SAFETY DATA SHEET

PRODUCT NAME: **Autoclave Deodorant Capsules**

DWS Product Code: **D00001**

Date of preparation: **22 March 2018**

Supersedes version dated: 20 January 2010

1.	**Identification of the substance / mixture and of the company / undertaking**	
1.1	Product Identifier	Product name: Autoclave Deodorant Capsules DWS product code: D00001
1.2	Relevant identified uses of the substance or mixture and uses advised against	To reduce odours generated from heating microbiological waste. For laboratory use only.
1.3	Details of the supplier of the safety data sheet	Don Whitley Scientific Limited, Victoria Works, Victoria Street, Bingley, West Yorkshire, BD16 2NH, United Kingdom.
1.4	Emergency telephone number:	+44 (0)1274 595728 [0900-1700 UK time]
2.	**Hazards identification**	
2.1	Classification of the substance or mixture	
	Classification under CLP	H302 – Harmful if swallowed H305 – May be harmful if swallowed and enters airways H312 – Harmful in contact with skin H315 – Causes skin irritation H317 – May cause an allergic skin reaction
2.2	Label elements	
	Label elements under CLP	
	Hazard pictograms	
	Signal word	Warning
	Hazard statements	H302 – Harmful if swallowed H312 – Harmful in contact with skin
	Precautionary statements	P264 – Wash thoroughly after handling P280 – Wear protective gloves / protective clothing P302+P352 – IF ON SKIN: Wash with plenty of water P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
2.3	Other hazards	None
3.	**Composition / information on ingredients**	
3.2	Mixtures	

2,4-Dimethyl-3-cyclohexenecarboxaldehyde

EC No.	CAS No.	CLP Classification	Percent
268-264-1	68039-49-6	Not a hazardous substance according to Regulation (EC) 1272/2008	1 – 10

Allyl phenoxyacetate

EC No.	CAS No.	CLP Classification	Percent
231-335-2	7493-74-5	Acute Tox. 4; Acute Tox. 3 – H302, H332, H311	1 – 10

(R)-p-mentha-1,8-diene

EC No.	CAS No.	CLP Classification	Percent
227-813-5	5989-27-5	Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1 – H226, H315, H317, H304, H400, H410	1 – 10

4. First aid measures

4.1 Description of first aid measures

Skin contact:	Remove all contaminated clothing. Immediately wash affected area with plenty of soap and water. If irritation persists obtain medical attention.
Eye contact:	Irrigate thoroughly with water for at least 10 minutes, hold eyelids open if necessary and obtain medical attention.
Ingestion:	Wash out mouth with water and give plenty of water to drink. Do not induce vomiting. Obtain medical attention urgently. It may be necessary to treat for shock.
Inhalation:	Move person into fresh air. If not breathing, give artificial respiration. Obtain medical attention urgently.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and / or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. Firefighting measures

5.1	Extinguishing media:	Suitable extinguishing media for the surrounding fire should be used. Water spray, water fog, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2	Special hazards arising from the substance or mixture	Thermal degradation products may be formed which are acidic and acrid. Carbon oxides may be formed. Vapours are heavier than air and may collect at ground level.
5.3	Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

6.1	Personal precautions, protective equipment and emergency procedures	Refer to section 8 of SDS for personal protection details. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating in low areas.
6.2	Environmental precautions	Do not allow to enter drains or water courses. Avoid subsoil penetration.
6.3	Methods and material for containment and cleaning up	Remove ignition sources. Ensure adequate ventilation. Avoid excessive inhalation of vapours. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable closed containers for disposal.
6.4	Reference to other sections	For disposal see section 13.

7.	**Handling and storage**	
7.1	Precautions for safe handling	Observe normal standards of industrial hygiene for handling chemicals. Use in well ventilated areas. Avoid direct contact with liquid content and inhalation of vapour. Wash hands immediately after use. Keep container tightly closed when not in use.
7.2	Conditions for safe storage, including any incompatibilities	Store in a cool, well ventilated area. Keep container tightly closed.
7.3	Specific end use(s)	For laboratory use only.
8.	**Exposure controls / personal protection**	
8.1	Control parameters	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by regulatory bodies.
8.2	Exposure controls	
8.2.1	Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2	Individual protection measures, such as personal protective equipment	
	NOTE: Under normal conditions of use, personal protective equipment is not required when handling intact autoclave deodorant capsules, but hands must be washed immediately after use. Where exposure to the liquid contents is possible (when the capsule has been broken), the following recommendations apply.	
	Respiratory protection:	Not required under normal conditions of use. Ensure adequate ventilation of the work area.
	Hand protection:	Gloves certified to EN 374. Full contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 480 min Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 30 min
	Eye protection:	Safety glasses with side-shields, certified to EN 166.
	Skin protection:	Long sleeved protective clothing (laboratory coat).
9.	**Physical and chemical properties**	
9.1	Information on basic physical properties and chemical properties	
	NOTE: The following descriptions of properties apply to the liquid content of the capsules	
(a)	Appearance	Liquid; clear; yellow / amber
(b)	Odour	Characteristic (citrus / lemon)
(c)	Odour threshold	No data available.
(d)	pH	No data available.
(e)	Melting point / freezing point	No data available.
(f)	Initial boiling point and boiling range	No data available.
(g)	Flash point	84°C (184ºF) – closed cup
(h)	Evaporation rate	No data available.
(i)	Flammability	No data available.

(j)	Upper / lower flammability or explosive limits	No data available.
(k)	Vapour pressure	0.11528 mm Hg
(l)	Vapour density	No data available.
(m)	Relative density	1.05 to 1.07 (at 25°C)
(n)	Water solubility	Insoluble
(o)	Partition coefficient: n-octanol/water	No data available.
(p)	Auto-ignition temperature	No data available.
(q)	Decomposition temperature	No data available.
(r)	Viscosity	No data available.
(s)	Explosive properties	No data available.
(t)	Oxidizing properties	No data available.
9.2	Other information	
	Volatile organic compound (VOC) content = 10.4%	

10.	**Stability and reactivity**	
10.1	Reactivity	Presents no significant reactivity hazards by itself or in contact with water. Avoid contact with strong acids, alkalis or oxidizing agents.
10.2	Chemical stability	Stable under recommended storage conditions.
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to avoid	Excessive heat.
10.5	Incompatible materials	Strong oxidizing agents.
10.6	Hazardous decomposition products	Carbon monoxide and unidentified organic compounds may be formed during decomposition.
11.	**Toxicological information**	
11.1	Information on toxicological effects (mixture)	
(a)	Acute toxicity	No data available for the mixture. See data below for allyl phenoxyacetate and (R)-p-mentha-1,8-diene.
(b)	Skin corrosion/irritation;	No data available for the mixture. See data below for (R)-p-mentha-1,8-diene.
(c)	Eye damage / irritation	No data available for the mixture. See data below for (R)-p-mentha-1,8-diene.
(d)	Respiratory or skin sensitization	No data available for the mixture. See data below for (R)-p-mentha-1,8-diene.
(e)	Germ cell mutagenicity;	No data available for the mixture. See data below for (R)-p-mentha-1,8-diene.
(f)	Carcinogenicity	No data available for the mixture. See data below for (R)-p-mentha-1,8-diene.
(g)	Reproductive toxicity	No data available.
(h)	STOT-single exposure	No data available.
(i)	STOT-repeated exposure	No data available.
(j)	Aspiration hazard	No data available.

11.1 Information on toxicological effects – allyl phenoxyacetate

Acute toxicity:	LD50 Oral – Rat: 523 mg/kg	LD50 Dermal – Rabbit: 903 mg/kg
Carcinogenicity:	Not identified as a probable, possible or confirmed human carcinogen by IARC.	

Information on toxicological effects – (R)-p-mentha-1,8-diene.

Acute toxicity:	LD50 Oral – Rat: 4,400 mg/kg	LD50 Dermal – Rabbit: > 5,000 mg/kg
Skin corrosion/irritation:	No data available	
Serious eye damage/eye irritation:	Eyes – Rabbit: No eye irritation (OECD Test Guideline 405)	
Respiratory or skin sensitisation:	Mouse: May cause sensitisation by skin contact (OECD Test Guideline 429)	
Germ cell mutagenicity:	Mouse lymphocyte: negative	Rat (male): negative

Carcinogenicity: Rat – Oral: Carcinogenic by RTECS criteria. Kidney, Ureter, Bladder, Kidney tumours. Tumorigenic Effects: Testicular tumours.
Mouse – Oral: Equivocal tumorigenic agent by RTECS criteria. Gastrointestinal: Tumours.

(R)-p-mentha-1,8-diene.is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or US EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans.

12. Ecological information

12.1	Toxicity	No data available for the mixture. See data below for (R)-p-mentha-1,8-diene.
12.2	Persistence and degradability	No data available for the mixture. See data below for (R)-p-mentha-1,8-diene.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	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)
12.6	Other adverse effects	No data available for the mixture. See data below for (R)-p-mentha-1,8-diene.

Ecological information – (R)-p-mentha-1,8-diene.

Toxicity:	Toxicity to fish (flow-through test):	LC50 - *Pimephales promelas* (fathead minnow) 0.72 mg/l - 96 h (OECD Test Guideline 203)
	Toxicity to daphnia and other: aquatic invertebrates	Immobilization EC50 - *Daphnia magna* (Water flea) 0.36 mg/l - 48 h (OECD Test Guideline 202)
	Toxicity to bacteria:	EC50 - Sludge Treatment: 3.94 mg/l (OECD Test Guideline 209)
Persistence and degradability:		Biodegradability Result: 71 % - Readily biodegradable (OECD Test Guideline 301B)
Other adverse effects:		Very toxic to aquatic life with long lasting effects.

13. Disposal considerations

13.1 Waste treatment methods

Disposal operations:	Transfer to a suitable container and arrange for collection by a licensed disposal company. Product may be burned in a chemical incinerator equipped with an afterburner and scrubber.
Recovery operations:	Not applicable.
Disposal of packaging:	Dispose of as normal industrial waste.
Important note:	The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14.	**Transport information**	
14.1	UN Number	Not applicable (not classified as dangerous for transportation).
14.2	UN proper shipping name	Not applicable (not classified as dangerous for transportation).
14.3	Transport hazard class(es)	Not applicable (not classified as dangerous for transportation).
14.4	Packing group	Not applicable (not classified as dangerous for transportation).
14.5	Environmental hazards	Not hazardous in the supplied form.
14.6	Special precautions for user	Not applicable (not classified as dangerous for transportation).
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable (not classified as dangerous for transportation).
15.	**Regulatory information**	
15.1	Safety, health and environmental regulations / legislation specific for the substance or mixture	Not applicable.
15.2	Chemical safety assessment	No chemical safety assessment has been carried out for the mixture.
16.	**Other information**	
Full text of phrases used in Sections 2 and 3		H226 – Flammable liquid and vapour. H304 – May be fatal if swallowed and enters airways. H305 – May be harmful if swallowed and enters airways. H311 – Toxic in contact with skin. H312 – Harmful in contact with skin. H315 – Causes skin irritation. H317 – May cause an allergic skin reaction. H332 – Harmful if inhaled. H400 – Very toxic to aquatic life. H410 – Very toxic to aquatic life with long lasting effects. P264 – Wash thoroughly after handling P280 – Wear protective gloves / protective clothing / eye protection / face protection. P302+P352 – IF ON SKIN: Wash with plenty of water P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
Legal Disclaimer		The information given in this safety data sheet is based on our knowledge of this product at the time of publication and is given in good faith. It is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Don Whitley Scientific Limited provides no warranty with respect to this information and disclaims all liability associated with its use.
Revision comments		This SDS has been revised (additional data provided) to comply with the requirements of Annex II to Regulation (EC) 1907/2006 as amended by Commission Regulation (EU) 2015/830.