Procedure for use of Carboclean Gel 100

# Carboline Norge AS

**CARBOLINE NORGE AS QMS INCORPORATED DOCUMENT**

# 1 PURPOSE

This procedure has been made to assure that the material is correctly used, and that the work is properly done, on time and in a safe manner.
Responsibility for the environment we work in, and at application site shall be acknowledged. Carboclean Gel 100 is a 100% biodegradable material with no negative environmental effects.

Regardless of this, we shall with this document secure that health, environment and safety (EHS) is focused at all times. All personnel working in and with Carboline Norge AS, and as such will use Carboclean Gel 100, must read and understand this procedure.

We shall secure that everyone have read and understand the product data sheets and are able to explain this if questioned by outsiders.

# 2 SCOPE

This procedure is part of the working procedures for Carboline Norge AS. The procedure is valid for all employees, partners and contractors who will be working with Carboclean Gel 100.

To secure that our work is performed in a responsible and correct way, it is important that we understand and acknowledge the routines for use of the material. I.e. that this procedure is important to understand to make sure that the quality assurance system for Carboline Norge AS is followed in all situations where work is done.

Wrong use of the product can result in bad execution of the work. It is therefore imperative that all personnel using the products Carboline Norge AS use, can and understand the way it is used and in a correct way.

# 3 RESPONSIBILITY

Carboline Norge AS shall make sure that responsible personnel know and understand the procedure prior to work start. Responsible personnel shall have attained Carboline Norge AS training program for use of the product.

When the work has started, job personnel are responsible for following the procedures. In larger projects, at least one supervisor from Carboline Norge AS SHALL be present at any time.

If problems occur during the work, a report for Near Miss Incident shall be written and submitted to the closest superior.

# 4 DEFINITIONS

"Material" – Carboclean Gel 100 – The material we use in our work.

# 5 DESCRIPTION

First of all the responsible leader for the job must obtain the permission to do the specified work and make sure that this is relevant for the actual site and time frame.

Prior to work start up, check with responsible site manager if other type of work is going on or planned in the same area. If this is the case, agreement must be made so that work can be safely executed by all parties.

Before a job physically starts it is important to secure the area and avoid disturbing other type of work caused by insufficient securing of the area. This also includes all other areas which will be affected by our work. Make sure there are not other jobs going on below, above or adjacent to our job site that could get large amounts of water spray. A job safety analysis shall therefore be done prior to work start in case there are personnel not familiar with use of the material.

All personnel in contact with the material shall know how it works, have read the data sheets and use correct personal protective equipment.

**Correct protective equipment:**

Full cover water protective suit, safety googles, helmet with face-shield, hearing protection, correct mask, PVC gloves and protective boots.

Correct mask: During application of Carboclean Gel 100 with gel spray (paint spray), and high pressure hosing with warm water, full cover mask shall be used.

**How the material works:**

All personnel working with Carboclean Gel 100 must know and understand the cyclic work mechanism of the material in order to obtain the best possible result of the material and work. Carboclean Gel 100 "eats up corrosion" i.e a chemical reaction dissolves rust, chalk, salts, algae etc.. Depending on corrosion grade it is therefore important to understand that the working time of the material is important for a good result. Too short working time can give a bad result and the job has to be repeated. This can also happen with too lang working time because the material can dry out and a new layer of Carboclean Gel 100 must be applied to remove the old.

The weather will also influence on the "active time" of the material. In direct sunlight, low humidity and very high temperature the material will dry out faster and need more frequent control. In direct sunlight exposure it should be considered to cover up the treated area also if the humidity is low.

If a treated area outdoors is exposed to heavy and direct rainfall, efficient and safe covering must be arranged. If the material is used in normal Norwegian climate and not exposed to high temperatures or direct heavy rainfall, it may stay on for a long time and work ideally. At temperatures below freezing, the working time of Carboclean Gel 100 will be affected. If necessary this can be avoided with longer working times. For most efficient removal of the material, high pressure washing with hot water shall be used. This is to promote quicker drying of the surface and easier removal of particles sticking to the surface. The material will penetrate around and underneath the rust particles in the metal and this is important to remove. This is better achieved using warm water.

**Use of the material on different substrates:**

*Surface rust:* One treatment. Working time – 24 hours

*More severe corrosion grade:* To obtain the desired result in a quick, safe and efficient manner, a pretreatment of heavy rusted areas must be done with high-pressure hosing. The deeper the corrosion attack, the more treatments with Carboclean Gel 100 must be expected. This must be evaluated during the work progress.

*Cleaning of salts, algae, shell, greens, magnetite, humus, chalk deposits, concrete and other deposits:* Pretreatment with high-pressure washing must be evaluated for each specific job. One treatment with working time 24 hours will normally be sufficient for a god result. Shorter working time may be sufficient for a particular job. Likewise it may be consider if one or more treatment must be done.

*Galvanized and metallized surfaces:* Use of Carboclean Gel 100 is not optimal on such surfaces. Visible traces (runs) will be visible and are not desirable. If despite this, the client insist on using the material, a written approval from the client shall be available PRIOR TO work start. The permission shall without delay be forwarded to the head office att. the Operations Manager. Without such permission we shall **not** use the material.

If work is performed near such areas, they shall be covered in a proper manner.

*Carboclean Gel 100 does not damage or remove the following:*

- Metals
- Oil products
- Paint, coating, laquer
- Plastic products
- Rubber, ex. packings and gasgets
- Glass surfaces

**Working equipment**

Prior to work start all work equipment shall be controlled and approved. All equipment shall be controlled during operation and be in accordance to require-ments. We use pressurized equipment for both air and water. Consequently it is very important to control for leaks that can lead to accidents. It's important to double check that correct hose is attached to correct equipment and use safety chaines between joints.

Ex: air hose connected to high-pressure washing unit must not happen. This is why it is important to double check before work starts. Safety first.

Upon completion of the job, all used equipment shall be washed and put back where taken out. Hoses or other equipment shall not remain loose when leaving the site.

All waste like rags and scrubbing pads shall be deposited in correct waste bin. Work clothes shall be left to dry for the next shift.

# 6 NON-CONFORMANCE

In case of deviations from the procedure this shall be reported to the nearest superior. This can include f.ex. not using hot water to remove the material, colleagues not using required personal protective equipment, wrong application of the material etc.

**Non-conformance report scheme** shall be used.

The procedure is valid for all personnel using the material and shall not under any circumstances be departed.

Under certain circumstances, when found necessary to depart from a requirement in the procedure, only Carboline Norge AS Site Manager has the authority to make such decision. **Non-conformance report scheme** shall be used and immediately sent to Carboline Norge AS EHS responsible person.

# 7 SOURCES/REFERENCES

References shall be given for the information sources related to the procedure.

Eksempelvis lovverk, standarder, håndbøker, internal requirements and other relevant procedures.

Norwegian: ”Arbeidsmiljøloven (Aml.) kapittel 4, Krav til arbeidsmiljøet”

Norwegian: ”Forskrift om utførelse av arbeid, bruk av arbeidsutstyr og tilhørende tekniske krav”

Product data sheet (PDS) for Carboclean Gel 100

Safety data sheet (SDS) for Carboclean Gel 100

General security check list for Carboline Norge AS, incl. Job planning

Procedure for use of high pressure spray.

Procedure for use of gel spray.

Training program for Carboline Norge AS

Work regulatory requirements

# 8 APPENDIX

There are no appendixes to this procedure.