



## SAFETY DATA SHEET

### CHRYSALIS LEGEND ALL PURPOSE SUPER

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

<b>Product name</b>	CHRYSALIS LEGEND ALL PURPOSE SUPER
<b>Product number</b>	LEGM_AL0285_2X2L
<b>Internal identification</b>	1234
<b>Container size</b>	2L

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

<b>Identified uses</b>	Detergent. For professional use only.
<b>Uses advised against</b>	Not for direct contact with Food or Beverage stuffs. Not for oral consumption.

##### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b>	Chrysalis Supplies Limited Unit 9a, Crest Rise Thurmaston Leicestershire LE4 9EX info@chrysalis.uk.com
<b>Manufacturer</b>	UK - Merlin Chemicals Ltd. Unit 5 Passfield Mill Business Park, Liphook, Hampshire, GU30 7RR Tel: +44 (0)1428 751122 email: technical@kersia-group.com EU - Kersia Deutschland GmbH, Marie-Curie-Straße 23 53332 Bornheim - Sechtem

##### 1.4. Emergency telephone number

<b>Emergency telephone</b>	Out of Office Hours Emergency Information:- For accidents and spillages involving this product that pose a threat to the environment, or human health, or require immediate first aid advice call:- +44(0) 7050 265597. Note:- This number will not accept order queries or calls dealing with equipment breakdowns. UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental Protection Agency 1890 335599 (This is a Lo Call Number)
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#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

<b>Physical hazards</b>	Not Classified
<b>Health hazards</b>	Eye Dam. 1 - H318
<b>Environmental hazards</b>	Aquatic Chronic 3 - H412

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### 2.2. Label elements

#### Hazard pictograms



<b>Signal word</b>	Danger
<b>Hazard statements</b>	H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains CITRONELLOL, 4-TERT-BUTYLCYCLOHEXYL ACETATE. May produce an allergic reaction.
<b>Precautionary statements</b>	P273 Avoid release to the environment. P280 Wear protective clothing, gloves, eye and face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P313 Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
<b>Contains</b>	C9-11 ALCOHOL ETHOXYLATE WITH 6.5M ETHYLENE OXIDE, ALKYL DIMETHYL AMINE OXIDE
<b>Supplementary precautionary statements</b>	P404 Store in a closed container.

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>C9-11 ALCOHOL ETHOXYLATE WITH 6.5M ETHYLENE OXIDE</b>		<b>5-8%</b>
CAS number: 68439-46-3		
<b>Classification</b>		
Acute Tox. 4 - H302		
Eye Dam. 1 - H318		
<b>ALKYL DIMETHYL AMINE OXIDE</b>		<b>1-4.5%</b>
CAS number: 308062-28-4	EC number: 931-292-6	REACH registration number: 01-2119490061-47
M factor (Acute) = 1		
<b>Classification</b>		
Acute Tox. 4 - H302		
Skin Irrit. 2 - H315		
Eye Dam. 1 - H318		
Aquatic Acute 1 - H400		
Aquatic Chronic 2 - H411		

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<b>1-METHOXY-2-PROPANOL</b>	<b>1-5%</b>
CAS number: 107-98-2	EC number: 203-539-1
	REACH registration number: 01-2119457435-35-XXXX
<b>Classification</b>	
Flam. Liq. 3 - H226	
STOT SE 3 - H336	
<b>ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE</b>	<b>&lt;1%</b>
CAS number: 68424-85-1	EC number: 270-325-2
M factor (Acute) = 10	M factor (Chronic) = 1
<b>Classification</b>	
Met. Corr. 1 - H290	
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
<b>CITRONELLOL</b>	<b>&lt;1%</b>
CAS number: 106-22-9	EC number: 203-375-0
	REACH registration number: 01-2119453995-23-XXXX
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1B - H317	
<b>4-TERT-BUTYLCYCLOHEXYL ACETATE</b>	<b>&lt;1%</b>
CAS number: 32210-23-4	EC number: 250-954-9
	REACH registration number: 01-2119976286-24-XXXX
<b>Classification</b>	
Skin Sens. 1B - H317	
Aquatic Chronic 2 - H411	

The full text for all hazard statements is displayed in Section 16.

**Composition comments** To the best of our knowledge, all of the substances used in this product are being supported for the relevant application in REACH.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Inhalation</b>	Move affected person to fresh air. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

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**Skin contact** Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.

**Eye contact** Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes and get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

**General information** The product contains a sensitising substance.

**Inhalation** Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose.

**Ingestion** Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, irritation of the mouth, throat and GI tract may occur. If dilute chemical is ingested some soreness of the mouth, throat and GI tract may occur.

**Skin contact** There may be mild irritation at the site of contact. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. May cause skin sensitisation or allergic reactions in sensitive individuals.

**Eye contact** Risk of serious damage to eyes. May result in permanent eye damage.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Use alcohol-resistant foam, carbon dioxide or dry powder to extinguish. Use fire-extinguishing media suitable for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** Burning produces irritating, toxic and obnoxious fumes.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Protective clothing and respiratory protection should be worn when tackling fires involving this product. Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Ensure adequate ventilation of the working area.

### 6.2. Environmental precautions

**Environmental precautions** Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Avoid or minimise the creation of any environmental contamination.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Stop leak if safe to do so. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable labelled containers and seal securely. For waste disposal, see Section 13.

### 6.4. Reference to other sections

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**Reference to other sections** See sections 8, 12 & 13

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Ensure adequate ventilation of the working area.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store below 40°C.

#### 7.3. Specific end use(s)

**Specific end use(s)** Detergent.

**Usage description** This product is suitable for use in food preparation areas, but is not designed for direct food contact.

### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### **1-METHOXY-2-PROPANOL**

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m<sup>3</sup>

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

#### **Ingredient comments**

Where an exposure level is quoted, a risk assessment should consider if there is a need to monitor the atmosphere of the working environment. Results should be compared against the WEL and/or DNEL information provided. The Long Term WEL refers to total exposure of a worker to a specific substance averaged out over an 8 hour period.

The Short Term WEL refers to a single exposure of a worker to a specific substance over a 15 minute period.

If the Short Term WEL is exceeded and no Long Term Limit is set, further exposure during the working shift is not permitted. Further controls should be implemented to ensure that future exposure to the substance is reduced below the levels set before the activity is repeated/continued. Where no Short Term WEL exists, guidance from the HSE is to use a value of three times the Long Term WEL.

The WEL limits are laid down in the EH40 list as supplied by the HSE. Where a worker is exposed to levels approaching a limit, further exposure control measures should be considered to reduce exposure to the substance. DNEL and/or PNEC information is supplied by manufacturers of substances in accordance with REACH legislation (Regulation (EC) No 1907/2006), and is used to provide suitable risk reduction measures to limit exposure of the user of the substance to a non hazardous level. If the measured level of exposure by a route divided by the DNEL for the route is greater than 1, then further exposure controls should be implemented as described in section 8.2. Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet.

**ALKYL DIMETHYL AMINE OXIDE (CAS: 308062-28-4)**

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<b>DNEL</b>	Professional - Dermal; Long term systemic effects: 11 mg/kg/day Professional - Inhalation; Long term systemic effects: 15.5 mg/m <sup>3</sup> 8h Professional - Dermal; Long term local effects: 0.27 % General population - Dermal; Long term systemic effects: 5.5 mg/kg/day General population - Inhalation; Long term systemic effects: 3.8 mg/m <sup>3</sup> General population - Oral; Long term systemic effects: 0.44 mg/kg/day
<b>PNEC</b>	- Fresh water; 0.0335 mg/l - marine water; 0.00335 mg/l - Intermittent release; 0.0335 mg/l - Sediment (Freshwater); 1.02 mg/kg - Sediment (Marinewater); 24 mg/kg - Soil; 1.02 mg/kg - STP; 24 mg/kg

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

#### Personal protection

The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.

#### Eye/face protection

The following protection should be worn: Chemical splash goggles. Refer to EN Standard 166 to select appropriate level of protection.

#### Hand protection

Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). Refer to Standard EN 374 and EN 16523

#### Other skin and body protection

Provide eyewash station. Wear suitable protective clothing as protection against splashing or contamination. Reference to EN 13832 and EN 943 is useful when selecting footwear and clothing.

#### Hygiene measures

Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin. Wash contaminated clothing before reuse. Provide eyewash station and safety shower.

#### Respiratory protection

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Workplace Exposure Limit.

#### Environmental exposure controls

Do not allow the substance to contaminate surface water/ground water. See points 6, 12 & 13.

#### General Health and Safety Measures.

The above requirements refer to the neat chemical. In-use solutions may have a lower classification, however, a full risk assessment should be carried out before handling any chemical(s). Risk assessments should refer to COSHH and any other relevant legislation or industry specific guidelines governing the use of chemicals.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

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<b>Appearance</b>	Liquid
<b>Colour</b>	Blue-green.
<b>Odour</b>	Characteristic.
<b>Odour threshold</b>	Not applicable.
<b>pH</b>	pH (concentrated solution): 6 - 7
<b>Melting point</b>	Not applicable.
<b>Initial boiling point and range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Evaporation factor</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not applicable.
<b>Other flammability</b>	Not applicable.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Bulk density</b>	Not applicable.
<b>Solubility(ies)</b>	Soluble in water.
<b>Partition coefficient</b>	Not applicable. Not technically practical for mixtures.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	Not applicable.
<b>Viscosity</b>	Not determined.
<b>Explosive properties</b>	Not applicable.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Not applicable. Contains no Oxidising Components.
<b><u>9.2. Other information</u></b>	
<b>Refractive index</b>	Not applicable.
<b>Particle size</b>	Not applicable.
<b>Molecular weight</b>	Not applicable.
<b>Volatility</b>	Not applicable.
<b>Saturation concentration</b>	Not applicable.
<b>Critical temperature</b>	Not applicable.
<b>Volatile organic compound</b>	Not applicable.
<b>Explosive Properties</b>	Not Classified as Explosive
<b>Storage Temperature Range</b>	0 - 40°C

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended. - See note 10.6.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Refer to section 10.1. Do not mix with Hypochlorite based chemicals, this could result in a dangerous heating of the solution.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid excessive heat for prolonged periods of time.

#### 10.5. Incompatible materials

**Materials to avoid** Strong acids. Bleach.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Does not decompose when used and stored as recommended. - See section 10.5.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - oral

**ATE oral (mg/kg)** 3,429.83

##### Acute toxicity - dermal

**ATE dermal (mg/kg)** 156,000.0

**General information** See section 4.2.

**Inhalation** Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose. - See section 4.2.

**Ingestion** May cause irritation to mouth, throat and GI tract.

**Skin contact** There may be mild irritation at the site of contact. May cause sensitisation or allergic reactions in sensitive individuals.

**Eye contact** Risk of serious damage to eyes. May cause permanent eye injury.

**Acute and chronic health hazards** May cause skin sensitisation or allergic reactions in sensitive individuals.

### SECTION 12: Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

#### 12.1. Toxicity

##### Acute aquatic toxicity

**Acute toxicity - fish** See note 12.0.

#### 12.2. Persistence and degradability



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**Persistence and degradability** The surfactant(s) used in this preparation complies (comply) with the biodegradability criteria as laid down in the European Detergents Regulation No 648/2004 as amended.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Not expected to bioaccumulate.

**Partition coefficient** Not applicable. Not technically practical for mixtures.

### 12.4. Mobility in soil

**Mobility** The product contains substances which are water soluble and may spread in water systems.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** Not determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** When handling waste, the safety precautions applying to handling of the product should be considered. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Do not mix with other chemicals.

**Disposal methods** Small volumes of use solution can be disposed of to sewers. Dispose of waste product or used containers in accordance with local regulations

## SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

<b>National regulations</b>	UK Adoption and Implementation of the UN Globally Harmonised System (GHS) on Classification and Labelling of Chemicals (GB CLP) and considers UK National REACH legislation.
<b>EU legislation</b>	European Regulation (EC) No 1272/2008 (as amended) on Classification, Labelling and Packaging of Substances and Mixtures. Also considered is the REACH Regulation (EC) No.1907/2006 (as amended).

#### 15.2. Chemical safety assessment

##### Pcs Information

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	(EC) No. 1272/2008 : EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures. NPIS - National Poisons Information Service. vPvB - Very Persistent, Very bioaccumulative. PBT - Persistent, Bioaccumulative & Toxic. REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC 1907/2006). DNEL - Derived No Effect Limit. PNEC - Predicted No Effect Concentration. COSHH - Control of Substances Hazardous to Health. Industry - Refers in section 8 to application of the substance in an industrial process. Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises.
<b>General information</b>	This document is a Safety Data Sheet, NOT a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH assessment, taking into account the information held within this document along with other local factors considered in a risk assessment. The Risk and Hazard statements listed below are the full text of abbreviations used in this document. They are not the final classification, for this refer to section 2.
<b>Revision comments</b>	No Change to Formulation, or Classification, SDS re-issued to comply with UK Post Brexit legislation references.
<b>Revision date</b>	01/12/2020
<b>SDS number</b>	27120

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### Hazard statements in full

H226 Flammable liquid and vapour.  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H400 Very toxic 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.  
EUH208 Contains CITRONELLOL, 4-TERT-BUTYLCYCLOHEXYL ACETATE. May produce an allergic reaction.

### REACH extended MSDS comments

REACH requires that persons handling chemicals should take the necessary risk management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevant recommendations must be passed along the supply chain. These assessments are generally reported in Exposure Scenarios. Where Exposure Scenarios have been provided for substances used in this product, the relevant information is incorporated into the safety data sheet.

### END OF SAFETY DATA SHEET

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.