

Mirvac Real Estate Pty Ltd

Hazardous Chemicals Assessment

90 Collins Street, Melbourne, Victoria 3000

26 September 2022

Project Ref: 754-SYDEN228268 – 90 Collins Street Hazchem Report 2022



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HAZARDOUS CHEMICALS ASSESSMENT

Prepared for
Mirvac Real Estate Pty Ltd

Prepared by
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Quality information

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EXECUTIVE SUMMARY

Tetra Tech Coffey Pty Ltd (Coffey) was commissioned by Mirvac Real Estate Pty Ltd (the client) to conduct a Hazardous Chemicals Assessment (assessment) of the office building located at 90 Collins Street, Victoria (the site). Phoebe Quessy conducted the assessment on 26th May 2022. The term 'Hazardous Chemicals' in this report has been used to refer to both dangerous goods and hazardous substances, as defined under the *Dangerous Goods (Storage and Handling) Regulations, 2012* and the *Occupational Health and Safety Regulations, 2017*.

Assessment Findings

Summary of Hazardous Chemicals Identified on Site

The following table presents a summary of the approximate total volumes of hazardous chemicals stored on site by dangerous goods class. It also details whether placarding and/or manifests are required for any dangerous goods stored in bulk at the site. Refer to **Appendix B** for full hazardous chemicals register.

Dangerous Goods Class	Approximate Quantity Stored on Site (L or Kg)	Placarding Required	Manifest Required
Class 2.2	552	-	-
Class 3	3	-	-
Class 5.1 and 5.2	15	-	-
Class 6.1	15	-	-
Class 8	61	-	-
Class 9	1	-	-
C1 Combustible Liquid	9,900	-	-
Non-Dangerous Goods and Products with Unknown Classes	240	-	-

Observations

The following observations were made at the time of the assessment (refer to **Appendix A** for a photographic supplement):

- Quantities of hazardous chemicals stored on site did not exceed the threshold levels for placarding and manifest requirements.
- Inspected hazardous chemicals observed on site were securely stored in sealed containers and provided with adequate secondary containment.
- Inspected hazardous chemicals appeared to be appropriately labelled.
- Hazardous chemical storage areas were secured from unauthorised access (e.g. within locked rooms).

- Safety Data Sheets (SDSs) were available for the majority of hazardous chemicals stored on site, however SDSs were not available in all hazardous chemical storage areas (e.g. water treatment chemicals).
- The majority of the SDSs reviewed on site were current (within 5 years of issue date), however a number of the SDSs reviewed were not current (e.g. Diesel SDS expired in 2021).

Recommendations

The following recommended actions (and the associated indicative recommended timeframes) are provided based on the findings and observations presented above:

High Priority (action within 1 month)

No high priority actions are required.

Medium Priority (action within 3 months)

No medium priority actions are required.

Low Priority (action within 6 months)

- Ensure that printed SDS copies are available and readily accessible for all hazardous chemicals (e.g. water treatment chemicals) in each relevant storage area, as well as within a central storage hub.
- Replace any outdated SDSs (e.g. Diesel) with current copies.
- Require as a condition of service contract, that all contractors engaged at the site provide a register of the chemicals they intend to use/store on site as well as a current SDS.
- Ensure all staff and contractors working within chemical storage areas at the site are provided with appropriate information, instruction and training to ensure they are able to work safely in these areas. It is recommended that this be managed within the site induction.
- Implement a periodic hazardous chemicals assessment at the site to ensure the requirements are being maintained and the register remains current. It is recommended that such a review is performed at least once every five years, or when significant changes are made to the hazardous chemicals used/stored on site.
- A copy of this report and register should be made available to any staff and contractors working within the relevant areas at the site.

1. INTRODUCTION

Tetra Tech Coffey Pty Ltd (Coffey) was commissioned by Mirvac Real Estate Pty Ltd (the client) to conduct a Hazardous Chemicals Assessment (assessment) of the office building located at 90 Collins Street, Victoria (the site). Phoebe Quessy conducted the assessment on 26th May 2022. The term 'Hazardous Chemicals' in this report has been used to refer to both dangerous goods and hazardous substances, as defined under the *Dangerous Goods (Storage and Handling) Regulations, 2012* and the *Occupational Health and Safety Regulations, 2017*.

1.1 Site Description

The site consisted of a 23 level (approximately 21,308m²) office building, constructed in 1988. The building was occupied at the time of the assessment. Key chemical storage areas included Diesel Tank Room on Level B2, Cleaners Room on Level B1, and the plant rooms on Levels 22 and 23.

1.2 Assessment Objectives

The objectives of this assessment were as follows:

- Conduct a visual inspection of all common areas (tenanted areas were not included) at the site.
- Liaise with relevant site personnel and collect data on the location, type, quantities, use and function of the hazardous chemicals stores on site.
- Assess the risks associated with the storage of hazardous chemicals on site.
- Evaluate the effectiveness of risk control measures implemented at the site to manage hazardous chemical storage.
- Provide recommended actions to rectify any identified non-conformances and minimise the identified risks.
- Prepare an up-to-date hazardous chemicals register for the site.

2. METHODOLOGY

The assessment consisted of an on-site visual inspection to identify and assess, so far as reasonably practicable, the presence, location and condition of hazardous chemicals at, on, and associated with the site. Areas were visually inspected for containers and storage vessels that may contain any potentially hazardous chemicals. Visual assessment of the type of all hazardous chemicals identified was conducted with product details recorded including estimated volumes, and whether the contents were labelled or indicated through signage. All chemical storage areas were accessed, where reasonably practicable, and where no access was available, locations were recorded within Section 2.1 of this report. The assessment was carried out methodically, systematically and diligently to make sure all relevant areas of the premises were inspected.

Hazardous properties of each hazardous chemical stored on site were collated from the Safety Data Sheets (SDS). Where the SDS was unavailable, generic hazardous properties for the class of dangerous goods were used. For each hazardous property identified, an assessment was made to determine whether this hazardous property resulted in a risk to occupants of the chemical storage area or any adjacent areas.

Data collected during the assessment was compared to the legislative documents and standards listed in Section 7.

2.1 Inaccessible Areas

The following areas were not accessible at the time of the assessment. The presence/absence of hazardous chemicals in these areas cannot be confirmed until further investigation can confirm or refute the presence.

- Occupied areas/tenancies.
- Areas not specified as chemical storage areas.

3. DUTIES OF THE SITE OCCUPIER / EMPLOYER

An occupier / employer of a premises where hazardous chemicals are stored and handled has a duty to identify the hazards associated with the hazardous chemicals and control the risks arising from their storage and handling. The following duties must also be carried out by the site occupier / employer:

- Provide appropriate consultation, training, induction and supervision to all workers who are required to work within hazardous chemical storage areas.
- Prepare a register of all hazardous chemicals stored or used at the site.
- Obtain current SDSs for all hazardous chemicals stored or used on site.
- Prepare a manifest of any hazardous chemicals stored in bulk quantities above the relevant threshold limits.
- Display appropriate placards for hazardous chemicals stored in bulk quantities above the relevant threshold limits.
- Ensure hazardous chemical storage areas are appropriately ventilated.
- Ensure hazardous chemical containers and pipework are protected from damage.
- Ensure all hazardous chemical containers and pipework are appropriately labelled.
- Ensure that incompatible hazardous chemicals are appropriately segregated.
- Ensure appropriate spill containment provisions are provided for all hazardous chemicals.
- Ensure suitable fire safety measures are available and appropriately maintained.
- Provide health monitoring to workers who may be exposed to hazardous chemicals in levels exceeding the relevant exposure standards.

Note: The above duties are specified in Part 4 of the *Dangerous Goods (Storage and Handling) Regulations, 2012* and Part 4.1 of the *Occupational Health and Safety Regulations, 2017*. The occupier / employer of this site is considered to be the Property Manager.

4. BACKGROUND INFORMATION

4.1 Definitions

Definitions of key terms used in this assessment report and within the hazardous chemicals register are provided below:

- Dangerous Goods – Substances capable of causing immediate harm to people and property because of their hazardous properties. They may be corrosive, flammable, combustible, explosive, oxidising or water-reactive or have other hazardous properties
- Hazardous Substances – Substances that have the potential to harm human health.
- Manifest – A summary of the key information about specific dangerous goods stored at a site, intended to be provided to emergency services in the event of an emergency. Only required for dangerous goods stored in large quantities over the threshold limits detailed in the *Dangerous Goods (Storage & Handling) Regulations, 2012*.
- Placard – Signage intended to provide a clear visual warning to emergency services that dangerous goods are stored at the site. They include outer warning placards, to be installed at the vehicle entrances to the site, and location placards, to be installed on or adjacent to each container or storage area. Only required for dangerous goods stored in large quantities over the threshold limits detailed in the *Dangerous Goods (Storage & Handling) Regulations, 2012*.

4.2 Dangerous Goods Classes

Classes of relevant dangerous goods are listed below:

- Class 2 – Gases.
 - Division 2.1 – Flammable gases.
 - Division 2.2 – Non-flammable, non-toxic gases.
 - Division 2.3 – Toxic gases.
- Class 3 – Flammable liquids.
- Class 4 – Flammable solids.
 - Division 4.1 – Flammable solids, self-reactive substances, and solid desensitized explosives.
 - Division 4.2 – Substances liable to spontaneous combustion.
 - Substances which in contact with water emit flammable gases.
- Class 5 – Oxidizing substances and organic peroxides.
 - Division 5.1 – Oxidizing substances.
 - Division 5.2 – Organic peroxides.
- Class 6 – Toxic and infectious substances.
 - Division 6.1 – Toxic substances.
 - Division 6.2 – Infectious substances.
- Class 8 – Corrosive substances.
- Class 9 – Miscellaneous dangerous substances and articles.
- C1 – Combustible liquids (liquids with a flashpoint greater than 60°C but less than 93°C and a fire point less than its boiling point).

Note: It is possible for substances to display more than one characteristic, therefore these substances may fall under more than one dangerous goods class. In such circumstances the substance will have a primary class and a subsidiary class. Subsidiary classes are displayed in brackets in the dangerous goods class column of the Hazardous Chemicals Register.

4.3 Packing Group

To further assist with the identification of dangerous goods and their particular hazards, Classes 3, 4, 5, 6 and 8 are assigned with a packing group. This represents the level of danger to persons exposed to the dangerous goods. Packing groups include the following:

- I – Great danger.
- II – Medium danger.
- III – Minor danger.

5. ASSESSMENT FINDINGS

The assessment findings are detailed in the following sections. Refer to **Appendix A** for a photographic supplement and **Appendix B** for the full Hazardous Chemicals Register.

5.1 Summary of Hazardous Chemicals Identified on Site

The following table presents a summary of the approximate total volumes of hazardous chemicals stored on site by dangerous goods class. It also details whether placarding and/or manifests are required for any dangerous goods stored in bulk at the site. Refer to **Appendix B** for full hazardous chemicals register.

Dangerous Goods Class	Approximate Quantity Stored on Site (L or Kg)	Placarding Required	Manifest Required
Class 2.2	552	-	-
Class 3	3	-	-
Class 5.1 and 5.2	15	-	-
Class 6.1	15	-	-
Class 8	61	-	-
Class 9	1	-	-
C1 Combustible Liquid	9,900	-	-
Non-Dangerous Goods and Products with Unknown Classes	240	-	-

5.2 Observations

The following observations were made at the time of the assessment (refer to **Appendix A** for a photographic supplement):

- Quantities of hazardous chemicals stored on site did not exceed the threshold levels for placarding and manifest requirements.
- Inspected hazardous chemicals observed on site were securely stored in sealed containers and provided with adequate secondary containment.
- Inspected hazardous chemicals appeared to be appropriately labelled.
- Hazardous chemical storage areas were secured from unauthorised access (e.g. within locked rooms).
- Safety Data Sheets (SDSs) were available for the majority of hazardous chemicals stored on site, however SDSs were not available in all hazardous chemical storage areas (e.g. water treatment chemicals).
- The majority of the SDSs reviewed on site were current (within 5 years of issue date), however a number of the SDSs reviewed were not current (e.g. Diesel SDS expired in 2021).

6. RECOMMENDED ACTIONS

The following recommended actions (and the associated indicative recommended timeframes) are provided based on the findings and observations presented above:

6.1 High Priority (action within 1 month)

No high priority actions are required.

6.2 Medium Priority (action within 3 months)

No medium priority actions are required.

6.3 Low Priority (action within 6 months)

- Ensure that printed SDS copies are available and readily accessible for all hazardous chemicals (e.g. water treatment chemicals) in each relevant storage area, as well as within a central storage hub.
- Replace any outdated SDSs (e.g. Diesel) with current copies.
- Require as a condition of service contract, that all contractors engaged at the site provide a register of the chemicals they intend to use/store on site as well as a current SDS.
- Ensure all staff and contractors working within chemical storage areas at the site are provided with appropriate information, instruction and training to ensure they are able to work safely in these areas. It is recommended that this be managed within the site induction.
- Implement a periodic hazardous chemicals assessment at the site to ensure the requirements are being maintained and the register remains current. It is recommended that such a review is performed at least once every five years, or when significant changes are made to the hazardous chemicals used/stored on site.
- A copy of this report and register should be made available to any staff and contractors working within the relevant areas at the site.

7. REFERENCES

- Occupational Health & Safety Act, 2004.
- Dangerous Goods Act, 1985.
- Occupational Health & Safety Regulations, 2017.
- Dangerous Goods (Storage & Handling) Regulations, 2012.
- Code of Practice for the Storage and Handling of Dangerous Goods, 2013.
- Compliance Code: Hazardous Substances, 2019.
- Australian Standard 1940:2017 'The Storage and Handling of Flammable and Combustible Liquids'.
- Australian Standard 1596:2014 'The Storage and Handling of LP Gas'.
- Australian Standard 3833:2007 'The Storage and Handling of Mixed Classes of Dangerous Goods in Packages and Intermediate Bulk Containers'.

8. LIMITATIONS

This report and the associated services performed by Tetra Tech Coffey are in accordance with the scope of services set out in the contract between Tetra Tech Coffey and the Client. The scope of services was defined by the requests of the Client, by the time and budgetary constraints imposed by the Client, and by the availability of access to the site.

Tetra Tech Coffey derived the data in this report primarily from visual inspections, examination of available records, and interviews with individuals with relevant information about the site. In preparing this report, Tetra Tech Coffey has relied upon, and presumed accurate, certain information (or absence thereof) provided by government authorities, the Client and others identified herein. Except as otherwise stated in the report, Tetra Tech Coffey has not attempted to verify the accuracy or completeness of any such information.

No warranty, undertaking, or guarantee, whether expressed or implied, is made with respect to the data reported or to the findings, observations, and recommendations expressed in this report. Furthermore, such data, findings, observations, and recommendations are based solely upon existence at the time of the assessment. The passage of time, manifestation of latent conditions or impacts of future events (e.g. changes in legislation, scientific knowledge, land uses, etc.) may require further investigation at

the site with subsequent data analysis and re-evaluation of the findings, observations, and recommendations expressed in this report.

This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the provisions of the agreement between Tetra Tech Coffey and the Client. Tetra Tech Coffey accepts no liability or responsibility whatsoever and expressly disclaims any responsibility for or in respect of any use of or reliance upon this report by any third party or parties. It is the responsibility of the Client to accept if the Client so chooses any recommendations contained within and implement them in an appropriate, suitable and timely manner.

APPENDIX A: PHOTOGRAPHS

Hazardous Chemicals Assessment

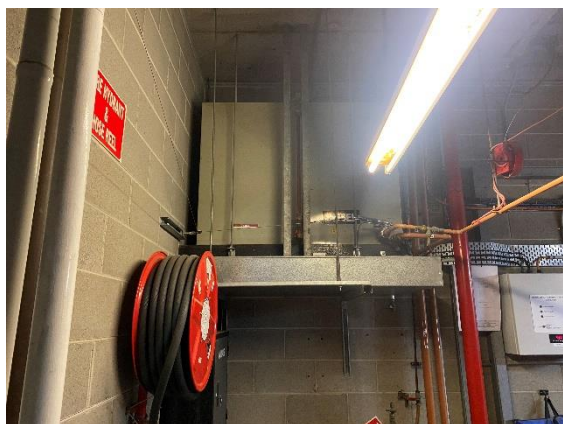


Photo 01. Level 23 Generator Room, Diesel Fuel Storage.



Photo 02. Level 23 Sprinkler Pump Room, Diesel Fuel Storage.



Photo 03. Level B2 Diesel Tank Room, Diesel Fuel Storage.

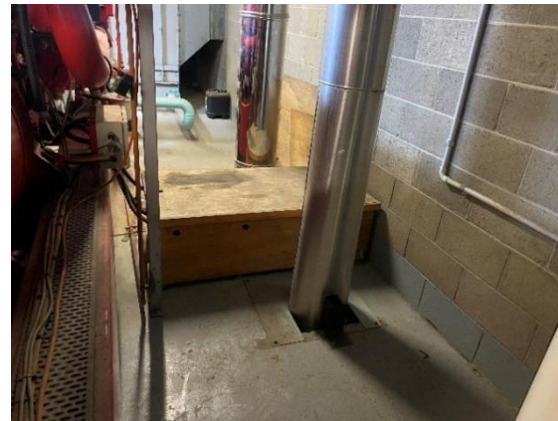


Photo 04. Level 23 Generator Room, Battery Storage.



Photo 05. Level 23 Sprinkler Pump Room, Battery Storage.



Photo 06. Level B2 Cleaners Room, Chemical Storage.

Hazardous Chemicals Assessment



Photo 07. Level B2 Cleaners Room, Chemical Storage.



Photo 08. Level 22 Plant Room, cooling tower chemicals.

APPENDIX B: HAZARDOUS CHEMICALS REGISTER

HAZARDOUS CHEMICALS REGISTER

Instructions

Complete, keep and maintain this *Hazardous Chemicals Register* for all existing and new chemicals used by staff. This register should be readily accessible by all staff and contractors who use or who may be affected or exposed to any of the hazardous chemicals listed herein.

All hazardous chemicals must have a current safety data sheet (SDS) and an accompanying risk assessment that is no more than five years old. The SDS must state whether the product is hazardous and, in case of dangerous goods, provide the proper shipping name, class label, subsidiary risk, and packing group details. Copies of the SDSs must be attached to this register.

Site		90 Collins Street, Melbourne VIC 3000			
Date of Register		26 th September 2022 (based on 26 th May 2022 inspection)			
Assessor	Name	Phoebe Quessy	Position Title	WHS Consultant	
	Company	Tetra Tech Coffey	Client Contact Name	Cameron McVilly	

Product Name	Purpose	Location	Quantity		Hazardous Substance	Dangerous Goods		SDS Expiry	Actions/Comments
			Number of Containers	Max Quantity (L or Kg)		Class	Packing Group		
Level B2, Diesel Tank Room									
Diesel	Fuel	Level B2, Diesel Tank Room	1 x 9,000L	9,000	Yes	C1	N/A	2021	Replace outdated SDS with current version
Level B1, Cleaners Room									
Central Cleaning Graffiti Remover	Cleaner	Level B1, Cleaners Room	1 x 5L	5	Unknown	Unknown	Unknown	Not available	Provide current SDS in a readily accessible location
Diversey Divercleanse	Cleaner	Level B1, Cleaners Room	8 x 0.75L 3 x 5L	21	Yes	8	III	Feb 2023	-
Netbiokem DSAM	Cleaner	Level B1, Cleaners Room	7 x 0.75L 6 x 5L	35.25	Yes	-	-	Apr 2025	-
Diversey Taski Glance	Cleaner	Level B1, Cleaners Room	7 x 0.75L 3 x 5L	20.25	-	-	-	Dec 2023	-

HAZARDOUS CHEMICALS REGISTER

Product Name	Purpose	Location	Quantity		Hazardous Substance	Dangerous Goods		SDS Expiry	Actions/Comments
			Number of Containers	Max Quantity (L or Kg)		Class	Packing Group		
Diversey Cream R7	Cleaner	Level B1, Cleaners Room	2 x 0.5L	1	Yes	-	-	Feb 2023	-
SAT So Safe Graffiti Remover	Cleaner	Level B1, Cleaners Room	1 x 1L	1	Yes	9	III	Mar 2026	-
AGAR Steel Shine	Cleaner	Level B1, Cleaners Room	1 x 0.75L	0.75	Yes	-	-	Feb 2026	-
Diversey Taski Wipeout	Cleaner	Level B1, Cleaners Room	2 x 5L	10	-	-	-	Feb 2023	-
Citro Clean	Cleaner	Level B1, Cleaners Room	6 x 0.5L	3	Yes	3	III	Nov 2024	-
Diversey Taski Cream R7	Cleaner	Level B1, Cleaners Room	1 x 5L	5	Yes	-	-	Feb 2023	-
Agar Exit	Cleaner	Level B1, Cleaners Room	2 x 5L	10	Yes	-	-	Oct 2025	-
Whiteley Fabripowr	Cleaner	Level B1, Cleaners Room	1 x 5L	5	Yes	-	-	Mar 2026	-
Diversey Taski Pro Strip	Cleaner	Level B1, Cleaners Room	2 x 5L	10	Yes	8	III	Not available	Provide current SDS in a readily accessible location
Agar pH-7	Cleaner	Level B1, Cleaners Room	3 x 5L	15	Yes	-	-	Apr 2025	-
Agar Steel Shine	Cleaner	Level B1, Cleaners Room	3 x 5L	15	Yes	-	-	Feb 2026	-
Level 22, Plant Room									
Hydro 320	Water treatment	Level 22, Plant Room	1 x 15L	15	-	-	-	Not available	Provide current SDS in a readily accessible location
Hydro 802	Water treatment	Level 22, Plant Room	1 x 15L	15	Yes	-	-	Not available	Provide current SDS in a readily accessible location
Hydro 424	Water treatment	Level 22, Plant Room	2 x 15L	30	Yes	-	-	Not available	Provide current SDS in a readily accessible location

HAZARDOUS CHEMICALS REGISTER

Product Name	Purpose	Location	Quantity		Hazardous Substance	Dangerous Goods		SDS Expiry	Actions/Comments
			Number of Containers	Max Quantity (L or Kg)		Class	Packing Group		
Hydro 256	Water treatment	Level 22, Plant Room	2 x 15L	30	Yes	8	III	Not available	Provide current SDS in a readily accessible location
Hydro 371	Water treatment	Level 22, Plant Room	1 x 15L	15	Yes	6.1	III	Not available	Provide current SDS in a readily accessible location
Hydro 348	Water treatment	Level 22, Plant Room	1 x 5L	5	-	-	-	Not available	Provide current SDS in a readily accessible location
Hydro 326	Water treatment	Level 22, Plant Room	1 x 4Kg	4	-	-	-	Not available	Provide current SDS in a readily accessible location
Hydro 375	Water treatment	Level 22, Plant Room	1 x 15Kg	15	Yes	5.1 (8)	II	Not available	Provide current SDS in a readily accessible location
Hydro 440	Water treatment	Level 22, Plant Room	1 x 4Kg	4	Yes	-	-	Not available	Provide current SDS in a readily accessible location
Level 23, Generator Room									
Diesel	Fuel	Level 23, Generator Room	1 x 500L (approx.)	500	Yes	C1	N/A	Not available	Provide current SDS in a readily accessible location
Valvoline Coolant 50 Pre-Mixed	Coolant	Level 23, Generator Room	1 x 10L	10	Yes	-	-	Not available	Provide current SDS in a readily accessible location
Lead Acid Batteries	Battery	Level 23, Generator Room	4 units	Unknown	Yes	8	Unknown	Not available	Current SDS needs to be sourced and stored in the SDS folder.
Level 23, Sprinkler Pump Room									
Diesel	Fuel	Level 23, Sprinkler Pump Room	2 x 200L (approx.)	400	Yes	C1	N/A	2021	Replace outdated SDS with current version

HAZARDOUS CHEMICALS REGISTER

Product Name	Purpose	Location	Quantity		Hazardous Substance	Dangerous Goods		SDS Expiry	Actions/Comments
			Number of Containers	Max Quantity (L or Kg)		Class	Packing Group		
Aus Cell Lead Acid Batteries	Battery	Level 23, Sprinkler Pump Room	4 units	Unknown	Yes	8	Unknown	Not available	Provide current SDS in a readily accessible location
Genuine York Oil	Lubricant	Level 23, Sprinkler Pump Room	1 x 35L	35	-	-	-	Not available	Provide current SDS in a readily accessible location
Level 23, Chiller Room									
R-134a	Refrigerant	Chiller Room	2 x 276Kg (within chillers)	552	Yes	2.2	N/A	Not available	Provide current SDS in a readily accessible location