



Operator **Technical Data Sheet**

Xcarbonator tanks & chemicals combine for the removal of grease and burnt-on black carbon from metal kitchen and bakery utensils by soaking them for a required duration in the Xcarbonator tank and solution.

Web: www.xcarbonator.co.uk
Email: admin@xcarbonator.co.uk

Warning

Before servicing any part of the Xcarbonator, be sure that it is disconnected from the electrical power source and that it has sufficiently cooled down. Failure to disconnect the Xcarbonator from the electrical outlet could result in electrical shock causing severe injury or death. Failure to wait until the Xcarbonator has cooled sufficiently could result in scalding.

Xcarbonator cannot be used on tin, silver or teflon-coated utensils.

Installation

Loading & Offloading

When loading or offloading the tank and/or relevant equipment from vehicles please ensure that you adopt the safe lifting posture ensuring that where possible that your back is straight, knees slightly bent and the majority of the weight placed on your legs.

Ensure that you utilize the ramps and lifts provided in your vehicles.

If premises cover several floors, make full use of elevators, ramps or any other assisted lift available to you at such time.

Positioning of the Tank

When installing the tank, consider the following:-

1. Close to a 13amp wall socket higher than the tank.
2. Within easy access of a water supply and suitable drainage.
3. In a well ventilated area within reasonable distance from smoke detectors.
4. Safe distance from high-risk food preparation areas

If tank is being placed outside, it must be placed in a relatively sheltered area and away from any dampness. The client must provide safe electrical sockets (IP56 Compliant) to this outside area. The tank electrical access panels will require to be silicone sealed during the installation process. Please store tank in dry location during periods of non-use to prevent dampness penetrating the electrics.

Xcarbonator Hazards

Hazards associated to the Xcarbonator tank include:-

1. Electrical power source (risk of electrocution)
2. Hot liquid
3. Hot steam
4. Chemical classed "Irritant"
5. Slippery floors from possible spillages
6. Leaving lid open for long durations could lead to solution burning-dry and possible fire risk

Protection

In order to reduce risk of accidents from hazards please:-

1. Ensure that all electrical power is disconnected from source before servicing.
2. Ensure that all electrical work is undertaken by a qualified Xcarbonator engineer.
3. Wear heat and water resistant gauntlet gloves when operating Xcarbonator.
4. Wear eye goggles when operating Xcarbonator.
5. Wear anti-slip shoes when operating Xcarbonator.
6. Display "Slippery Floor" warning signage when operating Xcarbonator.
7. Clean and remove all spillages immediately.
8. Make staff aware of potential hazards.

Installing the Tank

Give the tank a thorough investigation before installation, checking the tanks body and moving parts for damage, wear or tear.

1. Ensure the power cord is disconnected from the wall socket.
2. Ensure that the drain tap is in the closed position
3. Lock the brakes on the castors.
4. Fill the tank with water, preferably hot.
5. Never allow the water level to exceed :-
 - a. **Budget Tank** : The handles of the basket (*10cm from top*)
 - b. **Jumbo Tank** : The floor of the basket (*14cm from top*)
6. Add the chemical to the water.
 - a. **Budget Tank** : 5kg
 - b. **Jumbo Tank** : 10kg
7. Stir the chemical into the water.
8. Plug the power cord into the wall socket and turn to “**ON**” position.
9. Turn the tanks illuminated switch to the “**ON**” position (*should illuminate*).
10. Close lid and lock latch.

2.Using the Xcarbonator

1. Residue Food :-
 - a. Scrape excess food / wastage from utensils to be cleaned into dustbin.
 - b. Do not place excessive food wastage into the tank.
 - c. Preferably wash all utensils prior to soaking in the tank.
 - d. The tank is not a dustbin.
2. Opening of the Tank :-
 - a. Jumbo Tank :-
 - i. Wear recommended protective clothing
 - ii. Bend your knees slightly.
 - iii. Place each knee against the front wall of the tank for support.
 - iv. Keep your back straight.
 - v. Place both hands on the handles of the lid.
 - vi. Open lid off the tank slightly slowly - allowing for any built-up steam to escape.
 - vii. Once excess steam has escaped, open the lid fully keeping knees bent and back straight at all times.
 - b. Budget Tank :-
 - i. Wear recommended protective clothing
 - ii. Open/Close lid rapidly to allow steam build-up to escape
 - iii. Open lid and lock using the lid-lock mechanism at side of tank
 - iv. Bend your knees slightly.
 - v. Place each knee against the front wall of the tank for support.
 - vi. Keep your back straight.
 - vii. Place both hands on the handles of the basket.
 - viii. Lift basket out of solution and lock into hooks on sides of the tank wall
3. Filling the Basket :-
 - a. Do not insert silver, tin or teflon-coated utensils into the tank (or brittle items)
 - b. The basket is designed to hold no more than 20kg in weight.
 - c. Plan your load. Do not overload.
 - d. Place all utensils within the basket and frame.
 - e. Do not allow utensils to overspill the basket and frame as this causes jamming.
 - f. Do not allow utensils to lean forwards. Lean all items backwards.
 - g. Place utensils either on their sides or upside down in basket. This prevents lifting utensils full of water.

4. Closing the Tank :-
 - a. Ensure that the utensils are completely contained in the basket and not protruding.
 - b. Bend your knees slightly.
 - c. Place each knee against the front wall of the tank for support.
 - d. Keep your back straight.
 - e. Place both hands on the handles of the lid (or basket in case of Budget Tank).
 - f. Close lid off the tank slightly slowly watching for movement in the utensils.
 - g. Ensure all utensils fully submerged.
 - h. **WARNING – PLEASE CLOSE LID** as could lead to burning-dry and possible fire risk!
5. Wait the recommended duration for cleaning.
6. Open lid of tank again (2 above).
7. Removing utensils :-
 - a. Submerged utensils could be hot - **Caution**
 - b. Wear heat-proof gauntlets to protect against the heat.
 - c. Be aware and cautious of potential spillages and/or scaldings from liquid.
 - d. Lift utensils from basket and allow to drain over in the tank, before
 - e. Removing utensils altogether.
 - f. Scrape or scour (if any) excess carbon or grease.
 - g. Wash and rinse utensils thoroughly with clean water.

Filling / Draining Directions

Xcarbonator needs draining and refilling at-least once per month especially if the liquid inside has turned thick and black:-

1. Ensure the power cord is disconnected from the wall socket.
2. pH Balance Testing:- *Random tests or where required using the pH Strips*
- *pH Should be between 7 to 11 to safely dispose down effluent drain*
3. Unlock the brakes of the castors.
4. Put on the heat resistant gauntlet gloves and eye protectors.
5. Position the tank in an appropriate position for adequate drainage.
6. Place a slippery floor hazard warning sign in clear view of tank and drain.
7. If required, attach the hose connector and hose to the tank drain.
8. Place the other end of the hose down the effluent outlet drain.
9. Open the tanks ball-valve to release the dirty water. Rinse if required.
10. Close the tanks drain valve when finished draining.
11. Reposition the tank in its rightful position.
12. Fill the tank with water, preferably hot.
13. Never allow the water level to fall below or exceed :-
 - a. *Budget Tank : The handles of the basket (+/- 10cm from top)*
 - b. *Jumbo Tank : The floor of the basket (+/- 14cm from top)*
14. Add the chemical to the water.
 - a. *Budget Tank : 5kg Bag*
 - b. *Jumbo Tank : 10kg Bag*
15. Stir the chemical into the water.
16. Plug the power cord into the wall socket and turn to on position.
17. Switch light on tank should illuminate.
18. Close lid and lock latch - **Important**
19. Lock the brakes on the castors.

Process Times

As a rule of thumb, the heavier the build-up of carbon and the more porous the metal the longer it will take to effectively remove from the utensils (ie. Stainless steel shall clean quicker than aluminium).

Initially most kitchens have a heavy build-up of carbon on their utensils and as such we recommend a management schedule (see table) to firstly “deep clean” the utensils, bringing them back to a satisfactory standard that the henceforth only require regular hygiene maintenance (also see table).

Item	DeepClean Heavy Carbon	Light Clean	RegularHygiene Maintenance
Pots & Pans	* 18	6-12	1-2
Branding Irons	* 12	8	6
Filters	* 4-6	2-4	1-2
Roasting Trays	* 18	6-12	1-2
Serving Dishes	* 12-18	6-12	1-2
Wire Oven Racks	* 12-18	6-12	1-2
Deep Fry Basket	*18-24	10-18	1-2
Cooker Tops	*12-18	6-8	1-2
Gas Rings	*12-18	6-8	1-2
Baking Trays	*4-6	2-4	1
Machine Parts/Cogs	*12-18	6-12	1-2

* May require slight scour after soaking.

Xcarbonator
Health & Safety Risk Assessment

Department : Maintenance Technicians / Kitchen Porters / Staff / Chefs
Work Activity : Loading, Transporting, Delivery, Installation & Servicing of Xcarbonator System

Hazard : 1 : Lifting, pushing, pulling & motion of tanks (*sometimes on inclines*)
Risk Factor : Low
Possible Injuries : Back & muscle strains
: Cuts/Bruising from slips & falls
Control Measures : Staff training on awareness of risk
: Staff training on safe handling, lifting & motion
: Ramps & lifts to be incorporated where possible – Staff training on awareness

Hazard : 2 : Electrical work
Risk Factor : Low
Possible Injuries : Electrocution
: Severe burning from heating element
Control Measures : Staff training on awareness of risk
: Contact a trained Xcarbonator engineer to undertake work
: Staff must ensure the safe practice of un-plugging equipment before work
: Staff to allow element to cool before handling & use heat-resistant mittens

Hazard : 3 : Hot liquid, hot surfaces and potentially hot steam
Risk Factor : Low
Possible Injuries : Burns and scalding
Control Measures : Staff training on awareness of risk
: Staff to use heat-resistant gloves, goggles and clothing

Hazard : 4 : Wet floors & spillages
Risk Factor : Low
Possible Injuries : Cuts & bruises from accidental slips & falls
Control Measures : Staff training on awareness of risk
: Staff to use anti-slip shoes
: Staff to highlight areas of spillage with high visibility warning signs
: Staff to clean areas of any spillages

Hazard : 5 : Handling of chemical classed as “Irritant”
Risk Factor : Low
Possible Injuries : May irritate when inhaled, ingested and/or contact with eyes or skin
Control Measures : Staff training on awareness of risk
: Staff to use protective gloves, goggles, face-mask and clothing
: Staff to dampen powder first before cleaning any spillages to reduce risk of dust inhalation

Action Required : Ongoing staff assessments & training where required
: Provision of protective clothing
: Signage on tank
: Providing a user manual

Hazard : 6 : Leaving lid open and liquid burning dry OR not topping-up liquid

Risk Factor : Low

Possible Risks : Fire risk

: Heat risk to operator

Control Measures : Staff training on awareness of risk

: Always close lid

: Always top liquid up as it evaporates

Dated : 1st March 2017

Date of Review : Annually