

STOP WORK AUTHORITY

If you see or feel something is unsafe – **Stop!**

By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Caution

Risks of Dangerous substances can put peoples' safety at risk from fire, explosion and corrosion of metal

Dangerous substances are any substances used or present at work that could, if not properly controlled, cause harm to people as a result of a fire or explosion or corrosion of metal. They can be found in nearly all workplaces and include such things as solvents, paints, varnishes, flammable gases, such as liquid petroleum gas (LPG), dusts from machining and sanding operations, pressurised gases and substances corrosive to metal.

Caution

Risks of Handling Hazardous Substances can cause asthma or other diseases, including cancer. Many can damage the skin, and some can cause serious long-term damage to the lungs.

The effect can be immediate, such as dizziness or stinging eyes, or can take many years to develop, such as lung disease. Many of the long-term or chronic effects cannot be cured once they develop



Please be aware of the following issues that may contribute towards a major accident or hazard:

- | | |
|---|---|
| <ul style="list-style-type: none"> ❶ Failure to understand the properties of substances handled. ❶ Failure to identify hazards associated with mixing substances and domino events. ❶ Failure of quality assurance procedures. ❶ Storing incompatible substances together. ❶ Flammable Atmosphere Flammable vapours can be released if containers are left opened/unlidded or leak. Spillages may occur if unlidded containers are knocked over. ❶ Domino effects (e.g. thermal radiation from fires). ❶ Direction of leaks to common sumps/manifolds. ❶ Incorrect labelling/delivery of raw materials, intermediates and products ❶ Insufficient recording of chemical inventories at each location on site. ❶ Insufficient labelling of chemical storage containers (raw materials, reactants, intermediates, products, by-products and waste). ❶ Poor housekeeping. | <ul style="list-style-type: none"> ❶ Introduction of ignition sources into segregated areas containing flammable, combustible substances ❶ Poorly managed inventory control and identification systems for hazardous chemicals stored in drums and vessels. ❶ Explosive substances (e.g. smoking, mobile equipment and vehicles, power tools). ❶ Use of non-intrinsically safe equipment within intrinsically safe zones. |
|---|---|

DO NOT USE ANY CHEMICALS NOT ON CHEMWATCH

- Before any new chemicals are introduced, please ensure the Safety & Compliance Director is consulted.
- Ensure you understand the risks associated with each substance you use by reviewing the Safety Data Sheets (Available on all POL Lockers)
- Ensure you apply or control measures as required by the Safety Data Sheets – If control measures cannot be met, do not use the chemical and contact your Line Manager

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 2	Page 1 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: : S&C Director	Review Date: Sept 2027	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness as a result of contact with hazardous substances. There is also the potential to damage company assets.

**STOP WORK AUTHORITY**

If you see or feel something is unsafe – **Stop!**

By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Dealing with a Chemical Spill - Control Measures

- Follow the emergency response and first aid requirements on the Safety Data Sheets contained in Chemwatch and located on the POL lockers.
- Limit others to entering the vicinity of the spill unless the SDS control measures are in place.
- DO NOT** use electrical equipment, vehicles, or smoke in the vicinity of a chemical or fuel spill.
- Use the available spill kits – ensure they are replaced after use.
- Always wash your hands and remove any contaminated clothing or PPE before eating, drinking, or smoking.
- Make sure any contaminated items, are disposed of correctly.
- Raise a Synergi Life Occurrence Report.

For Significant Spills:

- Report any occurrence that is deemed unsafe or has the potential to significant cause harm to individuals, assets or the environment to the following:
 - Fire Service (999)** – if there is risk of a fire from any flammable or combustible substances
 - Environment Agency (0800 80 70 60)** is there is any risks of the chemicals entering drainage, being absorbed into the ground or polluting the air.

Control Measure for Hazardous Areas/Activities within Maintenance

- Workshop:** The workshop equipment, such as grinders and drills create dust and therefore must be segregated from flammable substances.
- Dust and particales:** ATEX or H (High) class vacuum unit to effectively remove dust / particles from the hangar floor / surfaces.
- Air bench and LEVs:** Do not use the Air bench or LEVs for steel as there is the potential that they will contain aluminium.
- POL Lockers:** Open POL lockers with open flammable substances have the potential to create an explosive atmospheric vapour. Therefore, POL that contained unsealed / open flammable liquids are not permitted in the Bonded Stores and lockers shall remain closed when not accessing substances. – Refer Appendix C
- Gas Canisters:** Shall be kept segregated by at least 0.5m from potential ignition sources.
- Paint Systems:** There will be the presence of flammable vapours when the various paint systems, solvents and adhesives are utilised on site. – Refer Appendix B
- Aviation Fuel:** There will be the presence of flammable vapours when draining, sampling, and storing fuel samples on site. Aviation Fuel must be handled and stored iaw the Safety Data Sheets and Risk Assessments
- Diesel Fuel:** There is diesel stored on site, but this is used minimally and therefore not considered a risk.
- Heat Sources:** Liquid Petroleum Gas (LPG) – There will be the presence of flammable gases when the LPG storage tanks are filled, used and teste. LPG Storage Tanks Under an abnormal situation propane could leak

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 2	Page 2 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: : S&C Director	Review Date: Sept 2027	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness as a result of contact with hazardous substances. There is also the potential to damage company assets.

**STOP WORK AUTHORITY****If you see or feel something is unsafe – Stop!**

By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

resulting in a flammable gas cloud. Propane is stored in under pressure. Any leakage will result in a highly flammable atmosphere. – Refer Appendix C.

Storage & Segregation - Control Measures

- Follow the guidance on the Safety Data Sheets and Risk Assessments contained in Chemwatch and on/in POL lockers.
- Segregate the chemicals iaw Appendix B
- Minimise the amount of chemicals stored in the hangar environment.
- Flammable and substances corrosive to metal shall be stored in fire resistance POL lockers.
- Keep all toxic chemicals in POL lockers and secure where appropriate.
- Do not store, dispose of, or use acids with bleach i.e. solutions containing hypochlorite.
- Avoid using any agents containing hydrofluoric acid which is particularly toxic and will require specialised storage.
- POL lockers containing opened substances shall be located in a well-ventilated location, away from workshop equipment, such as grinding or drilling to prevent the accumulation of flammable vapours.
- The maximum quantities that may be stored in cabinets and bins are no more than 50 litres for extremely flammable and highly flammable substances, and those flammable liquids with a flashpoint below the maximum ambient temperature of the workroom/working area and no more than 250 litres for other flammable liquids with a higher flashpoint of up to 55°C
- No unsealed / open containers will be permitted within the flammable cabinets located in a bonded store, unless:
 - substances are contained within sealed aerosol cans or are stored in minimum quantities, i.e. below 500mls. - suitable ventilation can be assured
 - All the flammable storage cabinets shall be >0.5 metres from fixed socket outlets and any other sources of ignition which may cause expansion of the contents and vaporisation of flammable liquid causing a flammable vapour cloud.
- Isolated conductive equipment. electrical equipment sockets, sparks from metal switches, batteries, and chargers' open flames or uncontrolled hot works in the area.
- Potential Ignition Source: Precautions should be taken to prevent vapours being ignited by the discharge of static electricity - Personnel that wear PPE footwear should be confirmed as static dissipative.
- Failure of an electrical or mechanical component, which may generate heat.
- The location of the cabinets must be easily accessible for the safe retrieval of materials during a spill.
- Combustible materials are not to be stored in or adjacent to flammable materials.
- No combustible substances should be stored adjacent to the flammable liquid stores.

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 2	Page 3 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: Safety Director	Issue Date: Sept 2025	
	Author: Safety Officer	Review Date: Sept 2025	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness as a result of contact with hazardous substances. There is also the potential to damage company assets.

STOP WORK AUTHORITY

If you see or feel something is unsafe – **Stop!**
 By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Handling - Control Measures

- Follow COSHH training received in your induction.
- A list of flammable and substances corrosive to metal is contained with Chemwatch and the risk assessments are located on all POL lockers. – Refer to Appendix A for Significant Flammable Liquids and combustible Gases.
- Review and follow the requirements set out in the Safety Data Sheets, including the following requirements:
 - PPE (make sure it is serviceable, fits and is worn correctly)
 - Emergency & first aid
 - Storage and disposal
- Ensure adequate ventilation and use LEV and RPE if required.
- Follow any workplace exposure limits for hazardous substance and plan work activities around these exposure limits, ensuring the safety of those working within the work area.
- Dispose of hazardous waste in appropriate containers and monitor them to ensure capacity is not exceeded. Contact the Resource Maintenance Planner or Engineering and Flight Operations Support Officer to arrange removal of hazardous waste.
- Always wash your hands and remove any contaminated clothing or PPE before eating, drinking, or smoking
- Report any occurrence that is deemed unsafe or has the potential to cause harm to individuals, assets or the environment.

3 Month Inspection Requirements

- ☐ All POL are In Date
- ☐ POL is clean & tidy.
- ☐ Out of date POL and empty oil containers are properly disposed of
- ☐ Check Ramco for shelf-life POL coming due & issue off as required.
- ☐ COSHH sheets are in folder on POL locker and accurately reflect contents of locker.
- ☐ Fuel Locker is clean & tidy
- ☐ Spill Kits contain the correct qualities

Line Maintenance Spill Kit - Safety-Kleen (refill kit P/N ORF240)

- | | | |
|---|---|--------------------------------------|
| ☐ Absorbent Socks 8cm x 3m (x11) (P/N 93010) | ☐ Disposal bag & tie (x4) | ☐ 1 x Gloves |
| ☐ Absorbent pads 39x48cm (x100) (P/N 92135) | ☐ Tub of 100 textured wipes (x1) (P/N ESW-100) | ☐ 1 x Goggles |
| | ☐ Instruction and Contents sheet (x1) | |

Base Maintenance Spill Kit -Safetykleen (refill kit P/N ORFJ)

- | | | |
|--|--|---|
| ☐ Absorbent Socks 8cm x 3m (x13) (P/N 93010) | ☐ Plug Rug Drain Cover 40x40cm (x1) | ☐ 0.5kg Plugging Compound (x1) |
| ☐ Absorbent pads 39cm x 48cm (x100) (P/N 92135) | ☐ Tub of 100 textured wipes (P/N ESW-100) | ☐ Roll Spill Hazard Tape |
| ☐ Disposal bag & tie (x1) | | |

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 2	Page 4 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: S&C Director	Review Date: Sept 2027	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness as a result of contact with hazardous substances. There is also the potential to damage company assets.

STOP WORK AUTHORITY

If you see or feel something is unsafe – **Stop!**
 By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Appendix A

Significate Flammable Liquids Characteristics

Name	CLP Classification	Location & Quantity Handled	Flash-point (°C)	AIT (°C)	Gas Group	Temp Class	Flammable Limits (%v/v in air)	Relative Vapour Density (air = 1)	Comment
Jet A-1 [AVTUR]	Highly flammable liquid and vapour. 	Less than 40 litres drained by gravity for the purposes of sampling	38	>225	IIA	No data	1.1 – 7.5	>1	As detailed in material data handling sheet
Iso-Propanol	Highly flammable liquid and vapour. 	Small bottles stored within flammable cabinets	12Open cup: 11.7 °C (53.1 °F; 284.8 K) Closed cup: 13 °C (55 °F)	399 °C (750 °F; 672 K)	IIA (as for propene)	T2	LEL – 2 UEL 12	2.1	As detailed in material data handling sheet
Consumable materials in flammable storage cabinets	Highly flammable liquid and vapour. 	Paint and thinners	No data	No data	No data	No data	No data	>1	As per BS60079-10-1 Flashpoints should be viewed as +/- 5°C of the SDS quoted values.
Paint systems, thinners, solvents. (e.g. Xylene)	   	Within Spray booth and mixing rooms	25	464	IIA	T2	LEL – 1.1 UEL - 7	3.7	As detailed in material data handling sheet
Diesel	H226; Flammable liquid and vapour 	Plant Fueling	>55	257	IIA	T3	0.6-6.5	>2	Heavier than air

Combustible Gas Characteristics

Name	CLP Classification	Location & Quantity Handled	Flash-point (°C)	AIT (°C)	Gas Group	Temp Class	Flammable Limits (%v/v in air)	Relative Vapour Density (air = 1)	Comment
Propane		External LPG Bullet tanks	-104	450	na	T2	2-11	0.5	As detailed in material data handling sheet

- **Flashpoint** – The lowest temperature at which vapours above a volatile combustible substance ignite in air when exposed to flame such as a flame or spark.
- **AIT** – Auto Ignition Temperature; the lowest temperature at which is spontaneously ignites in normal atmosphere without an external source of ignition.

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 2	Page 5 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: S&C Director	Review Date: Sept 2027	

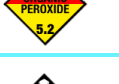
If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness as a result of contact with hazardous substances. There is also the potential to damage company assets.

Appendix B – Chemical Segregation Chart General recommendations for the separation or segregation of different classes of dangerous substances

The segregation advice set out does not take account of chemical incompatibilities. In some cases, different substances that are shown as compatible in the table may react together. You should also consult the material safety data sheets and other available sources for reactivity data to determine whether it is safe to store them together. Refer to Risk Assessment [202324 • Segregation of Hazardous Chemicals](#) which captures the link between this report and the HSE segregation chart.

Dangerous Goods Diversion Class for each chemical are contained within Chemwatch– please refer to Appendix A

Please note: CHEMWATCH contains Australian regulatory requirements, this chart is an adaption from the UK HSE regulations. [Chemical warehousing. The storage of packaged dangerous substances HSG71.](#)

Class		2. Compressed Gases			3. Flammable Liquids	4 Flammable Solids			5 Oxidising substance		6 Toxic Substances	8 Corrosive Substances	9 Miscellaneous	
		2.1 Flammable	2.2 Non-Flammable	2.3 Toxic		4.1 Readily Combustible	4.2 Spontaneously combustible	4.3 Dangerous when wet	5.1 Oxidising substances	5.2 Organic Peroxides				
														
2 Compressed Gases	2.1 Flammable		Compatible	Separate Bunds	Separate Bunds	Separate POL lockers	Separate POL lockers	Separate POL lockers	Separate POL lockers	Isolate	Separate Bunds	Separate Bunds	CLASS 9 Should be compatible with all other Class's This class includes such diverse substances as asbestos and those that are dangerous to the environment (eg PCBs), lithium batteries, and air bag inflators. You need to consider the specific characteristics of any material in this class before accepting it for storage, especially if considering storage with Class 5.1 and 5.2.	
	2.2 Non-Flammable		Separate Bunds	Compatible	Separate Bunds	Separate Bunds	Should be Compatible	Separate POL lockers	Should be Compatible	Should be Compatible	Separate POL lockers	Should be Compatible		Separate Bunds
	2.3 Toxic		Separate Bunds	Separate Bunds	Compatible	Separate POL lockers	Separate Bunds	Separate POL lockers	Separate Bunds	Should be Compatible	Separate POL lockers	Should be Compatible		Separate Bunds
3 Flammable Liquids		Separate POL lockers	Separate Bunds	Separate POL lockers	Compatible	Separate Bunds	Separate POL lockers	Separate POL lockers	Separate POL lockers	Isolate	Separate Bunds	Separate Bunds		
4. Flammable Solids	4.1 readily combustible		Separate POL lockers	Should be Compatible	Separate Bunds	Separate Bunds	Compatible	Separate Bunds	Separate POL lockers	Separate POL lockers	Separate POL lockers	Separate Bunds	Should be Compatible	Should be compatible to be housed in the same bund but check the Safety Data Sheets
	4.2 Spontaneously combustible		Separate POL lockers	Separate POL lockers	Separate POL lockers	Separate POL lockers	Separate Bunds	Compatible	Separate Bunds	Separate POL lockers	Isolate	Separate Bunds	Separate Bunds	Organic Peroxides should be stored in dedicated building. Some peroxides may be stored outside in fire resisting secure cabinets
	4.3 Dangerous when wet		Separate POL lockers	Should be Compatible	Separate Bunds	Separate POL lockers	Separate POL lockers	Separate Bunds	Compatible	Separate Bunds	Separate POL lockers	Should be Compatible	Should be Compatible	
5 Oxidising substance	5.1 Oxidising substances		Separate POL lockers	Should be Compatible	Should be Compatible	Separate POL lockers	Separate POL lockers	Separate POL lockers	Separate Bunds	Compatible	Separate POL lockers	Separate Bunds	Separate Bunds	
	5.2 Organic Peroxides		Isolate	Separate POL lockers	Separate POL lockers	Isolate	Separate POL lockers	Isolate	Separate POL lockers	Separate POL lockers	Compatible	Separate Bunds	Separate Bunds	
6 Toxic Substances		Separate Bunds	Should be Compatible	Should be Compatible	Separate Bunds	Separate Bunds	Separate Bunds	Should be Compatible	Separate Bunds	Separate Bunds	Compatible	Should be Compatible		
8 Corrosive Substances		Separate Bunds	Separate Bunds	Separate Bunds	Separate Bunds	Should be Compatible	Separate Bunds	Should be Compatible	Separate Bunds	Separate Bunds	Should be Compatible	Compatible		

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 1	Page 6 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: S&C Director	Review Date: Sept 2027	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness because of contact with hazardous substances. There is also the potential to damage company assets.

STOP WORK AUTHORITY

If you see or feel something is unsafe – **Stop!**

By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Appendix C – Accessing & Using Chemwatch

Access:

Click on the link on the Engineering SharePoint – Part 145
COSHH Database

[Chemwatch - Login Page](#)

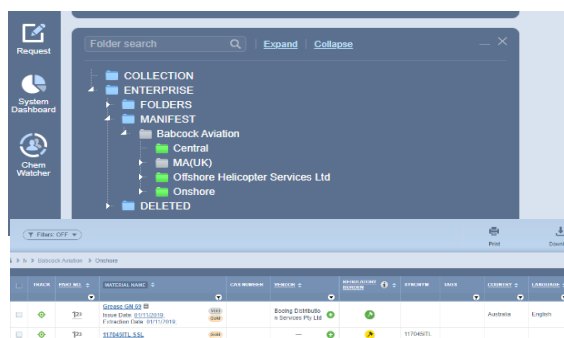
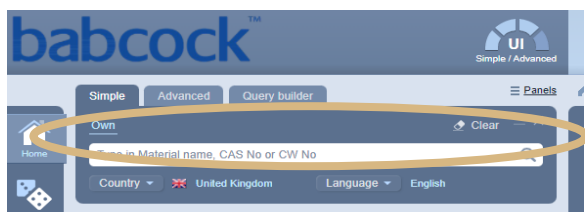
<https://jr.chemwatch.net/chemwatch.web/account/login?ReturnUrl=%2fchemwatch.web%2fhome>

Log In:

	babcockint
	onshoreview
	V14ronshore

Finding the Safety Data Sheet

- Under simple – type in the material name, CAS No or CW No or Select the Relevant Folder by typing in the location in the Folder Search box.



- Click on the material hyperlink to open it

Identifying the Dangerous Good Class

- Follow steps above and scroll cross the list of materials table until you find DG – you can filter and sort by DG Class Numbers

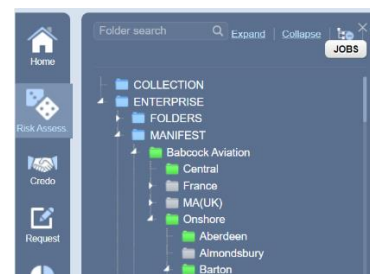
PLACARDS											
ID	REGULATORY BURDEN	HAZARD STATEMENT	TAGS	VOLUME CLASS	DG	CLASS	APPROVAL	COUNTRY	LANGUAGE	GENERAL NOTE	LINE
		EUH066 H225 H 319 H338 H412		0.00 L	3	II		United Kingdom	English		1133
		EUH064 H222+ H229 H304 H315 H336 H400 H410		0.00 L	2.1	Na					1950

Accessing The Risk Assessments

- For Risk Assessments – Click the Risk Assess icon on the left hand slide of the screen then in the folder search type in your location (Barton, Stavarton etc)
- List of risk assessments will appear, To filter select the filter icon and type in the chemical
- To open the Risk Assessment, select on the line (you might need to scroll across.
- The report will then be displayed, to print – select the Print icon at the top of the screen.



risk assessment



Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safety	Doc Ref: SSoW.03	Issue: 1	Page 7 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: S&C Director	Review Date: Sept 2027	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness because of contact with hazardous substances. There is also the potential to damage company assets.

STOP WORK AUTHORITY

If you see or feel something is unsafe – **Stop!**

By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Appendix D - Hazardous Areas Classification (HAC)

The following HAC zones detail the risks within the location

- **Zone 0:** Area where an explosive atmosphere is present continuously or for long periods.
- **Zone 1:** Area where an explosive atmosphere is likely to occur occasionally in normal operation.
- **Zone 2:** Area where an explosive atmosphere is not likely to occur in normal operation, but if it does occur, will persist for a short period only.

Zone	Extent of Zoning	Reason
Spray Booth		
1	(Assuming adequate extraction is available and interlocked).	Flammable atmosphere is expected to be present during normal operation or abnormal event such as a spillage.
2	Zone 2 – as above plus 2m.	Zone 1 above object. There is no Zone 2 upwards as vapours are heavier than air.
1	Internal to the extraction ducts and 2m around extraction vent.	A primary source of release will be present during normal operation.
Paint Mixing Room		
2	Within the paint mixing room	Flammable atmosphere is expected to be present during normal operation or abnormal event such as a spillage.
Hangar Environment		
0	In headspace of sealed and partially sealed container	Flammable vapours may be present all the time
2	POL Lockers - Entire Internal Area as Storage Cabinets extending 0.5-meter radius	If any contents are in an unliddd/open or leaking condition, spillage of contents may occur
2	0.1 meters of sealed flammable liquid containers to ground level	If any contents are released, any leak will likely persist due to limited ventilation.
2	0.5 meters of unsealed flammable liquids containers to ground level	If any contents are in an unliddd/open or leaking condition, spillage of contents may occur
2	The confines of any bund or drip try	Any leak will likely persist due to limited ventilation
N/A	Where items are stored on open shelving, the zone extent will be localised to the flammable material	Any leak from a container <1000ml will dispense in a short time. Therefore, no hazardous are classification is necessary
LPG Tanks		
2	1.5 metre radius surrounding the loading/unloading connection point during filling tank.	Flammable vapour escape/leaks while loading/unloading
1	1.5 metres from nominal hole	Release from nominal 1mm diameter hole
2	3.0 metre radius surrounding non-permanent pipe joints	Flammable vapour escapes
2	3.0 metre radius surrounding isolation valves	Flammable vapour escapes
2	0.5 metre radius below ground to drain water traps.	With water trap fitted
2	3.0 metre radius surrounding pressure relief valves (where a soft seated valve this mean by reduces to 0.5 metres).	Flammable vapour escapes during loading/unloading processes.
2	3.0m - For couplings used on filling connections	Flammable vapour escapes during loading/unloading processes.
2	0.5 metre radius surrounding non-permanent pipe joints. Excluding Ambi rad burners as ignition is expected to occur here.	Flammable vapour escapes

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely

Doc Ref: SSoW.03

Issue: 1

Page
8 of 11

Once printed the document is uncontrolled – controlled copies are available on the DMS

Owner: S&C Director

Issue Date: Sept 2025

Author: S&C Director

Review Date: Sept 2027

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness because of contact with hazardous substances. There is also the potential to damage company assets.

**STOP WORK AUTHORITY****If you see or feel something is unsafe – Stop!**

By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Appendix E

Paint Spray Booth and Mixing Room (Staverton Only)

Flammable Atmosphere: In spraying, liquid is converted into a mist of droplets which is directed onto a surface to produce an evenly distributed film of the required thickness and texture. Not all the liquid sprayed is deposited on the work piece. Over 50% may be lost as overspray or bounce back. These vapours may hit other surfaces - walls, floors and clothing - leaving flammable deposits. Even when these deposits are dry, they may still be flammable. If they are ignited a serious fire may result. Contaminated clothes may be easily ignited causing severe burns. Flammable vapours are also released during the drying process and may present a serious fire hazard. Some finishes, particularly cellulose thinners contained in paints being applied, may contain up to 80% of volatile solvent which evaporates during drying.

Control Measures

Ventilation

- The LEV shall be used when conducting paint spraying or mixing paint
- Ensure you adhere to the Paint Spray Booth Clearance Time prior to raising your RPE helmet/face shield visor.
- Effort should be made to keep the amount of bounce back and overspray to a minimum.

Explosion Venting

- Pressure gauge reading for outside LPG tanks to be maintained at 18.68 Bar. Any drop in pressure would indicate the possibility of leakage.

House Keeping

- No open containers with flammable or combustible liquids shall be left in the spray booth or mixing room when not in use.

Control of Ignition Sources

- Ignition sources should be kept out of spraying areas at all times. Even when spraying is not taking place, flammable residues, contaminated materials, drying and cleaning operations may still present a fire risk.
- Only ATEX rated equipment shall be used in the spray booth and mixing rooms

Control of Electrostatic

- The resistance to earth of any metal surfaces in the spraying area does not exceed 1 ohm.
- Regular checks of earth continuity are conducted by Todd Engineering to ensure that the equipment remains effectively grounded.
- PPE footwear should be confirmed as static dissipative
- Todd Engineering periodically confirm the flooring is static dissipative

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 1	Page 9 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: S&C Director	Review Date: Sept 2027	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness because of contact with hazardous substances. There is also the potential to damage company assets.

STOP WORK AUTHORITY

If you see or feel something is unsafe – **Stop!**

By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Appendix F

Liquid Petroleum Gas Tanks (Staverton Only)

Two propane vessels (3,900 litres capacity each) are located in the yard adjacent to hanger 3. This equates to 7,800 litre maximum capacity in the tanks, plus additional unknown capacity in the site gas pipe network. Pipelines run from these tanks throughout site at ceiling height inside buildings. Flogas (Propane), is supplied for internal Ambi-rad heating systems. The tanks on site are rented through "Flogas".

Flammable Atmosphere Under an abnormal situation propane could leak resulting in a flammable gas cloud. Propane is stored in under pressure. Any leakage will result in a highly flammable atmosphere

Control Measures

- The tanks are separated from buildings and a fix source of ignition by 7.5 meters and there is 1 meter between the vessels.
- There should be plenty of room around the tanks to ensure good air flow so that pockets of heavier-than-air LPG vapours cannot build up around them. Located externally, they are open on all four sides. This should allow small gas leaks to disperse. LPG is heavier than air and therefore any significant leakage of gas will collect and spread at ground level.
- There is a low steel fence to avoid impact of moving vehicles.
- No objects or vehicles are permitted within 6 meters of the tanks.
- The tanks are located on a flat surface, suitable for tanker delivering LPG.
- Parking area will remain clear on delivery days for safe transfer of LPG.
- The supplier of the LPG will make sure that the tanker cannot drive away with the supply hose still connected, that there is no risk of an electrical spark being generated from static electricity or by other means
- The LPG suppliers ensure that their drivers are suitably trained and have the correct procedures to follow

Servicing, Inspection and Maintenance Requirements

- Pressure gauge reading for outside LPG tanks to be maintained at 18.68 Bar. Any drop in pressure would indicate the possibility of leakage.
- Pressure valve test report available.
- All the access points to the top of the tanks were open, one lid was broken.
- There are transponders fitted to each tank.
- This is to relay tank fill levels to the supplier Flogas

Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 1	Page 10 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: S&C Director	Review Date: Sept 2027	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness because of contact with hazardous substances. There is also the potential to damage company assets.

STOP WORK AUTHORITY

If you see or feel something is unsafe – **Stop!**

By making dynamic, risk-based judgements you are empowered to stop an unsafe situation.

Staverton LPG Tank / Gas Leak Emergency Procedures

In the case of a fire

1. Dial 999 informing them there is an LPG vessel located on your premises
2. Remove everyone to a safe distance from the area
3. If it is safe to do so, turn off the supply of gas
4. Call Flogas 24 hour Emergency Team on 03457 200 100

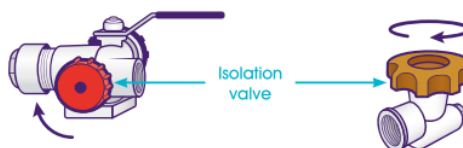
In case of a gas leak

- Isolate supply of gas from the tank, if it is safe to do so, (see below)
- Call National Gas Emergency 0800 111 999
- Call Flogas 24-hour Emergency Team on 03457 200 100
- Extinguish all possible sources of ignition within 7.5m of the leak, if the leak is indoors extinguishing any sources of ignition inside the property
- Don't operate any electrical equipment – including switches
- Don't smoke or vape
- Turn off all gas appliances, where safe to do so.
- If the leak is indoors, ventilate by opening windows and doors.

Turning off the gas supply

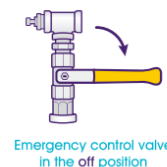
Isolating the gas supply from the tank

1. Open the hood/inspection hatch on the tank
2. Identify the isolation valve
3. Close the wheel valve by turning clockwise
4. Isolate gas supply at the property



Isolating the gas supply at the property

1. Turn off all appliance taps and pilot lights
2. Turn the emergency control valve to the "off" position when the valve handle is at 90° to the pipe



Title: Working with Dangerous & Hazardous Substances and Explosive Atmospheres Safely	Doc Ref: SSoW.03	Issue: 1	Page 11 of 11
Once printed the document is uncontrolled – controlled copies are available on the DMS	Owner: S&C Director	Issue Date: Sept 2025	
	Author: S&C Director	Review Date: Sept 2027	

If you ignore this Safe Systems of Work, you, or someone else could sustain an injury or illness because of contact with hazardous substances. There is also the potential to damage company assets.