

SACHE' B/118

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1. IDENTIFICATION

Product name: SACHE' B/118
Type of product: water based cleaner for metal
Product code:: SACB118.....

2. MAIN CHARACTERISTICS AND PROPERTIES USE

SACHE' B/118 is a one-step, water based system, for cleaning and degreasing without creation of waste water, sludge or solid waste to dump.

Due to its great flexibility, SACHE' B/118 is very easy to use.

The Product does not contain any dangerous compounds in the application concentration; it does not require any analytical control, it is practically odourless, and it can be used in several industrial application as replacement of both traditional solvent based products and degreasing water based products that contain surface-active agent or detergent that request rinsing or that create solid sludge to be disposed.

SACHE' B/118 works by removing the oily contaminants from the surfaces thanks to its low surface tension combined with a suitable mechanical action (temperature and pressure).

SACHE' B/118 does not leave on the parts treated any solid residue, it does not contain any conventional surfactants or any traditional surface-active agents, so it does not require any rinsing. SACHE' B/118, if correctly purified, has got a very long life: if the equipment is provided with a suitable filter and an oily skimmer it is possible to separate the oily contaminants from the product recovered and so to extend the product life.

SACHE' B/118 works at hot temperature between 60 – 100°C, depending to the kind and quantity of oily contaminants. After the cleaning operations the product evaporates fast, according to the application temperature. The heat used for the application is used to dry off the product and so it is recovered.

If necessary, compressed air can be used in order to avoid any accumulation of product into pocket or accumulation areas.

SACHE' B/118 can be used for cleaning iron, cast iron, galvanized, and, after tests, aluminium and light alloy.

SACHE' B/118 can be used in spraying washing machine or tunnel, by steam cleaner, by water buffer (preferably provided with a heating system) or by whipping (manual cleaning)

3. PHYSICAL - CHEMICAL CHARACTERISTICS

The following data refer to the concentrated Product as supplied.

Physical state: mono-phase liquid

Aspect Transparent uncoloured

Odour: slightly ethereal

Specific weight: 1.000 ± 0.050 kg/lit a 20° C

pH: 11 ca.

Flash point: > 94° C

Solubility in water: completely soluble

Stability: stable under normal storage and use condition.

Storage: If kept in its original packing perfectly sealed at temperature between 5 and 50°C, the Product is guarantee for a year since the supply date.

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4. APPLICATION DATA

- Product preparation:** SACHE' B/118 is supplied as concentrated solution that must be diluted with demineralised water.
Dilution ratio:
-SACHE' B/118: 2% - 3% (do not exceed this limit)
- demineralised water: 98 – 97%
- Application way:** In line or static spray plant, dip plant with ultra-sound, cleaning machine, cleaning lance (steam cleaner) or water buffer, whipping.
- Running temperature:** 60 - 100° C. It is possible to let the temperature change in this range according to contaminators present on manufactures. It is recommended not to use the Product at temperature lower then 50 - 60°C.
Specific tests should be carried out to find out the temperature that allows the product the best degreasing power.
- Time of process:** Treatment time: 2 - 10 minutes. It is based on the shape of the manufactured articles and on the amount and the type of oils to eliminate.
Draining time: 2 - 6 minutes
Drying time: 4 - 12. It is based on the shape of the manufactured articles and on the running temperature.
- Warning:** During the working time or under continuous shaking the Product creates in the tank a light layer of lather that anyway does not change the degreasing properties of the Product. The leather disappear slowly when the Product is in rest.
The formation of leather is reduced in working plants because the oil accumulates on the surfaces of the solution.
For a correct management of the Product it is recommended to keep the plant with a costant level of Product making frequent addition.

5 NOTES ON INSTALLATION

IN - LINE PLANT

The plant must be made, at least in the parts that are in direct contact with the Product (tank, treating area) in stainless steel in order to avoid in a long time corrosion problems.

Following we give the general scheme for an in-line plant: the plant must be provided with a pre-room for the entrance, a treatment area, a draining part, a drying part with a draught of hot air or with an oven for the most complex pieces with accumulation of Product in some areas.

In order to guarantee a long life to the solution, the contaminants present on the pieces must be removed: so the plant must be provided with the following part:

- at least one (but if necessary more than one) machine for the removing of superficial oils. This machine must work during the working time of the plants or when the plants is off. This machine must guarantee the separation of mineral oils.
- A micro or ultra filtration machine for the elimination of emulsifiable oils.

The dimension and the kind of the machines used for the oils removal depend on the type of contaminants and on the plant dimension.

5 NOTES ON INSTALLATION

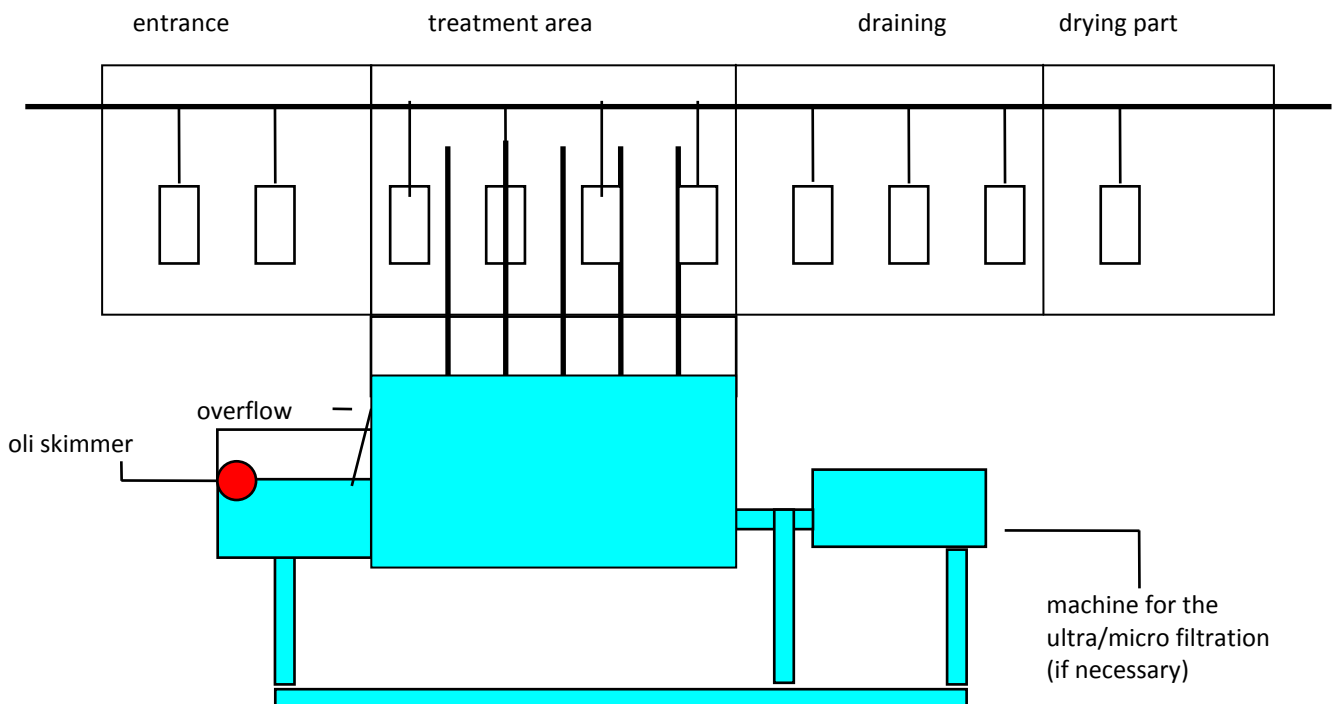
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For very dirty pieces it would be necessary the installation of some treatment areas with some tank connected each other working following the principle of counter-current fall: in the last treatment area, where there is the most clean Product that, for overflowing, flows in the penultimate tank that flows in the previous tank and then flows into the first. The first tank contains the more dirty products that conveys in another tank for the purification (with machine for removing superficial oils or by ultra/micro filtration). The Product recovered conveys in the last tank for the re-use. In this case the addition of new products must be made in the last tank.

It is necessary to install the adequate aspiration plant in order to avoid vapour's leak.

IN-LINE SPRAY PLANT SCHEME



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5 NOTES ON INSTALLATION

STATIC PLANT

The above drawn scheme is for in-line plant. SACHE' B/118 can be used also in static plant in which treatment area, draining and drying are in the same room.

In this case the plant must be provided with an aspiration system that starts working after the treatment in order to avoid the drying of the Product on the pieces. The aspiration time changes according to the treatment cycle. The pieces at the exit of the plant are almost dried, and it is required only a simple manual blowing with compressed air or with hot air for the part of the pieces still wet or moist or where there is Product's accumulation.

Obviously also a simple static plant must be provided with machine for the oils removing or with micro/ultra filtration machine in order to increase the life of the Product.

MACHINE FOR THE PIECES' CLEANING

These kinds of machines are generally used for the cleaning of pieces of small size and they work as a static plant. The considerations made for the static plant are valid in this case.

It is recommended to use a machine with a vertical gap in order to avoid that the working area is filled up by vapours.

It is also recommended to put the pieces on the basket in a way which allows that all the pieces get wet in the same way on the different parts to be cleaned.

Also the machine for the piece's cleaning must be provided, inside or outside itself, a machine for the oils removing or a machine for the ultra/micro filtration. In lack of this filtration a periodic substitution of products should be necessary.

WARNING

It is recommended to put the pieces in order to avoid the presence of stagnation or flat area where the cleaning liquid can accumulate before the drying, because these areas may not be cleaned.

ULTRA-SONIC EQUIPMENT

SACHE' B/118 works perfectly also in a ultra-sound plant (working temperature of 60 - 80°C).

The plant must be provided with at least two or three tank. The first one must be provided with the ultra-sound for the impurities' removal, the second and the third for the rinsing (that must be made always with SACHE B/118).

Working at hot temperature, the manufactured pieces, after the exit from the last tank, dry fast, and a quick blowing with warm (or better hot) air may be request for a complete drying action.

A machine for the oils removing or a machine for the ultra/micro filtration should be provided.

6. WARNING, LIMITATION

Pickling: the Product works only on the oils taking off them from the surface. It does not work on rust or on calamine, so it can not be used as rust or pickling removal.

Phosphating: SACHE' B/118 is not a product for the metal phosphating but it is only for the cleaning and the degreasing.: it does not make any conversion on the surface, it does not leave any sediment, it does not increase the corrosion seal of finishing cycles. Obviously the clean pieces can be start off to the phosphating treatment.

Kind of contaminants: SACHE' B/118 must not be used on surfaces contaminated by silicone, stearates, wax and greases with high softening point.

Metals: the Product can be used on every metal surfaces. As SACHE' B/118 is slightly alkaline it can attack the aluminium making it darker. It is suggested to use SACHE B/118 on aluminium only when the pieces are painted with pigmented paint and after careful experimental tests.

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7. VALUTATION ON ENVIRONMENTAL IMPACT

WATER

No water pollution is expected. The absence of intermediate steps for rinsing does not involve any water treatment or neutralization.

GROUND

No creation of reaction sludge; no disposal of solid waste to dump, except for the solid present on the pieces (for example metal filings or powders). The use of machine for the removing of superficial oils or unit for micro/ultra filtration allows to extend the life of the product reducing at minimum the operation of disposal of exhaust water.

ATMOSPHERE

SACHE' B/118 is a water based product without CFC (ChlorineFluorineCarbides), HCFC (Hydro ChlorineFluorineCarbides), substances with depressive power for the ozone stratospheric layer, alogenated or aromatic hydrocarbon.

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8. OPERATORS' SAFETY AND HEALTH

OPERATORS' HEALTH

SACHE' B/118 does not contain chrome or its compounds, cancer-producing substances, mutagenic or teratogenic, cyanided compounds.

SAFETY ON WORKING AREA

SACHE' B/118 is a Product that does not involve any risks on working areas. It is suggested to work in well ventilated areas with correctly designed and built plant.

9. LABELLING

SACHE' B/118 does not require any risk symbol on its label

10. PACKING

SACHE' B/118 is supplied on polyethylene high density 200 lt or 25 lt. Drums or even on 1000 Lt IBC.

The information correspond to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not, however, intended to substitute for any testing you may need to conduct to determine for yourself the suitability of products for your particular purpose. These information may be subject to revision as new knowledge/experience becomes available. Since we cannot anticipate all variations in actual end-use conditions, we makes no warranties and assumes no liability in connection with any use of this information. Our Technical Service should be contacted to learn more about product application opportunities.
