



Product Data Sheet

Product: Blackening Salts

PRODUCT DESCRIPTION

To provide a fine black oxidizing film on ferrous metals

PROPERTIES:

Appearance – White Powdery Flakes

pH: 13

Ingredients: Blend of: Alkali, oxidizing agents, stabilizers, flowing agents, complexion and chelating agents.

FEATURES:

Quality to finish and more cost effective than electroplating

DIRECTIONS FOR USE:

Use 60kg Blackening Salts with 40kg water

Temp range: 137 – 154 °C - Do NOT exceed 157 °C - Ideal Temp: 142 – 148 °C (144 - 146)

It is good to keep the system in a state of circulation or gentle stirring. If big metal parts are used – it is advisable to preheat the parts to at least 137 – 140 °C

Guide temps (please experiment to get optimal temps for your application):

Rolled Normal Steel: 138 -140°C

Chrome/Molybdenum Steel: 146 – 148 °C

Nickel Steel and Chrome Vanadium Steel: 151 – 157 °C

The blackened layer is a micro meter or thinner.

Blackening could happen within 3 – 5 minutes depending on grade of steel

(This is guideline only – experiment to get ideal time – depending on size and shape etc.)

Completed parts must be cleaned with very hot to boiling water or even sprayed with a water/steam mixture.

Thereafter it may be rinsed in a tank with very hot to boiling water.

Finally coat with water protective oil or waxy oil while still hot – soaking is a good idea since the oil penetrates into the micro pores created by the blackening process.

Clean/Degrease parts prior to blackening (longer tank life)

Tank will expire over time – it is a good idea to discard and make up a new tank every now and again for quick/effective/good results (this depends very much on control measures in general – chemicals are used up during the blackening process)

Control : take a sample of a freshly made up tank, cool it and check the relative density – once a week draw a sample and

STORAGE:

Products shall be ideally stored in a cool, dry location.

PRECAUTIONS:

Always ensure there is a boiling effect when parts are in (else parts may go brown red)

Always maintain water level (remember since the temp is higher than boiling point of water - the water will boil away over time.

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