SAFETY DATA SHEET

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According to Regulation (EC) No 1907/2006 Version 3 / Revision date: 10/12/2020

Date of issue: 10/12/2020

Section 1: Identification of the mixture and of the company/undertaking

1.1. Product identifier:

Product name: Lawn Gold 24

Product number: G60236 (1L), G60237 (2.5L) & G60238 (5L)

1.2. Relevant identified uses of the mixture and uses advised against:

Lawn Tonic.

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

Hygeia Chemicals Limited

Carrowmoneash, Oranmore, County Galway

Ireland

Tel: 00353 91-794722 Fax: 00353 91-794738

1.3.1 Responsible person:

E-mail: info@hygeia.ie

1.4. Emergency telephone number: National Poisons Information Centre (NPI)

Tel: 353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week) Healthcare Professionals: +353 (1) 809 2566 (24-hour service)

Section 2: Hazards identification

2.1. <u>Classification of the mixture:</u>

Classification according to Regulation (EC) No 1272/2008 (CLP):

Not considered as hazardous mixture.

Hazard statements: No hazard statements.

2.2. Label elements:

Hazard statements: No hazard statements.

Precautionary statements:

P101 – If medical advice is needed, have product container or label at hand.

P102 – Keep out of reach of children.

 $P103-Read\ carefully\ and\ follow\ all\ instructions.$

P501 – Dispose of contents/container in a safe way.

2.3. Other hazards:

The product has no other known specific hazards for human or environment.

Results of PBT and vPvB assessment: No data available.

Section 3: Composition/information on ingredients

3.1. Substances:

Not applicable.

3.2. <u>Mixtures:</u>

Description: Contains a blend of fertiliser ingredients, e.g. ferrous sulphate, ferric ammonium citrate, urea, citric acid.

The product does not contain any substances considered as hazardous, or the concentration of hazardous substances does not reach the extent stated in the relevant regulations, therefore it is not necessary to indicate them in the safety data sheet.

Section 4: First aid measures

4.1. Description of first aid measures:

Ingestion:

Measures:

- If ingestion is suspected, do not induce vomiting.
- If conscious, give plenty of water to drink.
- Obtain medical attention immediately (show this safety data sheet).

Inhalation:

Measures:

- Move to fresh air.
- If there is breathing difficulty or coughing, keep patient at rest seated in a comfortable position.
- Obtain medical attention immediately (show this safety data sheet).

Skin contact:

Measures:

- Remove contaminated clothing immediately.
- If skin contamination occurs wash immediately with plenty of clean, gently flowing water for at least 10 minutes.
 - Repeat skin decontamination process until all signs of chemicals have gone.

Eye contact:

Measures:

- If product has got into the eyes, immediately wash out with plenty of water for at least 10 minutes maintaining eyelids open.
- Protect unharmed eye.
- Take care not to wash the chemical from one eye into the other.
- Obtain medical attention immediately (show this safety data sheet).

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

No acute and delayed symptoms and effects known.

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

No special treatment needed; treat symptomatically.

Section 5: Firefighting measures

5.1. <u>Extinguishing media:</u>

5.1.1. Suitable extinguishing media:

Extinguish with water.

5.1.2. Unsuitable extinguishing media:

No data available.

5.2. Special hazards arising from the substance or mixture:

At temperatures above 130 °C, dangerous decomposition gases can be emitted: Nitrogen monoxide, nitrogen dioxide, dinitrogen oxide, ammonia, sulphur oxides.

5.3. Advice for firefighters:

Wear full protective clothing and self-contained breathing apparatus.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1. For non-emergency personnel:

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders:

Wear appropriate protective clothing (see Section 8).

Keep product away from children.

6.2. Environmental precautions:

Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately. Retain and dispose of contaminated wash water.

6.3. Methods and material for containment and cleaning up:

Soak up spilled product with inert absorbent material and dispose of according to local regulations.

6.4. Reference to other sections:

For further and detailed information see Sections 8 and 13.

Section 7: Handling and storage

7.1. Precautions for safe handling:

Observe conventional hygiene precautions.

Open container with care to avoid splashes.

When using product to not eat, drink or smoke.

Protect from contamination, direct sunlight, heat and moisture.

Technical measures:

No special measures required.

Precautions against fire and explosion:

This product may be combustible. It can lower the ignition temperature of combustible substances.

Keep away from heat and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities:

Technical measures and storage condition:

Keep away from heat.

Keep away from sources of ignition and combustible materials.

Avoid contamination.

Store away from other substances.

Incompatible materials: See Section 10.5 **Packaging material:** No special prescriptions.

7.3. Specific end use(s):

Refer to product label.

Section 8: Exposure controls/Personal protection

8.1. Control parameters:

Occupational exposure limit values (2020 Code of Practice for the Safety, Health and Welfare at Work): The components of the mixture are not regulated with exposure limit value.

Iron(II)sulphate (CAS: 7720-78-7), as Fe:

DNEL values	Oral exposure	Dermal exposure	Inhalative exposure
Consumer	0,29 mg/kg bw/day	0,29 mg/kg bw/day	0,5 mg/kg bw/day
Worker	no data	0,57 mg/kg bw/day	2,1 mg/kg bw/day

PNEC values				
Compartment	Value	Note(s)		
Freshwater	no data	no notes		
Marine water	no data	no notes		
Freshwater sediment	no data	no notes		
Marine water sediment	no data	no notes		
Sewage Treatment Plant (STP)	no data	no notes		
Intermittent release	no data	no notes		
Secondary poisoning	no data	no notes		
Soil	no data	no notes		

8.2. Exposure controls:

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1. Appropriate engineering controls:

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.

8.2.2. Individual protection measures, such as personal protective equipment:

Wash hands and exposed skin after use

The information regarding personal protective equipment is only for informative purposes. A complete risk assessment is required before the use of the product for the determination of the appropriate personal protective equipment, taking local circumstances into account.

- 1. **Eye/face protection:** No special instructions.
- 2. Skin protection:
 - a. **Hand protection:** No special instructions.
 - b. Other: No special instructions.
- 3. **Respiratory protection:** In case of aerosol or dust formation, use appropriate respiratory protection (particle filter EN 143, type P1, low efficiency).
- 4. **Thermal hazards:** No thermal hazards known.

8.2.3. Environmental exposure controls:

Do not empty into drains.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

Section 9: Physical and chemical properties

9.1. <u>Information on basic physical and chemical properties:</u>

Parameter	Value / Test method / Remarks	
1. Appearance:	green liquid	
2. Odour:	almost odourless	
3. Odour threshold:	no data*	
4. pH:	6-7 (typical)	
5. Melting point/freezing point:	no data*	
6. Initial boiling point and boiling range:	no data*	
7. Flash point:	no data*	
8. Evaporation rate:	no data*	
9. Flammability (solid, gas):	not, applicable; liquid	
10. Upper/lower flammability or explosive limits:	no data*	
11. Vapour pressure:	no data*	
12. Vapour density:	no data*	
13. Relative density:	no data*	
14. Solubility(ies):	soluble in water	
15. Partition coefficient: n-octanol/water:	no data*	

16. Auto-ignition temperature:	no data*
17. Decomposition temperature:	no data*
18. Viscosity:	no data*
19. Explosive properties:	not classified as explosive
20. Oxidizing properties:	non-oxidising

9.2. Other information:

Density: 1.237 g/ml (at 20 °C, typical)

Flammability (liquid): Not classified as flammable.

*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet.

Section 10: Stability and reactivity

10.1. Reactivity:

No reactivity known.

10.2. Chemical stability:

Stable under recommended storage conditions.

No decomposition if stored and applied as directed. Decomposes upon heating.

10.3. Possibility of hazardous reactions:

See Section 10.5.

10.4. Conditions to avoid:

Keep away from heat and sources of ignition.

10.5. Incompatible materials:

Sulphur, chlorites, chloride, chlorates, hypochlorites, acid or alkaline reacting substances, flammable oxidizable substances, nitrites, metallic salts, metallic powder, herbicide, chlorinated hydrocarbons, organic compounds,

10.6. Hazardous decomposition products:

Evolution of ammonia under the influence of alkalies is possible.

Nitrogen monoxide, nitrogen dioxide, dinitrogen oxide, ammonia, sulphur oxides.

Section 11: Toxicological information

11.1. <u>Information on toxicological effects:</u>

Acute toxicity: Based on available data, the classification criteria are not met.

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:** Based on available data, the classification criteria are not met.

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.

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

11.1.1. Summaries of the information derived from the test conducted:

No data available.

11.1.2. Relevant toxicological properties:

Data about the ingredients:

Ferrous sulphate:

- Acute toxicity:

LD50 (oral, rat): > 5317 mg/kg

LD50 (dermal, rat): > 2583 mg/kg

- Skin corrosion/irritation:

Causes severe skin burns and eye damage.

- Serious eye damage/irritation:

Causes serious eye damage.

- Skin sensitisation:

Not sensitizing.

11.1.3. Information on likely routes of exposure:

Ingestion, inhalation, skin contact, eye contact.

11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:

No data available.

11.1.6. Interactive effects:

No data available.

11.1.7. Absence of specific data:

No information.

11.1.8. Other information:

No data available.

Section 12: Ecological information

12.1. Toxicity:

The mixture is not classified as hazardous for the environment.

Data about the ingredients:

Ferrous sulphate solution (mixture):

EC50 (daphnia): 730 mg/l/48h (estimated) LC50 (fish): 190 mg/l/96h (estimated) **Iron(II)sulphate** (CAS: 7720-78-7), as Fe: LC50 (Salvelinus fontinalis): 0,41 mg/l/96h EC50 (Daphnia magna): 6,15-9,26 mg/l/48h

12.2. Persistence and degradability:

Data about the ingredients:

The product solely consists of inorganic compounds which are not biodegradable. The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. <u>Bioaccumulation potential:</u>

Not expected to be a hazard to aquatic organisms based on the fact that this product hydrolyses rapidly to form a precipitate, which sediments.

12.4. Mobility in soil:

Groundwater contamination is unlikely.

12.5. Results of PBT and vPvB assessment:

No data available.

12.6. Other adverse effects:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product has not been tested. The information is derived from the properties of the individual components.

At higher pH values, which can be found in natural surface waters, an increase of toxic effects on aquatic organisms may be expected.

WGK (Water hazard class, German regulation, self-classification): 1 , slightly hazardous for water

Section 13: Disposal considerations

13.1. Waste treatment methods:

Disposal according to the local regulations.

13.1.1. Information regarding the disposal of the product:

Dispose of according to local and national regulations.

13.1.2. Information regarding the disposal of the packaging:

Triple rinse containers with water and dispose of according to local and national regulations.

13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:

No data available.

13.1.4. Sewage disposal:

No data available.

13.1.5. Special precautions for any recommended waste treatment:

No data available.

Section 14: Transport information

ADR: Not subject to the conventions of carriage of dangerous goods.

14.1. <u>UN Number:</u>

No UN Number.

14.2. <u>UN proper shipping name:</u>

No proper shipping name.

14.3. Transport hazard class(es):

No transport hazard classes.

14.4. Packing group:

No packing group.

14.5. Environmental hazards:

No relevant information available.

14.6. Special precautions for user:

No relevant information available.

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

Not applicable.

Section 15: Regulatory information

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

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), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

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, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

COMMISSION REGULATION (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

15.2. <u>Chemical safety assessment:</u> A Chemical Safety Assessment is not required for this product.

Section 16: Other information

Information regarding the revision of the safety data sheet:

The safety data sheet has been revised according to Regulation (EU) 2015/830 (Section 1-16).

The composition and the hazard classification of the mixture did not change compared to the previous version.

This safety data sheet supersedes all previous versions according to Annex II of Regulation (EC) No 1907/2006.

Literature references / data sources:

Previous version of the safety data sheet (09. 09. 2018, version 1).

Methods used for the classification according to Regulation (EC) No 1272/2008:

Based on the calculation method carried out on the basis of the known hazards of the components, not considered as a hazardous mixture.

Relevant hazard statements (code and full text) of Sections 2 and 3: No relevant statements.

Training advice: No data available.

Full text of the abbreviations in the safety data sheet:

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate.

AOX: Adsorbable organic halides.

BCF: Bioconcentration factor.

BOD: Biological Oxygen Demand.

CAS number: Chemical Abstract Service number.

CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

CMR effects: Carcinogenic, mutagenic, reprotoxic effects.

COD: Chemical Oxygen Demand.

CSA: Chemical Safety Assessment.

CSR: Chemical Safety Report.

DNEL: Derived-No-Effect-Level.

ECHA: European Chemical Agency.

EC: European Community.

EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).

EEC: European Economic Community.

EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European Norm.

EU: European Union.

EWC: European Waste Catalogue (replaced by LoW – see below).

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA: International Air Transport Association.

ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

IMSBC: International Maritime Solid Bulk Cargoes.

IUCLID: International Uniform Chemical Information Database.

IUPAC: International Union of Pure and Applied Chemistry.

Kow: n-Octanol - Water Partition Coefficient.

LC50: Lethal concentration resulting in 50 % mortality.

LD50: Lethal dose resulting in 50 % mortality (median lethal dose).

LoW: List of Waste.

LOEC: Lowest Observed Effect Concentration.

LOEL: Lowest Observed Effect Level.

NOEC: No Observed Effect Concentration.

NOEL: No Observed Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level.

OECD: Organization for Economic Cooperation and Development.

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic.

PNEC: Predicted No Effect Concentration.

QSAR: Quantitative Structure Activity Relationship.

REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

SCBA: Self Contained Breathing Apparatus.

SDS: Safety Data Sheet.

STOT: Specific Target Organ Toxicity.

SVHC: Substances of Very High Concern.

UN: United Nations.

UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.

VOC: Volatile Organic Compound.

vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.

The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.

It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.