



SAFETY DATA SHEET NURON

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

1.1. Product identifier

Product name NURON
Product number MAPP Number 19518

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

Identified uses Herbicide

1.3. Details of the supplier of the safety data sheet

Supplier Gemini Agriculture Limited
 71-75 Shelton Street
 Covent Garden
 London
 WC2H 9JQ
 +44 (0)20 30115515
 sales@geminiag.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 845 564 6959

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 Irrit. 2 - H319 Skin Sens. 1 - H317 Asp. Tox. 1 - H304
Environmental hazards Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H410 Very toxic to aquatic life with long lasting effects.

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Precautionary statements	<p>P102 Keep out of reach of children.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P331 Do NOT induce vomiting.</p> <p>P391 Collect spillage.</p> <p>P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.</p>
Supplemental label information	EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
Contains	Prosulfocarb, Hydrocarbons, C10, aromatics, <1% naphthalene
Supplementary precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P405 Store locked up.</p>

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Prosulfocarb	70-90%
CAS number: 52888-80-9	EC number: 401-730-6
Classification	
Acute Tox. 4 - H302	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	
Hydrocarbons, C10, aromatics, <1% naphthalene	5-10%
CAS number: —	EC number: 918-811-1
Classification	
STOT SE 3 - H336	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	

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CALCIUM BIS (DODECYLBENZENESULPHONATE), BRANCHED	1-5%	
CAS number: 26264-06-2	EC number: 247-557-8	REACH registration number: 01-2119560592-37-XXXX
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412		
ISO BUTANOL	1-5%	
CAS number: 78-83-1	EC number: 201-148-0	REACH registration number: 01-2119484609-23-XXXX
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335, H336		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

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). If medical advice is needed, have product container or label at hand. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention immediately. Immediate first aid is imperative.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention immediately.
Ingestion	Do not induce vomiting. Avoid vomiting and stomach flushing because of the risk of aspiration. Get medical attention immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Skin contact	Take off immediately all contaminated clothing. Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing. Wash contaminated clothing 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 15 minutes. Get medical attention immediately.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

Inhalation	Aspiration hazard if swallowed. May be fatal if swallowed and enters airways.
Ingestion	Aspiration hazard if swallowed. May be fatal if swallowed and enters airways. Avoid vomiting and stomach flushing because of the risk of aspiration. Danger of pulmonary oedema. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin contact	Skin irritation. May cause sensitisation by skin contact.
Eye contact	Causes serious eye irritation.

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

Notes for the doctor Do not induce vomiting. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Water spray.

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 Vapours may accumulate on the floor and in low-lying areas. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

Hazardous combustion products Carbon dioxide (CO₂). Carbon monoxide (CO).

5.3. Advice for firefighters

Protective actions during firefighting No action shall be taken without appropriate training or involving any personal risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. Contain and collect extinguishing water.

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 Persons susceptible to allergic reactions should not handle this product. Ensure procedures and training for emergency decontamination and disposal are in place. No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Keep unnecessary and unprotected personnel away from the spillage. Avoid contact with skin and eyes. Avoid heat, flames and other sources of ignition. Vapours may accumulate on the floor and in low-lying areas.

6.2. Environmental precautions

Environmental precautions Very toxic to aquatic life with long lasting effects. Avoid discharge into drains or watercourses or onto the ground. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up No smoking, sparks, flames or other sources of ignition near spillage. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions	Persons susceptible to allergic reactions should not handle this product. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours/spray and contact with skin and eyes. Use only in well-ventilated areas. Keep out of the reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges.
Advice on general occupational hygiene	Persons susceptible to allergic reactions should not handle this product. Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Wash promptly with soap and water if skin becomes contaminated. Wash after use and before eating, smoking and using the toilet. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Earth container and transfer equipment to eliminate sparks from static electricity. Static electricity and formation of sparks must be prevented. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Keep away from flammable and combustible materials.
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7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

ISO BUTANOL

Short-term exposure limit (15-minute): WEL 75 ppm 231 mg/m³

Long-term exposure limit (8-hour TWA): WEL 50 ppm 154 mg/m³

WEL = Workplace Exposure Limit

Prosulfocarb (CAS: 52888-80-9)

Ingredient comments	No exposure limits known for ingredient(s).
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Hydrocarbons, C10, aromatics, <1% naphthalene

DNEL	Workers - Dermal; Long term systemic effects: 12.5 mg/kg/day Workers - Inhalation; Long term systemic effects: 150 mg/m ³ Consumer - Dermal; Long term systemic effects: 7.5 mg/kg/day Consumer - Inhalation; Long term systemic effects: 32 mg/m ³ Consumer - Oral; Long term systemic effects: 7.5 mg/kg/day
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CALCIUM BIS (DODECYLBENEZENESULPHONATE), BRANCHED (CAS: 26264-06-2)

DNEL	Industry - Dermal; Long term systemic effects: 1.7 mg/kg/day General population - Dermal; Long term systemic effects: 85 mg/kg/day General population - Oral; Short term systemic effects: 89 mg/kg/day
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PNEC	<ul style="list-style-type: none"> - Fresh water; 0.023 mg/l - Marine water; 0.0023 mg/l - Sediment (Freshwater); 0.174 mg/kg - Sediment (Marinewater); 0.0174 mg/kg - Soil; 0.62 mg/kg - Intermittent release; 0.01 mg/l
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ISO BUTANOL (CAS: 78-83-1)

DNEL	<p>Industry - Inhalation; Long term local effects: 308 mg/m³</p> <p>Professional - Inhalation; Long term local effects: 308 mg/m³</p> <p>General population - Oral; Long term systemic effects: 55 mg/kg</p> <p>General population - Oral; Long term systemic effects: 25 mg/kg</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.4 mg/l - Marine water; 0.04 mg/l - Intermittent release; 11 mg/l - STP; 10 mg/l - Sediment (Freshwater); 1.52 mg/kg - Sediment (Marinewater); 0.152 mg/kg - Soil; 0.0699 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Wear eye protection.

Hand protection

It is recommended that gloves are made of the following material: Nitrile rubber. 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.

Other skin and body protection

Wear chemical protective suit.

Hygiene measures

Persons susceptible to allergic reactions should not handle this product. Good personal hygiene procedures should be implemented. Promptly remove any clothing that becomes wet or contaminated. Remove contaminated clothing and protective equipment before entering eating areas. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Wash after use and before eating, smoking and using the toilet. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

Particulate filters should comply with European Standard EN143. Wear self-contained breathing apparatus.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
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Colour	Light (or pale), to Brownish. Yellow.
Odour	Aromatic.
Odour threshold	No data available.
pH	pH (diluted solution): 9.7 (1%)
Flash point	74°C PMCC (Pensky-Martens closed cup).
Relative density	1.017 g/cm ³
Solubility(ies)	Miscible with water.
Auto-ignition temperature	380°C
Viscosity	17.8 mPa s @ 20°C 8.5 mPa s @ 40°C 8-9 mm ² /s @ °C
Explosive properties	Not applicable.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability No information available.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Keep away from flammable and combustible materials.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon dioxide (CO₂). Carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) >2000 mg/kg

Acute toxicity - dermal

Notes (dermal LD₅₀) >4000 mg/kg

Acute toxicity - inhalation

Notes (inhalation LC₅₀) >4.7 mg/l

Skin corrosion/irritation

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Skin corrosion/irritation	Irritating to skin.
Animal data	Rabbit
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Irritating to eyes. Rabbit
<u>Skin sensitisation</u>	
Skin sensitisation	Buehler test - Guinea pig: Sensitising.
<u>Aspiration hazard</u>	
Aspiration hazard	Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
<u>Inhalation</u>	
Inhalation	Aspiration hazard if swallowed. May be fatal if swallowed and enters airways.
<u>Ingestion</u>	
Ingestion	Aspiration hazard if swallowed. May be fatal if swallowed and enters airways. Danger of pulmonary oedema. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin contact	Causes skin irritation. May cause sensitisation by skin contact.
Eye contact	Causes serious eye irritation.

SECTION 12: Ecological Information

Ecotoxicity	Very toxic to aquatic life with long lasting effects.
<u>12.1. Toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 3 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 2.2 mg/l, Daphnia magna

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

Bioaccumulative potential The product contains potentially bioaccumulating substances.

12.4. Mobility in soil

Mobility Prosulfocarb Semi-mobile.

Surface tension 32.2 mN/m @ 20.5°C

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 None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

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Disposal methods Incineration or landfill should only be considered when recycling is not feasible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not reuse empty containers. Empty containers or liners may retain some product residues and hence be potentially hazardous. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

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. (PROSULFOCARB AND AROMATIC HYDROCARBONS)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROSULFOCARB AND AROMATIC HYDROCARBONS)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROSULFOCARB AND AROMATIC HYDROCARBONS)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROSULFOCARB AND AROMATIC HYDROCARBONS)

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
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

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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	Control of Substances Hazardous to Health Regulations 2002 (as amended). EH40/2005 Workplace exposure limits. Health and Safety at Work etc. Act 1974 (as amended). Control of Pollution Act 1974. Control of Pollution (Special Waste) Regulations 1980 (as amended). 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).
EU legislation	Commission Regulation (EU) No 2015/830 of 28 May 2015. 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). Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC.
Guidance	Introduction to Local Exhaust Ventilation HS(G)37. Workplace Exposure Limits EH40. 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).

15.2. Chemical safety assessment

Not applicable.

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SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	HS&E Manager.
Revision date	09/08/2017
Revision	4
Supersedes date	28/09/2016
SDS number	40671
SDS status	Approved.
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. 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.

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