

according to 1907/2006/EC, Article 31

Version: 2

Revision: 17.09.2019

Printing date 17.09.2019 Trade name: **Corum 9230**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 <u>Product identifier</u> Trade name CAS number

Corum 9230 2216-51-5 (and) 59259-38-0

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

 Recommended Use
 Used in the formulation of cosmetics and personal care products

 Skin cosmetics
 Skin cosmetics

 Cosmetic auxiliary
 Cosmetic Active Agent

 Uses advised against
 No information available

 Product category
 Not determined

 Process category
 Not determined

- 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier CORUM INC.
 6FL., No.360, Ruei Guang Rd., Neihu Dist, Taipei 11492, Taiwan Further information obtainable from marketing.support@corum.com.tw
- 1.4 <u>Emergency telephone number</u> Company phone number

CORUM Tel. 886-2-8751-6060 Fax. 886-2-8751-6363

SECTION 2: HAZARDS IDENTIFICATION

2.1 <u>Classification of the substance or mixture</u> Classification according to Regulation (EC) No 1272

Classification according to Regulation (EC) No 1272/2008



GHS07 Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Label according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation. Hazard Pictograms





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Signal word Warning Hazard statements H315 causes skin irritation H319 causes serious eye irritation Precautionary statements	
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P264	Wash thoroughly after handling.
P302+P352	If on skin: wash with plenty of water
P305+P351+P338	If in eyes: rinse cautiously with water for serval minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362	Take off contaminated clothing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

Results of PBT and vPvB assessment Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical characterization: Mixture

3.2 Composition/information on ingredients

Chemical Name	CAS No.	EC No.
L-menthol \$\$ Skin Irrit. 2, H315; Eye Irrit. 2, H319	2216-51-5	218-690-9
[1R-[1alpha(R*),2ß,5alpha]]-5-methyl-2-(1 -methylethyl) cyclohexyl lactate	59259-38-0	261-678-3

SECTION 4: FIRST AID MEASURES

4.1 <u>Description of first aid measures</u>

General information	No data available.
After inhalation	Supply fresh air; consult doctor in case of complaints.
After skin contact	Remove contaminated clothing, contaminated footwear and dispose of safely. Wash off immediately with plenty of water for at least 15 minutes. If skin irritation continues, consult a doctor.
After eye contact	Protect unharmed eye Check for and remove any contact lenses Wash immediately and abundantly with running water for at least 15 minutes, keeping eyes open In case the eyes are injured, or in case there is irritation, seek for medical advise/treatment



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After swallowing

Do not give anything by mouth to an unconscious person. If the person is conscious, clean mouth with water and drink afterwards 2-4 glasses of water Prevent vomiting if possible. If a person is vomiting while laying on his back, place him in the recovery position (turned onto his side) Seek medical advice

- 4.2 Most important symptoms and effects, both acute and delayed Symptoms No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed Note to physicians

No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

- **Extinguishing media** 5.1 Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media High volume water jet.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters Wear self-contained breathing apparatus with facepiece. Additional information In the event of fire and/or explosion do not breathe fumes. Cool fire exposed containers with water spray from a protected location.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures 6.1 Ensure adequate ventilation. Put on appropriate personal protective equipment.
- 6.2 **Environmental precautions** Do not allow product to reach sewage system or any water course.
- 6.3 Methods and material for containment and cleaning up Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

6.4 **Reference to other sections**

See Section 7 for information on safe handing. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.



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SECTION 7: HANDLING ANDSTORAGE

- 7.1 Precaution for safe handling Advice on safe handling The usual precautionary measures are to be adhered to when handling chemicals. Avoid contact with skin and eyes. Put on appropriate personal protective equipment. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Store in tightly closed containers Store in a cool, dry, well-ventilated area, away from incompatible substances To maintain product quality, do not store in heat or direct sunlight Incompatible materials None known based on information supplied. Storage class (VbF) No
- 7.3 <u>Specific end use(s)</u> No further relevant information available.

SECTION 8: EXPOSURECONTROLS/PERSONAL PROTECTION

8.1 **Control parameters Exposure limits** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. DNEL Not determined. PNEC Not determined. Additional information The limits lists that are valid during this review were used as a basis. 8.2 Exposure controls Personal protective equipment **Respiration protection** Not necessary if room is well-ventilated. Hands protection Protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the



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	penetration times, rates of diffusion and the degradation.
Material of gloves	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application
Penetration time of glove material	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	Chemical safety googles.
General protective measure	Avoid contact with the eyes and skin
General hygiene measure	The usual precautionary measures are to be adhered to when handing chemicals
Environmental exposure controls	No further relevant information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Liquio
Appearance	Liquid
Color	Colou
Odor	Faint
Oder threshold	Not d

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<u>Property</u>	
pH value (5%)	Not determined
Melting point/Melting range	41,2 - 41,7 °C at 1013 hPa for ingredient L-menthol
	Not determined
Boiling point/Boiling range	212 °C at 1 atm for ingredient L-menthol
	Not determined
Flash point	94 °C at 102 kPa for ingredient L-menthol
	Not determined
Flammability (solid, gaseous)	Not determined
Ignition temperature	Not determined
Decomposition temperature	Not determined
Self-igniting	Not determined
Danger of explosion	Product does not present an explosion hazard
Explosion limit	
Lower	Not determined
Upper	Not determined
Oxidizing properties	Not determined
Explosive properties	Not determined
Vapor pressure	19 Pa at 25 °C for ingredient L-menthol
	Not determined
Vapor density	Not determined
Relative density	Not determined



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Evaporation rate Solubility

Partition coefficient (n-octanol/water at 25 °C)

Kinematic Viscosity Dynamic Viscosity

9.2 <u>Other information</u> Surface tension Dissociation constant Granulometry Not determined Not miscible or difficult to mix. 0.397 g/L at 20 °C (OECD 105) for ingredient L-Menthol

Not determined log Pow= 3,15 (25 °C) for ingredient L-menthol Not applicable Not applicable

Not applicable Not applicable Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 <u>Reactivity</u>

No further relevant information available.

- 10.2 <u>Chemical stability</u> The product is stable under ordinary condition. Thermal decomposition/conditions to be avoided No decomposition if used according to specifications.
- **10.3** Possibility of hazardous reactions No dangerous reactions known.
- **10.4** Conditions to avoid See Section 7 for information on safe handing.
- **10.5** <u>Incompatible materials</u> See Section 7 for information on safe handing.
- 10.6 <u>Hazardous decomposition products</u> No dangerous decomposition products known

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity LD/LC50 values relevant for classification

 2216-51-5 L-menthol

 Effect
 Value
 Species

 dose/concentration

 Acute oral toxicity
 LD50
 3400 mg/kg bw
 mouse

 Acute oral toxicity
 LD50
 3300 mg/kg bw
 rat



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Primary Irritant effect	
Skin corrosion/irritation	Human Occlusive Single Patch Test, tested at 2% dilution, 48 hours: non-irritant
	Non diluted product: causes skin irritation.
Serious eye damage/irritation	HET-CAM Test (in vitro), dilution at 2%: slightly irritant
	Non diluted product: causes serious eye irritation.

Respiratory tract	Not determined
Respiratory/skin sensitization	Not determined
Additional toxicological information	

Toxicokinetics, metabolism	Not determined
and distribution	
Repeated dose toxicity	

2216-51-5 L-menthol			
	Effect	Value	Species
	dose/concentration		
Oral toxicity	NOAEL Rep. Dose	200 mg/kg bw/d	Rat
_			Feed, 5,5 weeks (highest tested dose)

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Germ	Germ Cell mutagenicity		
2216-51-5 L-menthol			
AMES Test	AMES Test Negative (bacteria) (Bacterial reverse mutation (E. coli WP2 uvrA (trp))		
Carcino	ogenicity	Not determined	
Reprod	uctive toxicity	Not determined	

STOT-single exposure	Not determined
STOT-repeated exposure	Not determined

Not determined

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity 2216-51-5 L-menthol

Aspiration hazard

Effect dose/concentration	Value	Species	Method
LD50/96h	15.6mg/l	Branchydanio rerio	OECD 203
EC50	237 mg/l	Micro-organisms	OECD 209
EC50/48h (static)	26.6mg/l	Daphnia	Static



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EC50/96h	18.4 mg/l	Pimephales promelas	Flow-through
NOEC/72h	9.65 mg/l	Scenedesmus subspicatus	OECD 201

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Effect dose/concentration	Value	Species	Method
LC50	6.632 mg/l	Fish	ECOSAR v.0.99g prediction
EC50	10.944 mg/l	Daphnia	ECOSAR v.0.99g prediction

12.2 Persistence and degradability

The components are ready biodegradable, the mixture is also expected to be ready biodegradable.

12.3 Bioaccumulative potential

Low potential expected, based on the components tests and ECOSAR predictions.

12.4 Mobility in soil

No further relevant information available

12.5 <u>Results of PBT and vPvB assessment</u> Not applicable

12.6 Other adverse effects

No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 <u>Waste treatment methods</u>

Recommendation

Observe community, national or regional regulations for waste handling and treatment

Uncleaning Packaging Recommendation

Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 <u>UN-Number</u> ADR/RID ADN IMDG IATA

Not applicable Not applicable Not applicable Not applicable

14.2 <u>UN proper shipping name</u> ADR/RID ADN IMDG

Not applicable Not applicable Not applicable



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-		
	ΙΑΤΑ	Not applicable
14.3	<u>Transport hazard class(es)</u> ADR/RID ADN IMDG IATA	Not applicable Not applicable Not applicable Not applicable
14.4	Packing group ADR/RID ADN IMDG IATA	Not applicable Not applicable Not applicable Not applicable
14.5	<u>Environmental hazard</u> Marine pollutant	Νο
14.6	Special precautions for user Special precaution for user	Not applicable

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable UN "Model Regulation"

SECTION 15: REGULATORY INFORMATION

15.1 <u>Safe, health and environmental regulations/legislation specific for the substance or mixture</u> Inventory - United States - Toxic Substances Control Act (TSCA) 2216-51-5 L-menthol is listed.

Canada Domestic Substances List (DSL)

2216-51-5 L-menthol is listed. 59259-38-0 [1R-[1alpha(R*),2ß,5alpha]]-5-methyl-2-(1 -methylethyl) cyclohexyl lactate.

Canada Non-Domestic Substances List (NDSL)

Substance is not listed.

European Inventory of Existing Chemical Substances (EINECS)

2216-51-5 L-menthol is listed. 59259-38-0 [1R-[1alpha(R*),2ß,5alpha]]-5-methyl-2-(1 -methylethyl) cyclohexyl lactate.

Japan Existing and New Chemical Substances (ENCS) 2216-51-5 L-menthol is listed.

 $59259-38-0 \ [1R-[1alpha(R^*), 2\beta, 5alpha]]-5-methyl-2-(1-methylethyl) \ cyclohexyl \ lactate.$

China Inventory of Existing Chemical Substance (IECSC)

2216-51-5 L-menthol is listed. 59259-38-0 [1R-[1alpha(R*),2ß,5alpha]]-5-methyl-2-(1 -methylethyl) cyclohexyl lactate.

Korean Existing and Evaluated Chemical Substances (KECL)



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2216-51-5 L-menthol is listed.

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

2216-51-5 L-menthol is listed. 59259-38-0 [1R-[1alpha(R*),2ß,5alpha]]-5-methyl-2-(1 -methylethyl) cyclohexyl lactate.

Australian Inventory of Chemical Substances (AICS)

2216-51-5 L-menthol is listed. 59259-38-0 [1R-[1alpha(R*),2ß,5alpha]]-5-methyl-2-(1 -methylethyl) cyclohexyl lactate.

National regulations Other regulations, limitations and prohibitive regulations Not determined Substances of very high concern (SVHC) according to REACH, Article 57 Not determined

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of Corum Inc. It relates only to the specific material designated herein, and does not relate to use in combination with any other material or in any process. Corum Inc. assumes no legal responsibility for use of or reliance upon this information.

Abbreviations and acronyms

GHS: Globally Harmonized System of Classification and Labeling Chemicals CAS: Chemical Abstract Service (division of the American Chemical Society) VbF: Ordinance on the storage of combustible liquids, Austria DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent EC50: Effective Concentration 50% NOEC: No observed effect concentration SVHC: Substances of Very High Concern PBT: Persistent Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative STOT: Specific Target Organ Toxicity ADR: Agreement on Dangerous Goods by Road RID: Regulations concerning the Intl Transport of Dangerous Goods by Rail ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways IMDG: International Maritime Dangerous Goods IATA: International Air Transport Association

Sources

Own data from manufacture Chemical safety report according to REACH registration dossier.