SAFETY DATA SHEET
CHRYSALIS LEGEND ORANGE MULTI

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

1.1. Product identifier

Product name CHRYSALIS LEGEND ORANGE MULTI

Product number LEGM_AD0280_4NX5

Internal identification 1134

Container size 5L

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

Identified uses Detergent. For professional use only.

Uses advised against Not for direct contact with Food or Beverage stuffs. Not for oral consumption.

1.3. Details of the supplier of the safety data sheet

Supplier
Chrysalis Supplies Limited
Unit 9a, Crest Rise
Thurmaston
Leicestershire
LE4 9EX
info@chrysalis.uk.com

Manufacturer
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

Emergency telephone 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)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

CHRYSALIS LEGEND ORANGE MULTI

2.2. Label elements

Hazard pictograms

Signal word	Danger
Hazard statements	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective clothing, gloves, eye and face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P332+P313 If skin irritation occurs: Get medical advice/ attention. 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. P501 Dispose of contents/ container in accordance with national regulations.
Contains	BENZENESULPHONIC ACID, 4-C10-13-SEC-ALKYL DERVIS., C9-11 ALCOHOL ETHOXYLATE WITH 6.5M ETHYLENE OXIDE, d-Limonene
Supplementary precautionary statements	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

BENZENESULPHONIC ACID, 4-C10-13-SEC-ALKYL DERVIS. **1-5%**

CAS number: 85536-14-7 | EC number: 287-494-3 | REACH registration number: 01-2119490234-40-XXXX

Classification
Acute Tox. 4 - H302
Skin Corr. 1C - H314
Eye Dam. 1 - H318
Aquatic Chronic 3 - H412

C9-11 ALCOHOL ETHOXYLATE WITH 6.5M ETHYLENE OXIDE **1-5%**

CAS number: 68439-46-3

Classification
Acute Tox. 4 - H302
Eye Dam. 1 - H318

CHRYSALIS LEGEND ORANGE MULTI

d-Limonene		**1-5%**
CAS number: 5989-27-5	EC number: 227-813-5	REACH registration number: 01-2119529223-47-XXXX
M factor (Acute) = 1	M factor (Chronic) = 1	

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

2-AMINOETHANOL		**<1%**
CAS number: 141-43-5	EC number: 205-483-3	REACH registration number: 01-2119486455-28-XXXX

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Corr. 1B - H314
Eye Dam. 1 - H318
STOT SE 3 - H335

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 relevent application in REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). For immediate First Aid advice in the UK, dial 111.

Inhalation Move affected person to fresh air. Get medical attention if any discomfort continues.

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

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 Neat product will cause skin irritation and potentially permanent eye damage. Dilute product will result in less severe damage to the eyes, but contact should be treated as per neat chemical.

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

CHRYSALIS LEGEND ORANGE MULTI

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 Causes skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Limonene may cause an allergic reaction and result of drying of skin.

Eye contact May result in permanent eye damage.

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

Notes for the doctor Rinse well with water. Contains d-limonene, may cause an allergic like skin reaction in sensitive individuals.

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 When heated and in case of fire, irritating vapours/gases may be formed.

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

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.

CHRYSALIS LEGEND ORANGE MULTI

7.3. Specific end use(s)

Specific end use(s) Detergent, refer to Product Information Sheet for full details.

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

2-AMINOETHANOL

Long-term exposure limit (8-hour TWA): WEL 1 ppm(Sk) 2.5 mg/m3(Sk)
Short-term exposure limit (15-minute): WEL 3 ppm(Sk) 7.6 mg/m3(Sk)
WEL = Workplace Exposure Limit

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. Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet.

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.

CHRYSALIS LEGEND ORANGE MULTI

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

Appearance	Liquid
Colour	Orange.
Odour	Citrus.
Odour threshold	Not applicable.
pH	9 - 11
Melting point	Not applicable.
Initial boiling point and range	Not applicable.
Flash point	Not applicable. Contains no Flammable Components
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	~1.0 @ 20 Degrees C
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable. Not technically practical for mixtures.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not determined.
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.

CHRYSALIS LEGEND ORANGE MULTI

Oxidising properties	Not applicable. Contains no Oxidising Components.

9.2. Other information

Refractive index	Not applicable.
Particle size	Not applicable.
Molecular weight	Not applicable.
Volatility	Not applicable.
Saturation concentration	Not applicable.
Critical temperature	Not applicable.
Volatile organic compound	Not applicable.
Explosive Properties	Not Classified as Explosive
Storage Temperature Range	0 - 40°C

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)	9,688.9

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	Irritating to skin. May cause skin sensitisation or allergic reactions in sensitive individuals.
Eye contact	Risk of serious damage to eyes. May cause permanent eye injury.

CHRYSALIS LEGEND ORANGE MULTI

SECTION 12: Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

12.2. Persistence and degradability

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

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS d-Limonene, BENZENESULPHONIC ACID, 4-C10-13-SEC-ALKYL DERVIS.)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS d-Limonene, BENZENESULPHONIC ACID, 4-C10-13-SEC-ALKYL DERVIS.)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS d-Limonene, BENZENESULPHONIC ACID, 4-C10-13-SEC-ALKYL DERVIS.)

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS d-Limonene, BENZENESULPHONIC ACID, 4-C10-13-SEC-ALKYL DERVIS.)

CHRYSALIS LEGEND ORANGE MULTI

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

Transport labels

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

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

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

National regulations	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.
EU legislation	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).

CHRYSALIS LEGEND ORANGE MULTI

15.2. Chemical safety assessment

Pcs Information

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	(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.
General information	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.
Revision comments	No Change to Formulation, or Classification, SDS re-issued to comply with UK Post Brexit legislation references.
Revision date	01/12/2020
SDS number	27117
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation. 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.
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 relevent 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 relevent information is incorporated into the safety data sheet.
END OF SAFETY DATA SHEET	

CHRYSALIS LEGEND ORANGE MULTI