Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

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

1.1 Product identifier

Trade name: DURALAC GREEN

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

Application of the substance / the mixture
Anti-corrosive jointing compound
For industrial or professional use only

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Llewellyn Ryland Ltd
Haden Street, Birmingham B12 9DB, United Kingdom
Tel: +44 (0)121 440 2284
Fax: +44 (0)121 440 0281
Email: technical@llewellyn-ryland.co.uk

1.4 Emergency telephone number: Llewellyn Ryland Ltd, Tel: +44 (0)121 440 2284 (office hours only , 7am - 7pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Sens. 1	H317	May cause an allergic skin reaction.
Aquatic Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS07 GHS09

Signal word Warning

Hazard-determining components of labelling:
phthalic anhydride
fatty acids, C14-18 and C16-18-unsatd., maleated
cobalt(II) 2-ethylhexanoate
maleic anhydride

Hazard statements
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3 Other hazards

Results of PBT and vPvB assessment
This 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.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

Trade name: DURALAC GREEN

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with non-hazardous additions.

Dangerous components:		
CAS: 7779-90-0 EINECS: 231-944-3 Index number: 030-011-00-6 Reg.nr.: 01-2119485044-40	trizinc bis(orthophosphate) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	25 - 50%
CAS: 1314-13-2 EINECS: 215-222-5 Index number: 030-013-00-7 Reg.nr.: 01-2119463881-32	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	10 - 25%
EC number: 918-481-9 Reg.nr.: 01-2119457273-39	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics Asp. Tox. 1, H304, EUH066	2.5 - 10%
CAS: 1308-38-9 EINECS: 215-160-9 Reg.nr.: 01-2119433951-39	chromium(III)oxide substance with a Community workplace exposure limit	≤ 2.5%
CAS: 85-44-9 EINECS: 201-607-5 Index number: 607-009-00-4 Reg.nr.: 01-2119457017-41	phthalic anhydride Resp. Sens. 1, H334; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	≤ 2.5%
CAS: 1313-27-5 EINECS: 215-204-7 Index number: 042-001-00-9 Reg.nr.: 01-2119488038-30	molybdenum trioxide Carc. 2, H351; Eye Irrit. 2, H319; STOT SE 3, H335	≤ 2.5%
CAS: 22464-99-9 EINECS: 245-018-1 Reg.nr.: 01-2119979088-21	2-ethylhexanoic acid, zirconium salt Repr. 2, H361d	≤ 2.5%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32	xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	≤ 2.5%
Reg.nr.: 01-2119976378-19	fatty acids, C14-18 and C16-18-unsatd., maleated Skin Irrit. 2, H315; Skin Sens. 1, H317	≤ 2.5%
CAS: 136-52-7 EINECS: 205-250-6 Reg.nr.: 01-2119524678-29	cobalt(II) 2-ethylhexanoate Repr. 1A, H360Fd; Aquatic Acute 1, H400; Eye Irrit. 2, H319; Skin Sens. 1A, H317; Aquatic Chronic 3, H412	≤ 2.5%
CAS: 100-41-4 EINECS: 202-849-4 Index number: 601-023-00-4	ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	≤ 2.5%
CAS: 108-83-8 EINECS: 203-620-1 Index number: 606-005-00-X Reg.nr.: 01-2119474441-41	2,6-dimethylheptan-4-one Flam. Liq. 3, H226; STOT SE 3, H335 Specific concentration limit: STOT SE 3; H335: C ≥ 10 %	≤ 2.5%
CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60	(2-methoxymethylethoxy)propanol substance with a Community workplace exposure limit	≤ 2.5%
CAS: 108-31-6 EINECS: 203-571-6 Index number: 607-096-00-9 Reg.nr.: 01-2119472428-31	maleic anhydride Resp. Sens. 1, H334; STOT RE 1, H372; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1A, H317 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	≤ 0.1%

Additional information: For the wording of the listed hazard phrases refer to section 16.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

Trade name: DURALAC GREEN

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 label or SDS where possible).

After inhalation:
Remove person to fresh air and keep comfortable for breathing.
Seek medical treatment in case of complaints.

After skin contact:
Remove contaminated clothes immediately, wash the affected skin thoroughly with plenty of water.
In case of irritation seek medical treatment.
Wash contaminated clothes before reuse.

After eye contact:
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If irritation persists, get medical advice/attention.

After swallowing:
Rinse out mouth with water. If symptoms of indisposition persist, seek medical advice.
Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO2, dry chemical powder, foam or water spray
For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment:
In the case of fire wear self-contained respiratory equipment and protective suit.
Do not inhale explosion gases or combustion gases.

Additional information
Evacuate area and remove all ignition sources.
Cool endangered receptacles with water spray. Contain runoff to prevent entry into water or drainage systems.
Dispose of fire debris and contaminated fire fighting water according to the regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Please notice instructions for person-related safety precautions, wear protective equipment (see 8.)
Keep people at a distance and stay on the windward side.
Ensure adequate ventilation.
Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental precautions:
Do not allow to enter sewers, surface or ground water.
Contain the spilled material by bunding.
Advise water authority in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:
Absorb with non-combustible absorbent material, (eg sand, diatomite, vermiculite).
Place into suitable and labelled containers for disposal.
Clean contaminated floors and objects thoroughly, observing environmental regulations.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

Trade name: DURALAC GREEN

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Prevent formation of aerosols.
Avoid any contact with skin, eyes and clothes.
Do not eat, drink or smoke when using this product.
Wash hands before break and at the end of work.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles:
Store in tightly closed containers in a cool and well ventilated place.
Protect from heat and direct sun.

Information about storage in one common storage facility:
Do not store food, beverages and animal feeding stuffs in the storage area.
Store away from strong acids or strong oxidising agents.

Further information about storage conditions: Keep container tightly sealed.

7.3 Specific end use(s) Use only according to instructions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
CAS: 1308-38-9 chromium(III)oxide	
WEL	Long-term value: 0.5 mg/m³; as Cr
CAS: 1313-27-5 molybdenum trioxide	
WEL	Short-term value: 10 mg/m³, Long-term value: 5 mg/m³; as Mo
CAS: 1330-20-7 xylene	
WEL	Short-term value: 441 mg/m³, 100 ppm, Long-term value: 220 mg/m³, 50 ppm; Sk; BMGV
CAS: 136-52-7 cobalt(II) 2-ethylhexanoate	
WEL	Long-term value: 0.1 mg/m³; as Co; Carc, Sen
CAS: 100-41-4 ethylbenzene	
WEL	Short-term value: 552 mg/m³, 125 ppm, Long-term value: 441 mg/m³, 100 ppm; Sk
CAS: 108-83-8 2,6-dimethylheptan-4-one	
WEL	Long-term value: 148 mg/m³, 25 ppm
CAS: 34590-94-8 (2-methoxymethylethoxy)propanol	
WEL	Long-term value: 308 mg/m³, 50 ppm; Sk
CAS: 108-31-6 maleic anhydride	
WEL	Short-term value: 3 mg/m³, Long-term value: 1 mg/m³; Sen

Regulatory information WEL: EH40/2020

DNELs:
trizinc bis(orthophosphate) (CAS 7779-90-0), zinc oxide (CAS 1314-13-2):
workers, DNEL, chronic effects systemic, inhalation 5 mg/m³
workers, DNEL, chronic effects systemic, dermal 83 mg/kg bw/day
consumers, DNEL, chronic effects repeated, oral 8.83 mg/kg bw/day
consumers, DNEL, chronic effects systemic, inhalation 2.5 mg/m³
consumers, DNEL, chronic effects systemic, dermal 83 mg/kg bw/day

PNECs:
trizinc bis(orthophosphate) (CAS 7779-90-0), zinc oxide (CAS 1314-13-2):
freshwater 20.6 µgZn/l, marine water 6.1 µgZn/l

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

Trade name: DURALAC GREEN

sediment freshwater 117.8 µgZn/l, marine water 56.5 µgZn/l
STP 100 µgZn/l; soil 35.6 µgZn/l

Ingredients with biological limit values:	
CAS: 1330-20-7 xylene	
BMGV (Great Britain)	650 mmol/mol creatinine Medium: urine, Sampling time: post shift, Parameter: methyl hippuric acid

Regulatory information BMGV (Great Britain): EH40/2011

8.2 Exposure controls

Appropriate engineering controls Provide sufficient ventilation, particularly in closed areas.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:
Avoid unnecessary contact with the product. Do not eat, drink or smoke at workplace.
Remove contaminated clothing immediately and wash carefully before reuse.
Do not breathe gas/vapours/spray.
Ensure that washing facilities are available at the work place.
Be sure to clean skin thoroughly after work and before breaks.

Respiratory protection: Not required if used according to its intended purpose.

Hand protection
Chemical resistant gloves
Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

Material of gloves
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
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 cannot 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/face protection Goggles recommended during refilling

Body protection: Protective clothing.

Environmental exposure controls
Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Fluid
Form:	Viscous liquid
Colour:	Green
Odour:	Characteristic
Odour threshold:	No data available
Boiling point or initial boiling point and boiling range	No data available
Flammability	No data available.
Lower and upper explosion limit	No data available.
Flash point:	>60 - 93 °C
Auto-ignition temperature:	No data available.
pH	No data available
Viscosity	
dynamic:	15,000 - 25,000 (Brookfield RV 6, 5rpm)
kinematic:	No data available.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

Trade name: DURALAC GREEN

Solubility	
water:	No data available.
Partition coefficient: n-octanol/water:	No data available.
Vapour pressure:	No data available.
Vapour density:	No data available.
Density:	No data available.
9.2 Other information	
Explosive properties:	Not explosive.
Oxidising properties:	No data available.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity Stable under recommended transport or storage conditions.

10.2 Chemical stability Stable at ambient temperature and under normal conditions of use.

10.3 Possibility of hazardous reactions Stable at ambient temperature and under normal conditions of use.

10.4 Conditions to avoid Heat, direct sun exposure

10.5 Incompatible materials: Strong acids, strong oxidising agents

10.6 Hazardous decomposition products: Decomposes at high temperatures may form toxic gases.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification: No further relevant information available.

Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

Trade name: DURALAC GREEN

Aspiration hazard Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: For the product there are no ecotoxicological data available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment Not applicable.

12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.

12.7 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation Transfer to a suitable container and arrange for collection by specialised disposal company.

Uncleaned packaging:
Recommendation:
Disposal must be made according to official regulations.
Not completely emptied packaging is to be disposed of in the same manner as the product.

SECTION 14: Transport information

14.1 UN number or ID number	
ADR, IMDG, IATA	UN3082
14.2 UN proper shipping name	
ADR	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis(orthophosphate), zinc oxide)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis(orthophosphate), zinc oxide), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis(orthophosphate), zinc oxide)
14.3 Transport hazard class(es)	
ADR	
Class	9 (M6) Miscellaneous dangerous substances and articles.
Label	9
IMDG, IATA	
Class	9 Miscellaneous dangerous substances and articles.
Label	9
14.4 Packing group	
ADR, IMDG, IATA	III
14.5 Environmental hazards:	
Special marking (ADR):	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

Trade name: DURALAC GREEN

Hazard identification number (Kemler code):	90
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIZINC BIS(ORTHOPHOSPHATE), ZINC OXIDE), 9, III

SECTION 15: Regulatory information

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

Seveso category E1 Hazardous to the Aquatic Environment

National regulations: -

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Relevant phrases
H225 Highly flammable liquid and vapour.
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.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H360Fd May damage fertility. Suspected of damaging the unborn child.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

Further information:
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008: Calculation method

Date of previous version: 09.07.2015

Abbreviations and acronyms:
CLP: REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CAS: Chemical Abstracts Service (division of the American Chemical Society)
EINECS: European Inventory of Existing Commercial Chemical Substances
WEL: workplace exposure limit
DNEL: Derived No-Effect Level
PNEC: Predicted No-Effect Concentration
BMGV: Biological Monitoring Guidance Values
PBT: persistent, bioaccumulative and toxic properties
vPvB: very persistent and very bioaccumulative properties
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA: International Air Transport Association

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.03.2021 **Version 5** **Revision: 26.03.2021**

Trade name: DURALAC GREEN

IMDG: International Maritime Code for Dangerous Goods
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Carc. 2: Carcinogenicity – Category 2
Repr. 1A: Reproductive toxicity – Category 1A
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Data compared to the previous version altered Section 1,2,3,4,5,6,7,8,9,11,12,14,15,16