



SAFETY DATA SHEET PRIMAL P 376 LO EMULSION

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

1.1. Product identifier

Product name PRIMAL P 376 LO EMULSION

Product number 63154

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

Identified uses Agriculture binders and coatings

1.3. Details of the supplier of the safety data sheet

Supplier Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 63154

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Hazard statements EUH208 Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.

Supplemental label information EUH210 Safety data sheet available on request.

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

PRIMAL P 376 LO EMULSION**1,2-BENZISOTHIAZOL-3(2H)-ONE****>= 0.025 - < 0.05 %**

CAS number: 2634-33-5

EC number: 220-120-9

M factor (Acute) = 1

Classification

Acute Tox. 4 - H302

Skin Irrit. 2 - H315

Eye Dam. 1 - H318

Skin Sens. 1 - H317

Aquatic Acute 1 - H400

Aquatic Chronic 3 - H412

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

Composition comments The data shown are in accordance with the latest EC Directives.**SECTION 4: First aid measures****4.1. Description of first aid measures**

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
Skin contact	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention if any discomfort continues. Wash clothing and clean shoes thoroughly before reuse.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes. Get medical attention if any discomfort continues.

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

Skin contact	The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	Treat symptomatically. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	When heated and in case of fire, toxic vapours/gases may be formed.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.

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5.3. Advice for firefighters

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 Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Keep upwind. Keep unnecessary and unprotected personnel away from the spillage. Take care as floors and other surfaces may become slippery.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Wash skin thoroughly after handling. Container must be kept tightly closed when not in use.

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. Avoid freezing. Stir well before use. Store at temperatures between 1°C and 49°C.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Ingredient comments No exposure limits known for ingredient(s).

1,2-BENZISOTHIAZOL-3(2H)-ONE (CAS: 2634-33-5)

DNEL

Workers - Dermal; Long term systemic effects: 0.966 mg/kg
 Workers - Inhalation; Long term systemic effects: 6.81 mg/m³
 Consumer - Inhalation; Long term systemic effects: 1.2 mg/m³

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PNEC

Fresh water; 0.004 mg/l
 marine water; 0.0004 mg/l
 Intermittent release; 0.0011 mg/l
 STP; 1.03 mg/l
 Sediment (Freshwater); 0.0499 mg/kg
 Sediment (Marinewater); 0.00499 mg/kg
 Soil; 3.0 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Neoprene. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Milky. White.
Odour	Ammonia.
Odour threshold	No information available.
pH	pH (concentrated solution): 8.0 - 8.6
Melting point	0°C Water
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	100°C @ 760 mm Hg Water

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Flash point	No information available.
Evaporation rate	< 1.00 (butyl acetate = 1) Water
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	2,266.4808000 Pa @ 20°C Water
Vapour density	< 1.0000
Relative density	1.0300 - 1.0800
Bulk density	No information available.
Solubility(ies)	Partly miscible.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	< 400000 mPas
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	49.00 - 51.00 %
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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10.4. Conditions to avoid

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Conditions to avoid Avoid freezing.

10.5. Incompatible materials

Materials to avoid None known.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) This product has low toxicity. This information is based on test data from similar products LD₅₀ > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) This information is based on test data from similar products LD₅₀ > 5000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Skin corrosion/irritation This information is based on test data from similar products Prolonged skin contact may cause redness and irritation.

Serious eye damage/irritation

Serious eye damage/irritation This information is based on test data from similar products Not irritating.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

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

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system.

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Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged skin contact may cause redness and irritation. The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.
Eye contact	May cause temporary eye irritation.

Toxicological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 675.3 mg/kg, Oral, Rat Harmful if swallowed.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility This substance has no evidence of toxicity to reproduction.

Reproductive toxicity - development This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

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

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Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
Ingestion	Harmful if swallowed.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

SECTION 12: Ecological information

Ecotoxicity	The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.
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Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Ecotoxicity	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
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12.1. Toxicity

Toxicity	Not considered toxic to fish.
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Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Toxicity	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
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Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
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M factor (Acute)	1
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Acute toxicity - fish	LC ₅₀ , 96 hours: 1.9 mg/l, Oncorhynchus mykiss (Rainbow trout)
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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 3.7 mg/l, Daphnia magna
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Acute toxicity - aquatic plants	ErC ₅₀ , 72 hours: 0.8 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hours: 0.21 mg/l, Pseudokirchneriella subcapitata ErC ₅₀ , 72 hours: 0.36 mg/l, Algae NOEC, 72 hours: 0.15 mg/l, Algae
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Acute toxicity - microorganisms	EC ₅₀ , 3 hours: 28.52 mg/l, Activated sludge
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12.2. Persistence and degradability

Persistence and degradability	There are no data on the degradability of this product.
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Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Persistence and degradability	Not readily biodegradable.
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Biodegradation	- 24%: 28 days OECD 301B
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12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Bioaccumulative potential Bioaccumulation is unlikely. BCF: 3.2, Fish Calculation method.

Partition coefficient log Pow: 1.17

12.4. Mobility in soil

Mobility Partly miscible.

Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Mobility No information available.

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.

Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects No information available.

Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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.

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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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Classification procedures according to Regulation (EC) 1272/2008

EUH208: Calculation method. Not classified.: Calculation method.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

03/12/2021

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Version number	1.000
SDS number	63154
SDS status	Approved.
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.
Signature	Lisa Bland

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