammability (solid, gas)	: no data available
Oxidizing properties	: no data available
Auto-ignition temperature	: 290 °C Method: DIN 51794
Decomposition temperature	: no data available
Molecular weight	: 163,3 g/mol
pH	: no data available
Melting point	: < -50 °C
Boiling point	: 247 °C at 1 013 hPa
Vapour pressure	: 0,017 hPa at 20 °C Method: OECD Test Guideline 104
Density	: 863,97 kg/m3 at 20 °C
Bulk density	: Not applicable
Water solubility	: 42 mg/l at 20 °C
Solubility/qualitative	: practically insoluble
Partition coefficient: n-octanol/water	: log Pow: 3,2 Method: OECD Test Guideline 117
Viscosity, kinematic	: 3,2 mm2/s at 20 °C Method: OECD Test Guideline 114
Relative vapour density	: no data available
Surface tension	: 62,3 mN/m Method: OECD Test Guideline 115
Evaporation rate	: no data available
Explosive properties	: no data available

9.2 Other information

Not applicable

SECTION 10. Stability and reactivity

10.1 Reactivity

none

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions., No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : no data available

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

10.5 Incompatible materials

Materials to avoid : no data available

10.6 Hazardous decomposition products

Hazardous decomposition products : no data available

Thermal decomposition : no data available

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : LD50 Rat
Dose: 2 600 mg/kg

Acute inhalation toxicity : This information is not available.

Acute dermal toxicity : LD50 Rabbit
Dose: > 5 000 mg/kg

Acute toxicity (other routes of administration) : No data is available on the product itself.

Skin corrosion/irritation

Skin irritation : Species: Rabbit
No skin irritation
Method: OECD Test Guideline 404
Exposure time: 72 h
Test substance: 3,7-dimethyl-6-octenonitrile
Expert judgement

Serious eye damage/eye irritation

Eye irritation : Species: Rabbit
No eye irritation
Exposure time: 7 d

Respiratory or skin sensitisation

Sensitisation : Skin sensitization Human
Result: Not sensitizing
at 6 % in Petrolatum

Maximisation Test Guinea pig

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Result: Not sensitizing
at 10 % in Alcohol

Germ cell mutagenicity

Genotoxicity in vitro : Ames test
negative
Method: Mutagenicity (Salmonella typhimurium - reverse
mutation assay)

Chromosome aberration test in vitro
negative
Method: Mutagenicity (in vitro mammalian cytogenetic test)

Genotoxicity in vivo : Micronucleus test Species: Mouse
negative

Carcinogenicity

Carcinogenicity : No data is available on the product itself.

Reproductive toxicity

Reproductive toxicity : No data is available on the product itself.

Target Organ Systemic Toxicant - Single exposure

Target Organ Systemic Toxicant - Single exposure : No data is available on the product itself.

Target Organ Systemic Toxicant - Repeated exposure

Target Organ Systemic Toxicant - Repeated exposure : Species: Rat, male and female
Exposure time: 90d ()
NOAEL: 300 mg/kg
Test substance: 3,7-dimethyl-6-octenonitrile
Method: OECD Test Guideline 408
Expert judgement

Aspiration hazard

Aspiration toxicity : No data is available on the product itself.

Phototoxicity

Phototoxicity : Phototoxicity Guinea pig
Result:negative

Administrative information:
Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20
Sales & Distribution Information: VE01/FR/CH11/01
Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Further information : no data available

SECTION 12. Ecological information

12.1 Toxicity

Toxicity to fish : LC50: 2,4 mg/l
Exposure time: 96 h
Remarks:
The value is given based on a SAR/AAR approach using
OECD Toolbox, DEREK, VEGA QSAR models (Cesar
models), etc.

Toxicity to daphnia and other : EC50: 2,7 mg/l
aquatic invertebrates Exposure time: 48 h
Species: Daphnia magna (Water flea)
static test Method: OECD Test Guideline 202

Toxicity to algae : ErC50: 3,6 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (algae)
static test
: EC50: 3,6 mg/l
Exposure time: 96 h
Species: Pseudokirchneriella subcapitata (algae)
static test

M-Factor
3,7-dimethyl-2(3),6- : 1
nonadienonitrile
Toxicity to bacteria : no data available
Toxicity to fish (Chronic : no data available
toxicity)
Toxicity to daphnia and other : no data available
aquatic invertebrates
(Chronic toxicity)

Acute aquatic toxicity : no data available
Chronic aquatic toxicity : no data available
Toxicity Data on Soil : no data available
Other organisms relevant to : no data available
the environment

12.2 Persistence and degradability

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Biodegradability : Result: Not readily biodegradable.
32 %
Method: OECD Test Guideline 301 F
Result: Inherently biodegradable.
70 %
Method: OECD Test Guideline 301 F

12.3 Bioaccumulative potential

Bioaccumulation : no data available

12.4 Mobility in soil

Mobility : no data available
Distribution among : log K_{oc}: 3
environmental compartments Method: OECD Test Guideline 121

Additional advice : no data available
Environmental fate and pathways
Physico-chemical : no data available
removability

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Biochemical Oxygen : no data available
Demand (BOD)
Dissolved organic carbon : no data available
(DOC)
Chemical Oxygen Demand : no data available
(COD)
Adsorbed organic bound : no data available
halogens (AOX)
Additional ecological : An environmental hazard cannot be excluded in the event of
information unprofessional handling or disposal. Toxic to aquatic life with
long lasting effects.

SECTION 13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan**Lemonile - GIVAUDAN**

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Dispose of in accordance with local regulations.

SECTION 14. Transport information**ADR/RID/ADN**

UN number : 3082
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(3,7-dimethyl-2,6-nonadienenitrile)
Transport hazard class(es) : 9
Packing group : III
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)
Environmentally hazardous : yes

IATA/ICAO

UN number : 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(3,7-dimethyl-2,6-nonadienenitrile)
Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes
Packing instruction (CAO) : 964
Packing instruction (PAX) : 964
Packing instruction (Ltd. Qty.) : Y964

IMDG

UN number : 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(3,7-dimethyl-2,6-nonadienenitrile)
Class : 9
Packing group : III
Labels : 9
EmS Fire : F-A
EmS Spillage : S-F
Marine pollutant : yes
3,7-dimethyl-2,6-nonadienenitrile
IMDG Code Segregation Group : None

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan**Lemonile - GIVAUDAN**

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

SECTION 15. Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Major Accident Hazard : ENVIRONMENTAL HAZARDS
Legislation E2
Quantity 1: 200 t
Quantity 2: 500 t

Water contaminating class : WGK 2 water endangering
(Germany)

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H411 Toxic to aquatic life with long lasting effects.

Full list of Emergency response numbers worldwide.

	Country	Phone nr		Country	Phone nr
Europe	All Europe	+44 1235 239670	APAC	All East/South East Asia	+65 3158 1074
	France	+33 1 72 11 00 03		Sri Lanka	+65 3158 1195
	Germany	+49 69 222 25285		Taiwan	+886 2 8793 3212
	Spain	+34 91 114 2520		Japan	+81 3 4578 9341
	Italy	+39 02 3604 2884		Indonesia	007 803 011 0293
	Netherlands	+31 10 713 8195		Malaysia	+60 3 6207 4347
	Turkey	+90 212 375 5231		Thailand	001 800 120 666 751
	Norway	+47 2103 4452		India	+65 3158 1198 000 800 100 7479
	Greece	+30 21 1198 3182		Pakistan	+65 3158 1329
	Portugal	+351 30880 4750		Bangladesh	+65 3158 1200
	Denmark	+45 8988 2286		Philippines	+65 3158 1203
	Sweden	+46 8 566 42573		Vietnam	+84 28 4458 2388
	Poland	+48 22 307 3690		Korea	+65 3158 1285

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

	Czech republic	+420 228 882 830		South Korea	+82 2 3479 8401
	Finland	+358 9 7479 0199		Australia	+61 2 8014 4558
Middle East/Africa	All Middle East/Africa	+44 1235 239671		New Zealand	+64 9 929 1483
	Bahrain and Middle East	+973 1619 8321		China	+86 532 8388 9090
	Africa/South Africa	+27 21 300 2732		Mexico	+52 55 5004 8763
NOAM	USA and Canada	+1 866 928 0789	LATAM	Brazil	+55 11 3197 5891
	USA and Canada	+1 215 207 0061		Chile	+56 2 2582 9336
	USA and Canada	+1 202 464 2554	Global	Global	+44 1865 407333

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Givaudan

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Key or legend to abbreviations and acronyms used in the safety data sheet

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851

Lemonile - GIVAUDAN

Version 14.0

Revision Date 13 FEB 2018

Print Date 13 FEB 2018

Annex

Exposure Scenario

Number	Title
ES1	Formulation of fragrance compounds (mixing of fragrance substances into fragrance compounds)
ES2	Formulation of fragranced end-products (mixing of fragrance compounds into fragranced end-products)
ES3	Industrial end-use of washing and cleaning products
ES4	Professional end-use of washing and cleaning products
ES5	Professional end-use of polishes and wax blends
ES6	Consumer end-use of washing and cleaning products
ES7	Consumer end-use of air care products
ES8	Consumer end-use of biocides
ES9	Consumer end-use of polishes and wax blends
ES10	Consumer (and Professional) end-use of cosmetics

Administrative information:

Report Information: SDS_EU/EN/GHS_SDS_EU_REGION/20

Sales & Distribution Information: VE01/FR/CH11/01

Shipping Order Information: 15 619 440/7 767 851