

BLACK-IT!

Instructions (Iron & Steel)

IMPORTANT !! Before using this kit please read all of the instructions and the Health and Safety sheets carefully.

The **BLACK-IT** process for Iron and Steel is very easy to carry out. The following describes the simple sequence of operations. To guarantee success it is necessary to follow the instructions in the order given.

All of the solutions in the kit are supplied at the correct strength and no further dilution is necessary. Do not mix any of the solutions together and always return them to their original bottles. Ideally, the solutions should be at room temperature (about 20 degrees Celsius). You can treat many items at the same time providing they are all covered by the solutions.

SAFETY PRECAUTIONS

1. Always use rubber gloves and avoid contact with skin, eyes and clothing.
2. Eye protection is recommended.
3. Always carry out the process in a well ventilated area.
4. Do not smoke, eat or drink whilst processing.
5. Store in frost free area.
6. **KEEP AWAY FROM CHILDREN**

THE PROCESS

1. You will need five plastic containers which will hold the solutions. Ice cream containers are a good choice. The important thing about the container is that the treated item must be completely immersed in the solution. For very small items you can suspend them directly in the bottles.
2. Fill one of the containers with tap water. This is the wash bath. **NOTE!** If the wash bath water gets cloudy then change it.
3. Empty each of the other **BLACK-IT** solutions into separate plastic containers. It is a good idea to place the bottle behind the container to reduce the chance of getting the solutions mixed up. Ideally the solutions should be lined up in the order of use which is Degreaser, Conditioner, Blacking Solution and Dewatering Oil.
4. The item to be treated should be as bright and rust-free as possible.
5. Place the item in the Alkaline Degreaser for at least 5 minutes. Very clean items will need less time and vice-versa.
6. Remove the item and rinse in the wash bath. A little agitation will ensure that all of the Degreaser has been removed.
7. Place the item in the Conditioner for about 1 minute. This process ensures an even blacking.
NOTE! Do not leave for more than 2 minutes or uneven blacking may result.

8. Remove the item and wash. A little agitation will ensure that all of the Conditioner has been removed.
9. Place the item in the Blacking Solution for 2 to 4 minutes. Gently agitate to make sure that all surfaces of the metal are in contact with the solution. Even better, use a small plastic basket or hang on a tree with other parts.
10. Remove the item and wash. A little agitation will ensure that all of the Blacking Solution has been removed.
11. Place the item in the Dewatering Oil. The longer you leave the item in this oil the longer the corrosion protection. Typically 10 minutes should give 6 months protection. Components with blind holes should be agitated to ensure that all the surfaces are treated.
12. Remove the item and drain and dry. Leave the item to dry naturally and, if possible, do not touch for 45 minutes. The item is now coated and ready for use. If you are in a hurry and do not need high rust resistance, wait a couple of minutes then wipe with a clean rag.

Repeat the process for more items as required. When finished return all solutions to their original containers and store in a safe, frost-free place

Maintaining your BLACK-IT kit

The factor which governs the rate at which the solutions are consumed is the surface area treated. The following comments will help you maintain the kit to full effectiveness. All of the solutions are available separately so you need only buy what you need.

1. Degreasing Solution.

This is a mild alkaline solution. Examine the parts as you remove them from this solution. The parts should be wet all over. If there are any dry patches then place in the solution for another 5 minutes. If parts are taking a long time to clean then the solution probably needs replacing.

2. Conditioner.

This is a solution of Phosphates. Providing there has been no contamination from other solutions or debris then the solution will not need replacing until only 50% of the original quantity remains.

3. Blacking Solution.

The Blacking Solution contains Selenium compounds. As it is used up the process time will get longer and the blacking effect will become inconsistent and patchy. When this happens order a replacement.

4. Dewatering Oil.

This solution is designed to replace water with oil on the surface of the metal. The water removed will collect at the bottom of the bottle. CAREFULLY decant off the Dewatering Oil from the water and dispose of the water. The solution also has volatile components so return to the bottle and cap as soon as you are finished with it. As this solution degrades you will see streaks on the surface and a discolouring rust film will form quite quickly. Again, replace the solution when it's effectiveness is in question.

PRODUCT SAFETY SHEET

ALKALINE DEGREASER

IRRITANT - AVOID CONTACT WITH SKIN AND EYES. WEAR PVC GLOVES AND EYE PROTECTION

CONDITIONER

IRRITANT - AVOID CONTACT WITH SKIN AND EYES. WEAR PVC GLOVES AND EYE PROTECTION

BLACKING SOLUTION

HARMFUL BY INHALATION AND IF SWALLOWED. WEAR PVC GLOVES

FIRST AID PROCEDURES: Inhalation: Remove to fresh air.
Ingestion: Gargle, rinse mouth and drink plenty of water. Do not induce vomiting.
Seek medical aid.
Skin: Remove contaminated clothing and wash skin with plenty of water.
Seek medical aid if skin irritated.
Eyes: Flush with clean water immediately for 10 minutes. Seek medical aid.

SPILLAGE : If small, wash down with large amounts of water.
For larger spillages, absorb liquid in clay granules.
WASTE DISPOSAL: Dispose via a licensed waste disposal operator.

DEWATERING OIL

FLAMMABLE - DO NOT SMOKE. DO NOT USE NEAR SOURCES OF IGNITION.
AVOID CONTACT WITH SKIN. AVOID BREATHING VAPOUR.

FIRST AID PROCEDURES: Inhalation: Remove from exposure, rest and keep warm. Seek medical aid.
Ingestion: DO NOT induce vomiting. Wash mouth with water. Give milk to drink.
Skin: Remove contaminated clothing. Wash well with soap and water.
If irritation develops, seek medical aid.
Eyes: Flush with clean water immediately for 5 minutes. Seek medical aid.

SPILLAGE: Do not smoke. Absorb liquid in clay granules.
WASTE DISPOSAL: Dispose via a licensed waste disposal operator. May be incinerated.

Further information: **Pixel-Plus, Ty Mawr, Bryncroes, Pwllheli, Gwynedd. LL53 8EH.**
Tel 01758-730356, Fax 08700-523497
www.black-it.co.uk enquiries@black-it.co.uk

Full Product List as at Feb 8th 2010

NOTE! All prices are fully inclusive of carriage and VAT at current rate (17.5%)

Code	Description	Price £
PIX-100	BLACK-IT 500ml Kit (standard) -----	35.99
PIX-101	Alkaline Degreaser 500ml -----	13.00
PIX-102	Conditioner 500 ml -----	13.00
PIX-103	Blacking Solution 500 ml -----	17.00
PIX-104	Dewatering oil 500 ml -----	17.00
PIX-200	BLACK-IT 2 Litre Kit (Large) -----	79.99
PIX-201	Alkaline degreaser 2 Litre-----	25.00
PIX-202	Conditioner 2 Litre-----	25.00
PIX-203	Blacking Solution 2 Litre-----	35.00
PIX-204	Dewatering oil 2 Litre -----	35.00
PIX-500	BLACK-IT 5 Litre Kit -----	137.99
PIX-501	Alkaline degreaser 5 Litre -----	45.00
PIX-502	Conditioner 5 Litre -----	45.00
PIX-503	Blacking solution 5 Litre -----	70.00
PIX-504	Dewatering oil 5 Litre -----	70.00

Order from: Pixel-Plus, Ty Mawr, Bryncroes, Pwllheli, Gwynedd. LL53 8EH.

Tel 01758-730356

Fax 08700-523497

www.black-it.co.uk (online ordering facility)

sales@black-it.co.uk

Most Credit Cards Accepted

NOTE! All prices are fully inclusive of UK Mainland carriage and VAT

Document reference: standard-blackit-instructions-07-Feb-2010