

Chemical Safety Report

Public Version

Legal name of applicant: Custom Moulded Polyurethane Limited

Submitted by: Custom Moulded Polyurethane Limited

Substance: 2,2'-Dichloro-4,4'-methylenedianiline (MOCA, MbOCA) [CAS 101-14-4; EC 202-918-9]

Use title: Used in the manufacture of hot cast polyurethane components

Use number: 1

Application for continued use of MbOCA
Submitted by: Custom Moulded Polyurethane Ltd
Chemical Safety Report

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Industrial use of 2,2'-Dichloro-4,4'-methylenedianiline
(MbOCA) used in the manufacture of hot cast polyurethane components

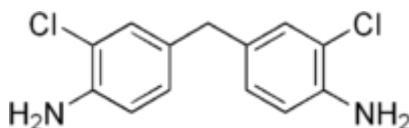


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SECTION 1: SCOPE OF REPORT

MbOCA as a “substance of very high concern” has been placed on the Authorization List under the Europe’s Registration, Evaluation, Authorisation & Restriction of Chemicals (REACH) regulatory regime.

Should any UK based polyurethane processor wish to continue to use of MbOCA following BREXIT, they are required to submit an application “for continued use” to UK Reach (HSE) to demonstrate that they, as a Polyurethane processor cannot find a suitable substitute curative for their specific critical cast component parts, plus unable to satisfy the long-established ongoing demand for spare parts. Also demonstrate that they process MbOCA safely, having procedures in place to protect employee’s health as far as reasonably practicable, also explain the financial impact on their business in the event of not being granted authorisation for their continued use of MbOCA.

SECTION 2: HISTORY OF MbOCA

MbOCA was first used as a polyurethane curative 68 years ago in 1954. Since this time MbOCA has established a very good track record of being **superior to any alternative curative** in terms of processability, kilo cost, and excellent all round physical properties and performance.

MbOCA is still the favoured curative worldwide. **There are no restrictions regarding its continued use outside of the EEA.**

If the MbOCA use situation was a worldwide issue, then all processors would be on a level playing field in terms of what they could offer, regarding performance and price, therefore safeguarding polyurethane processors and jobs within the UK.

Hopefully there will be a “drop in alternative” available in the future to match the performance, price and processability of MbOCA.

The demand for MbOCA cured parts is customer driven, therefore if the UK is unable to supply, customers will be forced to source their parts outside the EEA where there is no restriction regarding processing MbOCA.

This situation poses a very real threat to all UK based polyurethane processors and end users, resulting in possible business closures.

SECTION 3: COMPANY BACKGROUND

Custom Moulded Polyurethane Ltd commenced manufacturing in 2004. As the company name suggests it specialises in the design and manufacture of bespoke hot cast polyurethane components. The primary focus of the newly formed business, being to manufacture **high tensile strength** cast polyurethane components processed using TDI prepolymers cured with MbOCA.

Frequently working closely with third party design engineers, aiding in the design and development of small high tensile strength components, many being integral vital parts of larger pieces of equipment.

The business currently employs a total of 9 staff, 3 admin plus 6 direct labour / process operators 3 of which work with MbOCA, all being fully conversant with safe handling procedures and fully aware of its suspected health risk implications **R45 risk (suspect human carcinogen)**.

During its 18 years of processing Custom Moulded Polyurethane has developed a vast number of bespoke cast parts utilising TDI /MbOCA cured systems, most having ongoing requirements for spares.

Custom Moulded Polyurethane also supply parts previously designed/developed by third parties the only specified grade stated on component drawings being TDI/MbOCA cured.

No alternative grade can be used, as they simply do not perform in service.

Due to MbOCA first being used as a polyurethane curative way back in 1954 it has a very long track record of being a trusted vital component required to produce high tensile strength polyurethane parts and remains the favoured choice of processors worldwide. During this time a vast number of existing parts are used worldwide across all sectors of industry, with an ongoing demand for spare parts.

MbOCA usage at CMP is low at 3 tonnes per annum, the workforce is small which makes life easier regarding all aspects of health and safety management, we all work together as a team to minimise any risk to health.

The company MD has 48 years' experience regarding working with MbOCA which is a major benefit regarding deploying safe systems of work. This wealth of knowledge regarding working safely with this SVHC being passed onto his production manager who now has 18 years of experience in all aspects of working safely with MbOCA, working closely with process operators and training them in safe methods of work.

The MD would also comment that he would welcome a “drop-in replacement” in terms of processibility, performance and price to permit MbOCA to be removed from the workplace.

SECTION 4: CONTROL OF MBOCA

All aspects of Health and safety at CMP are a daily routine, being a small company, we all work closely together to establish a safe working environment.

In this report Custom Moulded Polyurethane will provide process operator biological monitoring results regarding the use of MbOCA used in the manufacturing of hot cast polyurethanes. Occupational exposure for MbOCA is regulated by the HSE in the UK, current biological monitoring guidance value (bmgv) is 15 $\mu\text{mol/mol}$ creatinine.

Biological monitoring is the preferred means of assessing exposure as the main exposure route is dermal. Biological monitoring measures the amount of MbOCA present in urine samples of process operators.

Custom moulded polyurethane has a good track record of low exposure levels achieving results well below the UK guidance levels of 15 $\mu\text{mol/mol}$ creatinine on occasions achieved non detectable results. Biological monitoring is currently the best method to assess the total exposure to MbOCA within the workplace, this is also complemented by workplace air monitoring and surface swipes to monitor any unseen contamination within the workplace.

Custom moulded polyurethane localises its use of MbOCA by only utilising one dispensing machine for the casting of MbOCA cured polyurethane. This ensures processing in a totally enclosed dispensing environment, reducing exposure to process operators as far as reasonably practicable, limiting exposure within the workplace. There are relevant method statements, COSHH and risk assessments in place for all aspects of handling and loading of MbOCA into the Melter.

All MbOCA processing areas are fitted with local exhaust ventilation to minimise any potential fume exposure to operators all LEV is inspected every 14 months in line with COSHH regulations.

MbOCA has a low dustiness and low vapour pressure the main route into the body is through dermal contact. CMP has onsite spot check procedures in place to monitor any MbOCA contamination along with procedures to deal with any surface contamination detected by using SKC products pictured on page 7.

This facility is a good aid to ensure our safe working procedures are being adhered to and effective. The colour indicating Surface swipes will detect any invisible traces of MbOCA on any hard surface, spot checks are carried out on any object touched by operators' hands e.g., tearoom tabletops, door handles, W/C flush handles, tap handles etc. Skin swipes are also used to ensure gloves are being used in the correct manner, gloves are frequently changed to prevent any contamination issues.

In the unlikely event of a positive result the surfaces are de-contaminated and investigated to identify the cause of contamination followed up by remedial action to prevent any reoccurrence.

Aromatic Amine surface wipes for skin and surface detection of any traces of MbOCA present





Cleaning / Developing solution for use with surface wipes pictured above

Used hard surfaces prior to using the colour indicating surface swipes

Aromatic Amine Skin Cleanser



Used to de-contaminate skin following contact with MbOCA.

Supplier of de-contamination products.

<https://www.skinc.com/products/surface-swype-for-aromatic-amines>

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SURFACE SWYPE FOR AROMATIC AMINES VIDEOS



How to Test for Chemicals on Surfaces and Decontaminate

Watch as SKC demonstrates how to check surfaces for MOCA. Surface SWYPE indicators are suitable for the OSHA PPE Standard, do not require instruments and analysis, and are available for a variety of chemicals with ACGIH skin notation. Surface SWYPEs play an important role in dermal exposure reduction programs by identifying at-risk surfaces with which workers can come into contact.

Chemical contamination on workplace surfaces can result in significant skin exposure. Identification of areas and tasks for risk of dermal exposure is a critical element in a hazard assessment as required by OSHA's PPE standard. SWYPEs are a simple and sensitive technique to identify contaminated work sites where protective gloves and clothing must be worn. The use of colorimetric SWYPE systems compliment the use of urine testing in a worker education and training program for controlling employee exposure.

A common sense approach is the key to the successful use of the SWYPE detection systems for reducing workplace exposures. The first step is to observe employee work practices. Tools, machinery controls, safety glasses or pencils that are handled with contaminated gloves and may later be touched by bare skin, represent

TAC MATS are in place to remove any chemical contamination from the soles of operator's footwear before entering clean areas such as tea rooms, toilets, and offices.



SECTION 5: PROCESSING MBOCA

Common sense demonstrates that keeping MbOCA processing in an enclosed environment in a small area of the workplace greatly reduces the risk of operator's exposure.

CMP only process MbOCA through one automated dispenser to achieve this scenario.

Reducing the frequency of the task of actual casting also reduces operator exposure. We achieve this by grouping casting operations together, reducing the frequency of casting operations required throughout the working day.

During an 8-hour working day the exposure to liquid polyurethane mixtures containing MbOCA are reduced to an absolute minimum, thereby minimising potential operator exposure.

Correct PPE and its correct use are the solution to reducing potential exposure especially glove usage due to the main route into the body is by dermal contact.

Regular glove changes and personal hygiene are the main contribution in keeping exposure to a minimum. We practice this every working day.

SECTION 6: BASIC MbOCA PROCESSING PROCEDURE

Basic procedure of Mboca use to produce hot cast polyurethane parts

1. TDI Prepolymer is loaded into the holding tanks on the dispenser and heated to 70°C.
2. MbOCA is loaded into the Melter tank by vacuum transfer of solid small pellets and melted into a straw-coloured liquid at 120°C.
3. Moulds are prepared and placed inside an industrial oven heated to 80°C.
4. The dispenser is calibrated to the required ratio (dependant on polyurethane hardness required)
5. The MbOCA and prepolymer are metered by gear pumps drawn from the holding tanks and conveyed to the mix head chamber where they are homogenously mixed.
6. A small bore 10mm dia. delivery hose is fitted to the base of the mix head, conveys the mixture to the heated moulds inside the oven.
7. Following the required cure time, the solid polyurethane parts are de-moulded and returned to the oven for 16 hours post cure.
8. At this point all traces of Mboca have been fully crosslinked with the prepolymer, MbOCA is no longer present, therefore no potential of operator exposure exists.

It has been debated that MbOCA should be considered an “intermediate use” chemical due to the fact that all MbOCA is fully consumed during the manufacture of casting polyurethane.

There are several documented studies available, by such companies as Chemtura who carried out extensive lab testing to evaluate the presence of free MbOCA in fully cured cast parts.

The extensive tests determined that all the MbOCA present in the polyurethane mixture is fully crosslinked with the prepolymer during the reaction process, resulting in the amount of free MbOCA detected in finished parts being well below **0.1% w/w (weight by weight)**.

SECTION 7: MANAGEMENT OF RISKS

Identified Hazard	Average kilos processed per month	Average annual usage
Industrial use of 2,2'-Dichloro-4,4'-methylenedianiline (MbOCA) in the manufacture of hot cast polyurethane products	250 kg	3000 kg

Areas of exposure controlled
Delivery and storage of MbOCA drums
Moving / handling of MbOCA drums
Loading of MbOCA Melter
Storage and safe disposal of empty MbOCA drums
Casting Liquid polyurethane containing MbOCA into moulds
Curing of cast polyurethane in oven
Maintenance of dispenser
Waste handling
Spillage of MbOCA

SECTION 8: RISK ASSESSMENTS

Method Statements, Risk Assessments and COSHH Assessments are in place for all aspects involving working with MbOCA.

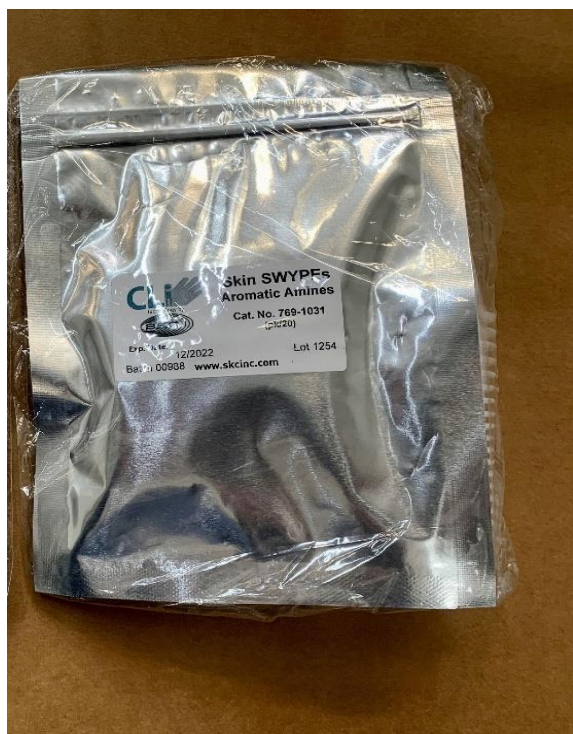
Method statements are developed with the process operators' input to ensure all working procedures are workable in practice, using a "hands on" approach.

CMP Ltd employ the services of an external Health & Safety Consultancy company who work closely with us in a very "hands on" approach in the workplace and ensure we are updated regarding all current HSE regulations. They provide health & Safety training for our employees.

Method statement

Name of task:	Contact with Mboca via skin, eyes, ingestion.
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Sequence of work:
<p>1. Read the related Risk assessment and COSHH assessment. Quickest route for Mboca into your body is through your skin.</p> <p>2. Ensure all correct PPE is worn whilst working with Mboca avoid contact with your skin. There are two levels of PPE. If unsure what PPE to wear for a task speak to the Site Manager before starting:</p> <p>Level 1 PPE is wearing vinyl disposable gloves for indirect handling tasks. In particular:</p> <ul style="list-style-type: none">○ Handling MOCA drums.○ Tape on the waste drums.○ The container when pouring. <p>Level 2 PPE is wearing vinyl gloves, disposable overalls, P3 dust mask. In particular:</p> <ul style="list-style-type: none">○ Loading the MOCA.○ Cleaning up spills. <p>Wear cotton gloves if Mboca is hot:</p> <ul style="list-style-type: none">○ wear cotton gloves over vinyl gloves when working with hot MBOCA before it has cured.○ wear cotton gloves when working with MBOCA after it has cured. <p>3. Skin contact – Immediately remove all contaminated clothing, including footwear if contaminated. Immediately remove all contaminated clothing, including footwear, especially if hot as Mboca is processed at 120°C therefore skin burns may occur. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. Report exposure to Site Manager immediately. Use D-TAM cleanser on all contaminated areas of your skin to remove all traces of Mboca.</p> <p>4. Following decontamination of your skin use Aromatic skin SWYPES to ensure your skin has no traces of Mboca present.</p>



5. Eye contact – Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from the eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
6. Ingestion – Immediately give a glass of water. First aid is not generally required. If in doubt, contact a poisons information centre or doctor.
7. Report the incident in the Company's accident book.
8. Complete a Mboca worksheet and submit to the Site Manager.
9. Supply a urine sample for biological monitoring. Sample should be taken first thing the next morning following the contact to ensure all Mboca absorbed through the skin has had long enough to enter your system and be present in your urine.

Operator acknowledgment:		
Print:	Signed:	Date:
Document approved by:		
Print:	Signed:	Date:

Method Statement

Name of task:	Mboca liquid leak /spillage
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Sequence of work:

1. Follow the related Risk assessment and COSHH assessment.
2. If it is safe to do so, attempt to stop the source of the leak to prevent it spreading ensuring you are not exposing yourself to inhaling any fume present.
3. Prevent any spillage from entering drains. **Note: Liquid Mboca will solidify quickly below 105°C any spread will be minimal never reaching nearest drains located outside the front of the premises in the carpark.**
4. Alert any personal nearby of the spillage and instruct them to remove themselves from the area.
5. Ensure there is no smoking, sparks, flames, or other sources of ignition near the spillage.
6. Put out barriers and signs as required around the spill.
7. Report the spillage to your supervisor/Site Manager who will supervise safe clean-up procedures.
8. **Prior to any cleaning up operations ensure you use all required PPE.** As well as standard PPE this is to include the wearing a paper boiler suit with integral hood, P3 dust mask, vinyl gloves. Wear cotton gloves over vinyl gloves for hot Mboca spills
9. DO NOT use water – MbOCA is insoluble in water.
10. Increase the ventilation as much as reasonably practical e.g., open the roller shutter doors.
11. Avoid breathing any dust or any contact with your skin and eyes.
12. Allow all spilt MbOCA to solidify use scrapers to remove from surfaces.
13. Shovel contents into the designated Mboca waste drum. Vacuum up or sweep up – avoid generating dust. Use the designated vacuum cleaner fitted with a HEPA filter.
14. Once finished cleaning, carefully remove all PPE in the correct manner and place them inside the designated MbOCA waste drum.
15. Refit the drum lid and steel band on the waste drum. Use the black cling film wrap to cover the top of the waste drum and wrap it around the outside of the waste drum to prevent any cross contamination. Store the waste drum in the designated store area awaiting safe disposal.

16. Ensure the work area is left clean, tidy, and safe.
17. Wash your hands thoroughly and use the D-TAM skin cleanser.
18. Management to check the spillage site has been fully decontaminated using Mboca detection surface wipes prior to the spillage site being used.
19. Complete a Mboca worksheet and hand it over to the Site Manager.
20. Supply a urine sample for biological monitoring. Sample should be taken first thing the next morning following the spillage to ensure any MbOCA absorbed through the skin has had long enough to enter your system and be present in your urine.
21. In the event of a large spillage notify our local HSE

Operator acknowledgment:		
Print:	Signed:	Date:
Document approved by:		
Print:	Signed:	Date:

Method Statement

Name of task:	MBOCA loading on TDI machine
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Sequence of work:

1. Follow the related Risk assessment and COSHH assessment.
2. Set up the machine before moving the Mboca drum into the area. Use the pencil provided to switch Mboca valve and pump to the off position, on the TDI machine control panel touch screen.
3. Use the touch screen pencil provided to reduce the temperature of the Mboca oven, hose, and valve to 0°C on the TDI machine control panel.
4. Ensure all PPE is worn, this is to include the wearing of a paper boiler suit with integral hood, P3 dust mask, vinyl gloves.
5. Ensure the working area is clean, tidy, and free from any obstacles.
6. Transport the Mboca drum from storage to the TDI machine using the correct handling equipment (pallet truck or sack truck) and correct manual handling procedure. Avoid manual handling the drum as much as reasonably practicable.
7. Place the Mboca drum in the LEV booth and ensure the LEV is operational and in position.
8. Before loading any Mboca into the machine, if loading more than 25kg close the flow and return taps inside the Mboca oven.
9. Open the large ball valve on top of the Mboca Melter tank. Pull the handle up to the open position.
10. Pull the retractable hazard barrier belts into position to cordon off the area to prevent any unauthorised personal walking through the loading area.
11. Remove the plastic locking tab on the drum lid clamp using the designated pliers, release the metal drum lid clamp, remove the drum lid place both items inside the designated Mboca extraction booth. Cut the cable ties on the black plastic drum liner bag. Carefully unfold the bag and open it over the outer top rim of the drum.
12. Remove the vacuum nozzle from its holder and place it into the Mboca pellets ready to load.
13. Stand outside the booth, switch the vacuum loader on and allow the Mboca pellets to be drawn up the vacuum pipe into the loader hopper.

Load the required amount of Mboca pellets. When the liner bag is almost empty, carefully, and slowly fold the bag inside the drum turning it upside down cautiously to **reduce any dust particles** becoming airborne. Empty the remaining pellets into the drum and continue to use the vacuum nozzle to transfer them to the loader.

14. When loading is completed remove the vacuum nozzle from the Mboca pellets and allow two cycles of the loader to pass to ensure no pellets are still inside the vacuum loading tube.
15. Switch the vacuum loader off and insert the nozzle back into the holder.
16. **Carefully and slowly** fold the bag inside the drum.
17. Refit the drum lid and steel band.
18. Once finished cleaning, carefully remove all PPE in the correct manner and place them inside the designated Mboca waste drum for safe disposal.
19. Use the black cling film wrap to cover the top of the waste drum and wrap it around the outside of the waste drum to prevent any cross contamination. Hold the waste bin on the tape when carrying. Store the waste drum in the designated store area awaiting safe disposal.
20. Put on a new pair of vinyl gloves.
21. Close the ball valve located on top of the Mboca Melter. Pull the valve handle down to the closed position.
22. Take off the vinyl gloves correctly and dispose of them in the Mboca waste bin.
23. Increase the temperature of the Mboca Melter oven to 120°C.
24. Ensure the work area is left clean, tidy, and safe.
25. Wash your hands thoroughly followed by D-TAM skin cleanser.

Operator acknowledgment:

Print:

Signed:

Date:

Document approved by:

Print:

Signed:

Date:

Method Statement

Name of task:	Mboca pellet spillage
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Sequence of work:

1. Follow the related Risk assessment and COSHH assessment.
2. If it is safe to do so, attempt to stop the pellets from spreading ensuring you are not exposing yourself to any contamination wear correct PPE.
3. Prevent any pellets from entering drains. **Note: Any pellet spread will be minimal never reaching nearest drains located outside the front of the premises in the carpark.**
4. Alert any personal nearby of the spillage and instruct them to remove themselves from the area.
5. Ensure there is no smoking, sparks, flames, or other sources of ignition near the spillage.
6. Put out barriers and signs as required around the spill.
7. Report the spillage to your supervisor/Site Manager who will supervise clean-up procedures.
8. **Prior to any cleaning up operations ensure you use all required PPE.** As well as standard PPE this is to include the wearing a paper boiler suit with integral hood, P3 dust mask, vinyl gloves.
9. DO NOT use water – Mboca is insoluble in water.
10. Increase the ventilation as much as reasonably practical e.g., open the roller shutter doors.
11. Avoid breathing any dust or any contact with your skin and eyes.
12. Shovel contents into the designated Mboca waste drum. Vacuum up or sweep up – avoid generating dust. Use the designated vacuum cleaner fitted with a HEPA filter.
13. Once finished cleaning, carefully remove all PPE in the correct manner and place them inside the designated Mboca waste drum.
14. Refit the drum lid and steel band on the waste drum. Use the black cling film wrap to cover the top of the waste drum and wrap it around the outside of the waste drum to prevent any cross contamination. Store the waste drum in the designated store area awaiting safe disposal.

15. Ensure the work area is left clean, tidy, and safe.
16. Wash your hands thoroughly and use the D-TAM skin cleanser.
17. Management to check the spillage site has been fully decontaminated using Mboca detection surface wipes and DETAM solution prior to the spillage site being used.
18. Complete a Mboca worksheet and hand it over to the Site Manager.
19. Supply a urine sample for biological monitoring. Sample should be taken first thing the next morning following the spillage to ensure any Mboca absorbed through the skin has had long enough to enter your system and be present in your urine.

Operator acknowledgment:		
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Document approved by:		
Print:	Signed:	Date:



RISK ASSESSMENT FORM

PART 1

Site: In the Company's premises.		No of persons at risk: Tick the Right Box		Assessment: MBOCA	
Activity/Process: The use of MBOCA during production. It is used in one machine on the shopfloor: <ul style="list-style-type: none"> • Handling MBOCA deliveries and storage. • Moving MBOCA to the machine location. • Loading the MBOCA into the machine. • Transfer of mixed polyurethane containing MBOCA to moulds. • Dealing with waste and spills. 			Workers	Others	Assessor:
		1		x	Signature:
		2-5			Date:
		6-10	x		Review Date: As circumstances change
		10+			
		RISK RATING AND CONTROL MEASURES			
Hazard	Existing Safety Measures/Controls:	Risk Rating Likelihood(L) X Severity(S) = Rating(R)	Additional Controls Recommended:		

		L	S	R	
MBOCA – hazardous substance	<ul style="list-style-type: none"> • MBOCA is a hazardous substance. • Exposure is through contact and it is absorbed through the skin. • The Company has a COSHH risk assessment and MSD sheet for the MBOCA. • Follow the COSHH risk assessment for the hazardous substance used. Ensure the correct PPE is worn when handling. • Follow the control measures for hazardous substances in the Company's hazardous substances risk assessment when using a hazardous substance. • The MBOCA comes into two forms. It comes in pellet forms in the drums. Once mixed in the oven it is a liquid until it sets. 	2	4	8	<ul style="list-style-type: none"> • Have employees read through and sign the COSHH risk assessment.
Training	<ul style="list-style-type: none"> • Employees are trained in the safe use of MBOCA following the Company's safe system of work. • Employees are trained in the Company's safe system of work to take gloves contaminated with MBOCA off correctly. 	2	4	8	<ul style="list-style-type: none"> • Have employees read through and sign the method statements.
Biological monitoring Worksheets	<ul style="list-style-type: none"> • The Company carries out biological monitoring for the use of MBOCA. All employees who may be exposed to MBOCA take part in this. • The test is testing the urine as the MBOCA is suspected of causing cancer in the bladder. • A reputable lab is used. They provide the kit materials and perform the analysis. • It is recommended the testing is carried out at least annually. The Company carries out the testing more frequently than this. • The Company also carries out tests if an employee was exposed to MBOCA. For example, a spill onto the skin. • The Company do not reuse the test bottles. New ones are used for each test. • The tests are carried out on the fourth day of production at lunch time to take the test in a suitable timeframe that takes into account exposure, following HSE guidelines. 	1	4	4	<ul style="list-style-type: none"> • Record in writing steps taken to reduce MOCA exposure in the event of a test result above exposure limit and have the employee read and sign them.

	<ul style="list-style-type: none"> When a test is carried out each employees complete a worksheet to record their MBOCA use that week. In the event of a test result above the exposure limit, the Site Manager is to review the worksheet with that employee. The Site Manager to agree change of work practices with the employee to reduce the risk of MBOCA exposure. Following the identification of exposure, the employee submits another urine sample. Test records and worksheets are stored for each employee. 				
MBOCA delivery	<ul style="list-style-type: none"> The MBOCA is brought on pallets on a lorry. Visually check the MBOCA drums are in good condition and stable on the pallet before bringing them into the premises. Use the forklift truck to unload the MBOCA from the lorry and to put it on the mezzanine floor. Follow the Company's forklift truck risk assessment when using the forklift truck. Ensure third parties are standing clear of the lifting operation. The forklift has fixed covers on the driving cabin and on top. This will stop the MBOCA spilling onto the employee during lifting operation if there was a leak or a MBOCA drum fell. Place the pallet securely on the mezzanine floor. 	1	4	4	
MBOCA storage and waste area	<ul style="list-style-type: none"> There is a designated location to store the MBOCA and waste MBOCA/ MBOCA waste drums. This is on the mezzanine floor inside the premises. This is away from any drains which are located outside the premises. This area is away from Company operations on the machines/workstations. There are wooden pallets to store the MBOCA on and they are in good condition. Employees to visually check they are in good condition. Employees to store the drums upright and not on the edge of the pallet. Do not overfill. 	2	4	8	<ul style="list-style-type: none"> Ensure those stacked at height are secure and cannot fall. Lower any that may fall. Tidy up the storage/waste area to ensure safe access/egress. Remove trip hazards in the way.
Moving MBOCA to machine	<ul style="list-style-type: none"> The Company has provided a drum cage and pallet truck/sack truck to handle to MBOCA to reduce handling times. 	2	4	8	

	<ul style="list-style-type: none"> • Use the drum cage to lower the drum to the floor from the mezzanine floor. • Use the pallet truck/sack truck to move the drum to the machine as much as reasonably practicable. • Only one MBOCA drum is required per machine cycle. Only move one drum to the machine per cycle. 				
Loading MBOCA	<ul style="list-style-type: none"> • Put on the MBOCA level 2 PPE. • Follow the 'MBOCA loading on TDI machine' method statement. • Put the barrier tapes across and exclude third parties from the area. • The Company has provided a booth with extraction and a vacuum hose to load the MBOCA. • Employees must use the booth, ensure the extraction is on and use the vacuum hose. • Ensure the waste bin is collapsed correctly following the loading MBOCA method statement. • The Company provides plastic cling film wrap to put on waste bins. This allows the waste drums to be handled on the cling film parts. The cling film wrap has a handle to avoid contact with the bin when using. Tape up the waste bin appropriately once full before moving. • When removing the lid from the drum or placing items into the waste bin, do it slowly and avoid putting head over the drum/bin. • Avoid dust when removing the lid, using the vacuum hose and collapsing the bin. 	1	4	4	<ul style="list-style-type: none"> • Fix the barrier tapes in place. • Implement the booth.
Dispensing material	<ul style="list-style-type: none"> • Ensure the swing arm is swung outwards to allow easy access. • A button is on the swing arm in easy access. When pressed it turns it on and then pressed again to turn it off. • The flowrate is low. • The nozzle is pointing directly down. • Keep hands out of the way when pouring. Stand back and hold the container at arm's length. • Use the propriety containers provided by the Company. 	2	4	8	

	<ul style="list-style-type: none"> • Ensure third parties are standing clear. • The Company has provided a waste drum under the swing arm to collect drips and in the event the wrong mixture was produced. • Put the swing arm back into its designated location when not in use. Ensure the drips are going into the waste drum. • Place the containers into the ovens as soon as possible. • Leave the plastic beakers in the oven until the PU contents has cured to a solid. Do not attempt to remove them in the event of a mistake with the mix etc. 				
Harden MBOCA content	<ul style="list-style-type: none"> • There is no exposure to MBOCA once it has been mixed and cured due to the nature of the cross linking of the material. • Employees do not need to wear PPE or deal with cross contamination on cured MBOCA content, beakers with content after the oven or finished products etc. 	0	0	0	
Machine Maintenance	<ul style="list-style-type: none"> • The machine that uses MBOCA may occasionally break down. • Maintenance employees to wear MBOCA level 2 PPE. • Ensure third parties are standing clear, put out barriers and signs as required. 	2	4	8	<ul style="list-style-type: none"> • Purchase portable signs and barriers to put out when maintaining the machine.
MBOCA Machine	<ul style="list-style-type: none"> • The machine and associated pipework have fixed covers throughout which prevents MBOCA from leaking out of the machine and pipework. • The machine is visually checked and periodically maintained to ensure it is in good condition before operating it. • Operators are trained in its use. • Follow the 'MBOCA loading on TDI machine' method statement to load the machine. • 	1	4	4	
PPE	<ul style="list-style-type: none"> • Employees must wear the correct PPE for the task/ type of MBOCA exposure. If unsure, ask the Site Manager before proceeding. • Level 1 PPE is wearing vinyl disposable gloves for indirect handling tasks. In particular: 	1	4	4	<ul style="list-style-type: none"> • Carry out face fit testing for the dust masks.

	<ul style="list-style-type: none"> ○ Handling MBOCA drums. ○ Tape on the waste drums. ○ The container when pouring. • Level 2 PPE is wearing vinyl gloves, disposable overalls, P3 dust mask. In particular: <ul style="list-style-type: none"> ○ Loading the MBOCA. ○ Cleaning up spills. • The Company has lots of PPE available. Employees as to dispose of PPE where required/exposed. Dispose of the vinyl gloves, P3 dust mask and disposable overalls after every use. • The Company has provided hand wipes. Employees to use these periodically. • Ensure skin is covered. Avoid contact with skin when handling. • The Company provides cotton gloves for handling hot MBOCA: <ul style="list-style-type: none"> ○ Employees to wear cotton gloves over vinyl gloves when working with hot MBOCA before it has cured. ○ Employees to wear cotton gloves when working with MBOCA after it has cured. 				
Exposure to MBOCA	<ul style="list-style-type: none"> • If exposed to MBOCA, dispose of it correctly and report to the Site Manager to complete a worksheet. • This includes work clothes and boots etc. • If it has come out of the machine or oven it may be hot. Immediately remove the clothing to reduce the likelihood of burns. • Avoid contact with hot MBOCA. Wear cotton gloves or wait for it to cool sufficiently. • Follow the Company's method statement or COSHH risk assessment for first aid treatment. 	2	4	8	
Hot MBOCA					
Waste MBOCA bin	<ul style="list-style-type: none"> • The Company has provided a waste MBOCA bin to put anything contaminated with MBOCA inside. • Put disposable PPE, wipes, hoover contents etc into the waste MBOCA bin. • Follow the control measure above for waste storage. • The Company disposes as MBOCA as hazardous waste by a hazardous waste disposal Company. 	1	4	4	<ul style="list-style-type: none"> • Put a sign on the MBOCA waste bin.

Tools	<ul style="list-style-type: none"> The Company has provided a set of tools and containers for MBOCA use only. Tools are put into a container that is closable. Only use the MBOCA designated tools and containers when dealing with MBOCA. Ensure they are put back on their designated location when not in use and close the container. 	1	4	4	<ul style="list-style-type: none"> Ensure the tools are stored in a closable container.
Cleaning	<ul style="list-style-type: none"> Follow the Company's method statement to clean MBOCA. If the MBOCA was in liquid form, ensure it hardens before attempting to clean. Ensure MBOCA level 2 PPE is worn when cleaning. Put out barriers and signs to exclude third parties as required. Put the waste into the MBOCA waste bin. Use the hoover provided to clean up spills. Report to the Site Manager of the spill and clean up upon completion. The Company has its own washing facilities to clean overalls. The employee performing the washing must wear vinyl gloves when handling dirty overalls. 	1	4	4	<ul style="list-style-type: none"> Purchase wet floor signs to put up around the spills.
Manual handling	<ul style="list-style-type: none"> The MBOCA drums are heavy – up to 50kg. Ensure good manual handling when handling the drums. Ensure vinyl gloves are worn when handling the drums including waste drums. Avoid manual handling the drums as much as reasonably practicable. Use the sack truck/ pallet truck etc to move the drums. Use the vacuum hose to load the machine. Wash hands after handling. 	1	4	4	
Colour indication detector wipes	<ul style="list-style-type: none"> The Company has colour indication detector wipes to test surfaces for MBOCA residuals. In the event of biological monitoring results above exposure limit, the Site Manager will use these to test and find the sources of exposure. In the event of a spill the Site Manager will test the surface after cleaning to ensure correct clean up. 	1	4	4	<ul style="list-style-type: none"> Mark the box and have it in a designated location. Record the results on the worksheet.
Cross contamination	<ul style="list-style-type: none"> Employees are trained to reduce cross contamination as much as reasonably practicable. 	2	4	8	

	<ul style="list-style-type: none"> Employees are provided with the MBOCA waste bin to dispose of MBOCA contaminated materials. Employees are trained to take contaminated gloves off correctly. The Company has provided wipes, water and soap. The MBOCA and waste drums are stored in one area. The MBOCA is only used in one section of the shopfloor in one machine. There are designated workbenches, containers and tools for the use of MBOCA. 				
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Risk Rating Matrix:

Risk Rating		Rating Action Bands		Action Required
Likelihood	Severity of Injury	Total	Assessment	
1. Very Unlikely [hasn't occurred before]	1. Minor Injuries [no lost time]	1-2	Minimal	No further action required
2. Slight [rarely occurs]	2. Significant Injuries [up to 7 days]	3-9	Low	Review Control Measures to reduce risk
3. Feasible [possible but not common]	3. Serious Injuries [over 7 days]	10-15	Medium	Action should be taken to reduce the risk
4. Likely [has before, will again]	4. RIDDOR Major Injury	16-20	High	Action must be taken to reduce risk
5. Very Likely [occurs frequently]	5. Fatality	25	Extreme	Stop Work and Seek Professional Help
To establish Risk Rating multiply "Likelihood" by the "Severity"				

PART 4: TOOLBOX TALKS - TRAINING

All employees shall be appropriately instructed and trained in the safe working techniques to be employed.

All trainees shall work under the close supervision of their supervisor.

MOCA					
Location		Date		Presented By	
Attendees or: I confirm that I have read the above toolbox talk and will comply with this safe system of work. If I have any questions or doubts about what to do, I will speak to my supervisor:					
Date	Name		Signature		

COSHH Risk Assessment

Trade Name:		MOCA (MbOCA)		Substance:		Light yellow pellets in drums. Hot amber colour liquid when melted in machine.	
Supplier/Phone Number:		Era Polymers Pty Ltd Emergency Number: +61 1800 951 288					
Hazard Classification:			Signal/Danger Word: Danger			Route of exposure:	
<input type="checkbox"/> Not Classified <input type="checkbox"/> Toxic <input type="checkbox"/> Very Toxic <input checked="" type="checkbox"/> Harmful <input type="checkbox"/> Irritant			<input type="checkbox"/> Sensitising <input checked="" type="checkbox"/> Carcinogenic <input type="checkbox"/> Oxidising <input type="checkbox"/> Flammable <input type="checkbox"/> Explosive			<input type="checkbox"/> Corrosive <input checked="" type="checkbox"/> Environment <input type="checkbox"/> Biological <input type="checkbox"/> Other	
						<input type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/> Skin <input type="checkbox"/> Eyes <input checked="" type="checkbox"/> Other: Eating, drinking, smoking without washing hands. Food, drink and cutlery exposure to the substance.	
May cause cancer through skin exposure. Harmful if swallowed.							
Risk/Hazard Safety phrases:				Precautionary /Safety phrases:			
H302 Harmful if swallowed. H350 May cause cancer. H410 Very toxic to aquatic life with long lasting effects.				P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P201 Obtain special instructions before use. P281 Use personal protective equipment as required. P264 Wash all exposed external body areas thoroughly after handling. P270 Do not eat, drink, or smoke when using this product. P273 Avoid release to the environment P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation. P308+P313 IF exposed or concerned: Get medical advice/attention. P391 Collect spillage. P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth P405 Store locked up. P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.			
This is suspected of causing bladder cancer. The main routes of exposure are by absorption through your skin or by ingestion.							

This substance may induce methemoglobinemia following exposure. This reduces the oxygen carrying capacity of the blood.

Signs and symptoms of methemoglobinemia include:

- Headaches.
- Fatigue.
- Cyanosis – bluish cast to the skin and mucous membranes. For example, blue fingers.
- Tachypnoea, dyspnoea – abnormally rapid breathing, difficult or laboured breathing.
- Tachycardia – rapid heartbeat such as over 100 beats a minute.
- Altered levels of consciousness.
- Heart attacks.
- Diffuse hypoxic brain injury – lack of supply to the brain and may cause irreversible brain damage.
- Death in severe cases.

If you are experience any of the above symptoms when using the substance, report it to the Site Manager immediately.

The Company has provided a local exhaust ventilation system to reduce inhaling this substance. The Company is also carrying out periodic health surveillance to monitor you in order to ensure your exposure to this substance is below the workplace exposure limit. For example, the urine sampling. If you notice blood in your urine, you must report it to your Site Manager immediately. You must follow the Company's safe system of work when handling and ensure hands are cleaned with soap and water after its use. Do not use the substance in the presence of food, drink or cutlery.

Workplace Exposure Limit (WEL):

Is there a WEL: ☐ No ☒ Yes (See reverse for details)

Health Hazards:

☒ High

☐ Moderate

☐ Low

Level of Risk if the following safety measures are in place:

☐ High

☐ Moderate

☒ Low

First Aid Response:

Inhalation: If fumes, aerosols, or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

Ingestion: Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin: Immediately remove all contaminated clothing, including footwear, especially if hot. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. Report exposure to Site Manager immediately.

Personal Protective Equipment: (to current BS or EN Standards) Specify type to be worn:

Two levels of PPE:

- Level 1 PPE is wearing vinyl disposable gloves for indirect handling tasks. In particular:
 - Handling MBOCA drums.
 - Tape on the waste drums.
 - The container when pouring.
- Level 2 PPE is wearing vinyl gloves, disposable overalls, P3 dust mask. In particular:
 - Loading the MBOCA.
 - Cleaning up spills.

Wear cotton gloves if Mboca is hot:

- wear cotton gloves over vinyl gloves when working with hot liquid MBOCA.
- wear cotton gloves when working with MBOCA cured freshly cast parts.

If unsure speak to your Site Manager before beginning the task.

Method of working: Follow the Company's safe system of work for their use. Follow the Manufacturer's Instructions.

Authorised Location of use: ☒ External ☒ Internal ☐ Confined space [A permit to work is required]

Persons at Risk: ☒ Site personnel ☒ General public ☐ Client personnel ☒ Other: Family members if not removed contamination before going home.

Spill Response:

Follow the Company's cleaning method statement.

Workplace Exposure Limit (WEL):

Ingredient	8-Hour TWA
MBOCA (MbOCA)	0.005mg/m ³

Fire precautions: Avoid contamination with oxidising agents as ignition may result from contact.

The dust powder may swirl and form an explosive dust-air mixture. Avoid generating clouds of dust, particular in a confined space or unventilated space as the dust may form an explosive atmosphere and any source of ignition (a flame or spark etc) may cause fire or explosion.

Ensure the LEV system is working prior to use, avoid generating clouds of dust and keep away from sources of ignitions (flames or sparks etc). Do not use in a confined space.

Extinguishing Media: Foam, dry chemical powder, CO₂

Environmental protection: Very toxic to aquatic animals. Avoid tipping down drains and contact with surface water.

Waste disposal: Dispose of as hazardous waste. Do not tip down the drains.

Storage and Handling:

Wear the correct PPE when handling. Follow the MBOCA risk assessment for handling and storage.

Avoid contact with eyes and skin. Keep skin covered. Avoid inhalation. Do not drink liquid form. Avoid forming clouds of dust. Ensure the area is well-ventilated. Do not smoke, eat or drink when handling. Ensure hands are washed with soap and water after handling, before eating, drinking or smoking. Keep away from food, drink and cutlery. Do not use in a confined space.

Open the drum slowly and keep head out of the way.

Keep away from heat, sparks, and open flames. Read and follow manufacturer's recommendations before using. After use ensure the container is securely sealed.

Do not handle uncured items without the correct PPE on.

Avoid contaminating other areas – clean hands and remove contaminated gloves/clothing before entering other areas. Avoid contact with skin or clothes with contaminated gloves. Ensure hands are cleaned properly and do not take contaminated clothes or PPE home as you may risk exposing others.

Store in a dry, cool and well-ventilated place. Store away from food, water, and cutlery. Keep away from heat, sparks, and open flames. Do not cut, drill, grind or weld the containers. If you notice a leaky container report it to the Site Manager immediately.

The material reacts with water and generates gas which may rupture the container. Store away from water and leaks.

Store away from arylamines, metal oxides, oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates, water, alkalis and detergent solutions.

Other Control Measures in Place:

Company's Safe Systems of Work.

Company's method statements.

MbOCA risk assessment.

Substance to be used only in accordance with Manufacturer's Instructions.

Follow the HSE guidance on the correct removal of gloves.

Health Surveillance: Urine biological testing Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Permit to work required: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Level of risk remaining Subsequent to control measures adopted: High <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input checked="" type="checkbox"/>
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MSDS Reference: Version No: 1.1 Issue Date: 09/06/2020

Date: 09/03/2022

Last Review Date: 10/05/2022

Completed by: The Health and Safety Consultancy

Completed by: The Health and Safety Consultancy

SECTION 9: PROCESSING IMPROVEMENTS

We are continually looking for ways to improve the safe handling/processing of MbOCA.

We are currently in the process of designing a Mboca Melter which will be void of any parts requiring maintenance which are in direct contact with both pellets and/or liquid MbOCA contamination.

The issue of maintenance on the MbOCA side of any commercially available Mboca Melter has always been an issue for polyurethane processors, as it may require breaking into enclosed melting vessels to access parts which require maintenance, resulting in possible high exposure scenarios.

As far as we are aware, following extensive research and industry knowledge there is no such MbOCA Melter commercially available.

Our new design will address potential operator MbOCA contamination when maintenance is required, removing potential exposure to an absolute minimum.

We hope to have the new Melter in operation within the next 6 months following completion of design and manufacture.

We will then put this bespoke equipment to market being a much improved, safer MbOCA Melter to polyurethane processors worldwide.

SECTION 10: ENVIRONMENTAL

Due consideration has been given to any potential impact on the environment by MbOCA.

Mboca is delivered in double sealed drums therefore risk of external contamination is very unlikely.

In the event of a spillage/release of liquid MbOCA it would cool and solidify rapidly being removed from its heat source, removing any issue of any spillage reaching drains, which are located 30 metres away from the only area in our factory we process MbOCA.

Due to MbOCA having a low vapour pressure and practically dust free, emissions to atmosphere are non-detectable as demonstrated in our most recent air monitoring survey.

There are several documented studies published, by such companies as Chemtura who carried out extensive lab testing to evaluate the presence of free MbOCA in fully cured cast parts.

The extensive tests determined that all the MbOCA present in the polyurethane mixture is fully crosslinked and consumed with the prepolymer following casting, resulting in the amount of free MbOCA detected in finished parts being well below

0.1% w/w (weight by weight). Therefore, we are not subjecting end users / customers or indeed the general public to MbOCA contamination, as MbOCA no longer exists in cast polyurethane components.

All Mboca waste or contaminated PPE are securely stored and sealed inside empty MbOCA drums and stored for safe disposal by a licenced special waste company.

Custom moulded Polyurethane has protocols, method statements, COSHH and risk assessments in place in the very unlikely event of any spillages. This is foremost to protect any personnel and to prevent any residue entering any drainage and contaminating ground.

The company has physical barriers in place to prevent any external unauthorised persons access to the workplace.

Due to the above we have concluded that CMP Ltd do not generate any environmental impact regarding exposure to MbOCA.

SECTION 11: BIOLOGICAL MONITORING

Table below of biological monitoring result history. Of the process operators employed only 50% of the total actually work with MbOCA,

The current biological monitoring guidance value **(BMGV) in the UK is 15 µmol/mol creatinine.**

As a result of the procedures, we have in place regarding the safe handling of MbOCA we aim to be much lower than the UK guidance value and strive to set our target level at 5 µmol/mol creatinine this has been achieved over many years of testing.

We did have a small issue March 2014, this being due to a one-off incident due to operator error this was investigated and corrected; re-test conducted to ensure results were back to a low level.

Future biological monitoring will continue to ensure our working procedures are safeguarding all process operators who work with MbOCA.

Sample date	Supplier	Lab ref	Employee ref	UMOL/MOL creatinine	Process operators
				Sample result	Employed
17/02/2005	HSL	19544	RT	1.45	2
26/05/2011	HSL	38362	10	0.6	3
26/05/2011	HSL	38362	11	1.6	3
07/06/2012	HSL	42731	2	0.7	3
01/10/2012	HSL	44204	2	ND	3
22/01/2013	HSL	45632	JA	5.1	4
11/03/2014	HSL	50225	2	10.4	4
11/03/2014	HSL	50225	3	3.3	4
20/05/2014	HSL	50872	2	1.4	4
17/02/2015	HSL	53295	2	0.7	4
24/05/2016	HSL	57457	4	ND	4
10/07/2017	HSL	61248	RT	ND	4
10/07/2017	HSL	61248	DH	0.7	6
10/07/2017	HSL	61248	CS	0.4	6
05/12/2017	HSL	62899	DH	1.2	6
05/12/2017	HSL	62899	DH	1.2	6
06/12/2017	HSL	62899	CS	2.1	6
02/02/2018	HSL	63390	DH	1.7	6
03/02/2018	HSL	63390	CS	1.6	6
23/04/2021	HSL	74407	DH	0.5	6
23/04/2021	HSL	74407	ML	ND	6
23/04/2021	HSL	74407	BH	0.3	6
11/02/2022	HSL	77363	DH	0.9	6
11/02/2022	HSL	77363	CS	ND	6
11/02/2022	HSL	77363	BH	1.6	6

Due to dermal contact being the easiest route into the body personal hygiene is extremely important. Frequent changing of gloves and thorough hand washing are essential to help maintain low exposure. Single use hand drying towels are also important to avoid any cross contamination.

The above is encouraged and practiced by all process operators who work with MbOCA.

SECTION 12: WORKPLACE AIR MONITORING

Our most recent air monitoring survey returned good results identifying no airborne MbOCA present in the workplace atmosphere. Extract Summary from recent workplace air monitoring survey report below.

Executive Summary

Air Tech ECS was commissioned by Phil Thorne of Custom Moulded Polyurethane Ltd. to undertake exposure monitoring at its Lydney site, as part of the company's programme of compliance with the Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended). This survey was undertaken on 17th January 2022 by [REDACTED] of Air Tech ECS Ltd. As isocyanates are a potent respiratory sensitiser and MbOCA is a carcinogen, there is no exposure considered 'safe'. Therefore, there is a requirement to reduce exposure to as low a level as is reasonably practicable (ALARP), regardless of monitoring results. This means the application of all practicable control measures, even where exposure monitoring has determined exposure to be low. Further guidance regarding ALARP can be found on the HSE website at this link. Summary of Results Exposure to MbOCA was below the limits of analytical detection and therefore considered to be adequately controlled during the sampling period. This measurement provides reassurance regarding inhalation exposure but does not account for dermal (skin) exposure.

MbOCA Results were below the limits of detection for MbOCA for all samples, which means that there was no detectable mass of MbOCA on the sample media. Although typically results exceeding 30% of the WEL are considered significant, where exposure limits are very low – as is the case with MbOCA – results below the limits of detection are considered indication of adequate control measures. As sampling included the activities most likely to cause exposure to airborne MbOCA; heating and refilling of the liquid state MbOCA and the refilling of the dry state MbOCA, this is considered indication that control measures during normal operations are adequate. As MbOCA exposure is not likely to occur via inhalation, and results of this survey show there was no detectable concentration of airborne MbOCA.

SECTION 13: HEALTH SURVEILLANCE

CMP Ltd employ the services of a health surveillance company who are associated with the NHS. Whilst we are below the employee head count threshold to require us to provide this by law, we consider it should be implemented due to the fact that we process Isocyanates and Mboca.

All employees who work with Mboca and Isocyanates receive an onsite health check on an annual basis to monitor any potential health risks associated with processing the chemicals used.

SECTION 14: MOVING FORWARD

As mentioned earlier in this report CMP Ltd do not process MbOCA by choice, it is processed out of necessity due to the fact that available alternatives simply **do not work** on all end use applications. We will continue to use alternatives where possible for less demanding end use applications where high tensile strength are not required, however unfortunately these parts represent a low volume of polyurethane applications.


CMP will continue to work closely with new and existing raw material suppliers and evaluate any new MbOCA alternatives as and when they are made available, in the hope that one day there will be a “drop-in replacement “for MbOCA, in terms of processibility and cost at which point the use of MbOCA will be discontinued at CMP Ltd.

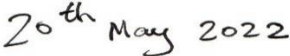
Until that point, in the interest of maintaining a successful thriving business and safeguarding employment, unfortunately there is no alternative other than to hope that CMP are granted authorisation to continue using the vital ingredient MbOCA, as we consider the low health risks safely processing MbOCA are outweighed by the fact that there are no suitable alternatives currently available.

SECTION 15:DECLARATION

The applicant is aware of the fact that evidence might be requested by the Health and Safety Executive to support information provided in this document.

Also, we request that the information blanked out in the “public version” of the Analysis of Alternatives and Socio-Economic Analysis is not disclosed. We hereby declare that, to the best of our knowledge as of today (20th May 2022) the information is not publicly available, and in accordance with the due measures of protection that we have implemented, a member of the public should not be able to obtain access to this information without our consent or that of the third party whose commercial interests are at stake.

Signature: 

Date, Place: 
GLOUCESTERSHIRE U.K.