

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 Version 2 / Revision date: 10/12/2020 Date of issue: 10/12/2020

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

- **1.1.** <u>Product identifier:</u> Product name: Hygeia Hytrol All Natural Path and Drive Weedkiller Product Code: P2223 (1L), P2224 (5L)
- **1.2.** <u>Relevant identified uses of the mixture and uses advised against:</u> Herbicide.

1.3. Details of the supplier of the safety data sheet: Hygeia Chemicals Limited Carrowmoneash, Oranmore, County Galway

Carrowmoneash, Oranmore, County Galway Ireland Tel: 091-794722 Fax: 091-794738

- 1.3.1.
 Responsible person: E-mail:
 info@hygeia.ie
- **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:

- P102 Keep out of reach of children.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P501 Dispose of contents/container in accordance with local regulations.

EUH 210 – Safety data sheet available on request.

EUH 401 – To avoid risks to human health and the environment, comply with the instructions for use.

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. <u>Substances:</u>

Not applicable.

3.2. <u>Mixtures:</u>

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
					Pictogram,	Hazard class	Hazard
					signal word code(s)	and category code(s)	statement code(s)
						Flam. Liq. 3	
Acetic acid*/**					GHS02	Skin Corr.	H226
Index number: 607-002-00-6	64-19-7	200-580-7	-	6	GHS05	1A	H314
Note B					Danger	Aquatic	H412
Note D						Chronic 3	

*: Substance having occupational exposure limit value.

**: Classification specified by the manufacturer that includes other classification in addition to the classification specified by Regulation (EC) No 1272/2008.

Note B:

Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations.

Specific concentration limits: **Acetic acid** (CAS: 64-19-7): Skin Corr. 1A; H314: $C \ge 90 \%$ Skin Corr. 1B; H314: 25 % $\le C < 90 \%$ Skin Irrit. 2; H315: 10 % $\le C < 25 \%$ Eye Irrit. 2; H319: 10 % $\le C < 25 \%$

For the full text of hazard statements, see Section 16.

Section 4: First aid measures

4.1.	Description of	<u>f first aid measures:</u>
	General infor	mation:
	Show this safe	ty data sheet to the doctor.
	Remove any cl	lothing soiled by the product.
	Ingestion:	
	Measures:	
	-	Wash out mouth thoroughly.
	-	Seek medical advice immediately, show label or container.
	Inhalation:	
	Measures:	
	-	Supply fresh air or oxygen; call for doctor.
	-	If breathing is irregular or stopped, administer artificial respiration.
	Skin contact:	
	Measures:	
	-	Wash with plenty of soap and water.
	Eye contact:	
	Measures:	
	-	Rinse opened eye for several minutes under running water. Then consult doctor.

4.2. <u>Most important symptoms and effects, both acute and delayed:</u>

No acute and delayed symptoms and effects known.

4.3. <u>Indication of any immediate medical attention and special treatment needed:</u> Immediately rinse eyes with water.

Section 5: Firefighting measures

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

- **5.1.1.** Suitable extinguishing media: The product is not directly flammable. Use CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **5.1.2.** Unsuitable extinguishing media: No data available.
- 5.2. Special hazards arising from the substance or mixture: Formation of toxic gases possible during heating or in fire: carbon monoxide (CO) and hydrocarbons. The inhalation of combustion products can have serious adverse effects on health. Do not inhale explosion or combustion gases.
- **5.3.** <u>Advice for firefighters:</u> Wear full protective clothing and self-contained breathing apparatus. Cool endangered containers with water spray.

Section 6: Accidental release measures

6.1. <u>Personal precautions, protective equipment and emergency procedures:</u>

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 protective equipment. Keep unprotected people away.
- **6.2.** <u>Environmental precautions:</u> 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.
- 6.3. <u>Methods and material for containment and cleaning up:</u>

Absorb with liquid binding material (sand, diatomite, acid binder, universal binder, sawdust). Dispose of contaminated material as waste according to Section 13. Ensure adequate ventilation.

6.4. <u>Reference to other sections:</u> 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. Wash hands before breaks and at the end of work. Technical measures: Ensure good ventilation/exhaustion at the workplace. Precautions against fire and explosion: The product is not flammable. Keep ignition sources away. Do not smoke. 7.2. Conditions for safe storage, including any incompatibilities: Technical measures and storage condition: Keep container tightly sealed. Store in cool, dry place. Store only in original container. Protect from frost. Protect from heat and direct sunlight. **Incompatible materials:** See Section 10.5 Packaging material: No special prescriptions.

7.3. <u>Specific end use(s):</u>

No specific instructions available.

Section 8: Exposure controls/Personal protection

8.1. <u>Control parameters:</u>

Occupational exposure limit values (2020 Code of Practice for the Safety, Health and Welfare at Work): **Acetic acid** (CAS: 64-19-7): 8 hours: 10 ppm; 25 mg/m³ 15 minutes: 20 ppm; 50 mg/m³

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term	Long term	Short term	Long term	Short term	Long term
		(acute)	(chronic)	(acute)	(chronic)	(acute)	(chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data

PNEC values

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. <u>Exposure controls:</u>

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:

The usual precautionary measures should be adhered to general rules for handling chemicals. Avoid contact with the eves and skin.

Do not eat, drink or smoke while working.

Keep away from foodstuffs, beverages and food.

Immediately take off all contaminated clothing.

Keep out of reach of children.

Keep children and pets away from treated areas until spray has dried.

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: Use appropriate protective glasses (EN 166).
- 2. Skin protection:
 - a. Hand protection: Use appropriate protective (rubber) gloves (EN 374).
 - b. **Other:** Use appropriate protective clothing.
- *3.* **Respiratory protection:** In the case of insufficient ventilation, breathing protection is recommended. Recommended filter device: Filter type E.

8.2.3. Environmental exposure controls:

No specific prescription.

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:	colourless liquid
2. Odour:	characteristic odour
<i>3</i> . Odour threshold:	no data*
4. pH:	2.81 (use concentration, at 20 °C)
5. Melting point/freezing point:	no data*
6. Initial boiling point and boiling range:	no data*
7. Flash point:	not applicable
8. Evaporation rate:	no data*
9. Flammability (solid, gas):	no data*
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:	product is not self-igniting
17. Decomposition temperature:	no data*
18. Viscosity:	no data*
19. Explosive properties:	product is not explosive
20. Oxidizing properties:	no data*

9.2. <u>Other information:</u>

Density: 1.01 g/cm³

*: 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. <u>Reactivity:</u>

- No reactivity known.
 10.2. <u>Chemical stability:</u> No decomposition if used according to specifications
 10.3. Possibility of hazardous reactions:
- No dangerous reaction known.
- 10.4. <u>Conditions to avoid:</u> No conditions to avoid known.
 10.5. Incompatible materials:
- No incompatible materials known.
 10.6. Hazardous decomposition products:

In fire conditions or when heated to high temperatures, toxic gases such as carbon monoxide and carbon dioxide may be released.

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:

- LD/LC50 values that are relevant for classification (of the active substance): - Acute toxicity:
- LD50 (oral, rat): 3310 mg/kg
- LD50 (dermal, rat): > 2000 mg/kg
- LC50 (inhalation, rat): 40 mg/l/4h
- Sensitisation:
- No sensitising effect known.
- **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. <u>Toxicity:</u> Based on available data, the classification criteria are not met. Aquatic toxicity (of the active substance): LC50 (fish): > 300 mg/l LC50 (daphnia): > 300 mg/l EC50 (algae): > 300 mg/l

- 12.2. <u>Persistence and degradability:</u> Not persistent in water, readily biodegradeable.
- **12.3. Bioaccumulation potential:** Does not bioaccumulate.
- **12.4.** <u>Mobility in soil:</u> No data available.
- 12.5. <u>Results of PBT and vPvB assessment:</u> No data available.
- 12.6. Other adverse effects: Avoid release to the environment. Dangerous to bees. To protect bees and pollinating insects do not apply when crop plants and weeds are in flower. Do not use where bees are actively foraging. Do not allow product to reach groundwater, water bodies or sewage system.

Section 13: Disposal considerations

13.1. <u>Waste treatment methods:</u>

Disposal according to the local regulations.

- **13.1.1. Information regarding the disposal of the product:** Dispose of unused product in its container at a household waste site. Contact your local council (local authority).
- **13.1.2.** Information regarding the disposal of the packaging:

Dispose of empty container in a dustbin.

- **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. **UN Number:** No UN Number. 14.2. UN proper shipping name: No proper shipping name. 14.3. Transport hazard class(es): No transport hazard classes. Packing group: 14.4. 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. <u>Safety, health and environmental regulations/legislation specific for the substance or mixture:</u>

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> No information.

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 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 (05. 10. 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:

H226 – Flammable liquid and vapour.

H314 – Causes severe skin burns and eye damage.

H315 – Causes skin irritation.

H319 - Causes serious eye irritation.

H412 – Harmful to aquatic life with long lasting effects.

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.