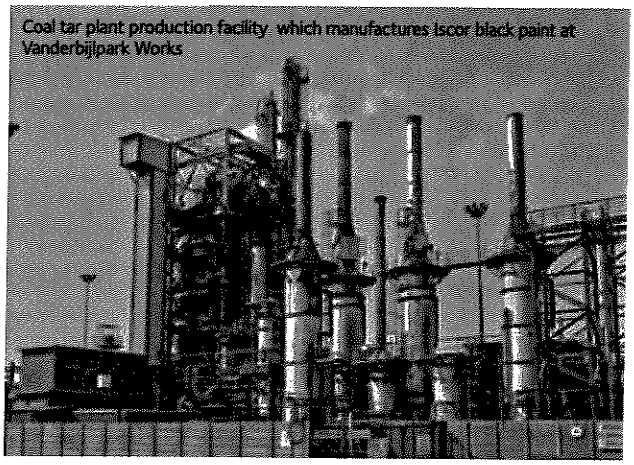
Iscor black paint

Description

Iscor black is an exterior coal tar-based "paint" with excellent waterproofing, adhesion and corrosion protection, mould and fungi-killing properties.

Typical physical and chemical properties

Physical state	Liquid at ambient temperature
Colour	Black
Odour	Tyical coal tar odour
Boiling point	+/- 150°C
Flash point	55°C
Density	1,11 kg/l min @ 25°C
Relative vapour density	4 (air =1)
Explosion properties	1 – 6 vol% in air
Solubility – Water – Solvents	Very slightly soluble Soluble (gelling may occur)
Water content	0,5% max
Viscosity	140 – 180 cP @ 30°C SPND 18,20 RPM



Coal tar plant production facility which manufactures Iscor black paint at Vanderbijlpark Works

Aromatic oils, aromatic cutback solvents and pitch are blended to conform to specifications. "Paints" are not always compatible with other paints and cannot be used underneath or on top of other paints without conducting appropriate tests. Proper cleaning of the substrate is recommenced before Iscor Black is applied. The products contain a variety of hydrocarbons, such as phenol and polycyclic aromatic hydrocarbons.

Product specification: Iscor Black

roperty	Units	Typical Specifications	Test method
Density at 25°C	kg/l	1.11 to 1.15	MCCTASWP00018
Water content	% v/m	0.5 maximum	MCCTASWP00024
Viscosity at 30°C, SPND 18, 20 RPM	cP	140 to 180	MCCTASWP00006

Process

Iscor Black is blended from the products derived from the distillation of crude coal tar. Iscor Black is used mainly as an exterior "paint" for sealing various surfaces, for example iron and steel, roof tiles, pavings and wood. Fumes may cause irritation, depending on the concentration and duration of exposure.

Application and advantages

Iscor Black can be used on iron and steel (sheets, poles and structures), wood (poles, beams), porous areas (bricks, roof tiles, fascia boards, floor paving). Iscor Black covers +/- 12m² per litre and requires no undercoat. It is not compatible with other paints. Iscor Black touch dries in approximately one hour and totally dries in approximately twenty-four hours.

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Handling and storage

Store in closed containers.
Mix very well before application.
Keep away from sources of ignition.
Overheating and pressure build-up must be avoided.

Spillage

Prevent from spreading or entering drains, ditches or rivers by using sand, sawdust or inert absorbent.
Isolate the source of the spilt material and prevent further discharge.

Directions for use

- Remove all loose material (dust, loose rust, old paint, oil or greasiness).
- Surface must be dry.
- Stir mixture well before use.
- Apply in one direction with brush or spray-gun.
- Leave sufficient time to dry.
- Wear gloves during application.
- Avoid inhalation of fumes when painting and drying.
- Only for exterior use and not for use in confined spaces without ventilation.
- Use toluene (or other available solvent) for the cleaning of equipment. (Available from hardware stores).

Client enquiries

Orders and enquires may be directed to ArcelorMittal South Africa Coke & Chemicals
Tel: 016 889 6401 or +27 16 889 6401(Int.)
Fax: 016 889 9101 or +27 16 889 9101(Int.)

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1. COMPANY AND PRODUCT DETAILS

Trade Name: *Iscor Black*

Synonyms: *Coal Tar Base Paint (1000010046)*

Contact information: ***0825496063 / 061 513 7249 iscorblack@tshegofentse.co.za***

Emergency number: *082 928 1435*

2. HAZARDOUS IDENTIFICATION

Identification of the risks:

Human health hazards: *Inhalation of fumes may cause irritation of the nose and throat, headaches or dizziness. Vapours may cause redness or burning sensation of the eyes. The IARC (International agency for Research on Cancer) classifies Coal tar as a human carcinogen.*

Environmental Hazards: *Although it is biodegradable, it can act as a water and soil pollutant.*

3. COMPOSITION/INFORMATION RELATING TO THE INGREDIENTS

Preparation description: *Coal tar paints are preparations blended from the products derived from the distillation of crude coal tar. Used mainly on iron and steel, roof tiles, vehicle undercarriages, wooden structures and pipes.*

Chemical Nature: *Aromatic oils, aromatic cutback solvents and pitch are blended to conform to specifications. Paints are not compatible with other paints and cannot be used underneath or on top of other paints. The products contain a variety of hydrocarbons such as phenol and polycyclic aromatic hydrocarbons such as benzo (a) pyrene and phenol derivatives.*

CAS Number:	***Compound Name:***	***Concentration in mg/kg, on an as received basis:***
7439-89-6	*Iron, Fe*	*114*
7440-66-6	*Zinc, Zn*	*106*
82115-62-6	*Sodium, Na*	*328*
7789-78-8	*Calcium, Ca*	*106*
CAS Number:	***Compound Name:***	***Concentration in %, on an as received basis:***
71-43-2	*Benzene*	*0.27*
104-51-8	*n Butyl benzene*	*0.02*
98-06-6	*Tert-Butyl benzene*	*0.21*
100-41-4	*Ethyl benzene*	*1.2*
98-82-8	*Isopropyl benzene*	*0.08*

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91-20-3	*Naphthalene*	*72.8*
100-42-5	*Styrene*	*2.6*
108-88-3	*Toluene*	*3.9*
106-42-3/ 95-47-6/108.38-3	*Xylenes*	*4.3*
95-63-6	*1,2,4 Trimethyl benzene*	*1.9*
108-67-8	*1,3,5Trimethyl benzene*	*1.3*
99-87-6	*4 Isopropyl toluene*	*0.05*
83-32-9	*Acenaphthene*	*0.60*
120-12-7	*Anthracene*	*1.03*
218-00-9	*Benzo(a)anthracene*	*0.11*
205-99-2	*Benzo(b) Fluoranthene*	*0.02*
207-08-9	*Benzo(k) Fluoranthene*	*0.02*
86-74-8	*Carbazole*	*0.15*
218-01-9	*Chrysene*	*0.10*
132-64-9	*Dibenzofuran*	*0.22*
206-44-0	*Fluoranthene*	*0.24*
86-73-7	*Fluorene*	*0.32*
85-01-8	*Phenanthrene*	*0.52*
108-95-2	*Phenol*	*0.66*
129-00-0	*Pyrene*	*0.44*
91-57-6	*2 Methylnaphthalene*	*0.09*
95-48-7	*2Methylphenol*	*0.46*
105-67-9	*2,4 Di methyl phenol*	*0.15*
8001-28-3	*4 Methyl phenol*	*0.18*

4. *FIRST AID MEASURES*

General Advice: *If you feel unwell, seek medical advice.*

Inhalation: *Remove to fresh air. Support breathing as needed. Call doctor if symptoms persist.*

Skin contact: *Remove contaminated clothes and rinse skin well with water for at least 15 minutes.*

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Eye contact:	*Gently lift the eyelids and flush immediately and continuously with copious amounts of water. Consult a doctor immediately. Do not let the patient rub their eyes or keep them tightly closed*
Ingestion:	*Do not induce vomiting. Keep patient warm and transfer to hospital.*
Note to physician:	*Treat symptomatically. Liberal amounts of neat oil or olive oil can be used on skin burns. Cresol may be detected in urine. Special attention should be given to the detection of skin disorders.*

5. *FIRE-FIGHTING MEASURES*

Suitable Extinguishing media:	*For small fires, use foam, carbon dioxide (CO_2) or dry chemical powder. For large fires, use fog or foam. Use water spray to cool containers exposed to fire*
Specific Hazards or precaution:	*Stay away from ends of tanks. Immediately leave the area if you hear a rising sound from venting safety device. Isolate area (if possible) for 500 meters in all directions.*
Protective equipment for Fire fighters:	*Proper protective equipment, including breathing apparatus and gloves.*
Additional information:	*Vapours may travel to an ignition source and flash back.* *Containers may explode in heat of fire.*

6. *ACCIDENTAL RELEASE MEASURES*

Personal precautions:	*Ventilate contaminated area thoroughly. Evacuate all non-essential personnel. Remove ignition sources.*
Environmental Precautions:	*Prevent the product from spreading or entering into drains, ditches or rivers by using sand, earth, sawdust or inert absorbent. Prevent further leakage or spillage, if safe to do so.*
Methods for Cleaning up:	*When cooled down, scoop up in closed, clearly marked containers for disposal.*

7. *HANDLING AND STORAGE*

Safe handling advice:	*Avoid contact of material with skin, eyes and clothing. Avoid breathing vapours or fumes of heated material. When handling, do not eat, drink or smoke. Keep away from open flames or sparks.*
Advice on protection Against fire and explosion:	*To be stored in closed containers. Overheating and pressure build-up must be avoided. Prevent direct contact of water with liquid material. Electrical equipment must be flame-proof and earthed.*
Storage:	*Keep away from sources of ignition. Use lowest practicable storage temperature to minimise fume generation. Mild steel is recommended as a storage material.*

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering control	*Use engineering controls to keep airborne concentrations*
Measures:	*below the exposure limits. Locate emergency equipment at well-marked and clearly identified stations in case emergency escape is necessary.*
Occupational exposure	*TWA OEL-RL (Time-Weighted Average, Occupational*
Standards:	*Exposure Limit - Recommended Limit):0.14 mg/m³ of coal tar pitch volatiles (as Cyclohexane solubles).*

Personal protective equipment:

Respiratory protection:		*To counter the risk of inhaling vapours, wear a fresh air mask.*
Hand protection:		*Solvent-resistant rubber or plastic gloves.*
Eye protection:		*Tightly sealed safety glasses, and or face shield.*
Skin and body protection:		*Overalls, or a neoprene apron and barrier cream*

Hygiene measures:	*Wash overalls and undergarments separately from household clothing.. Dispose of soiled gloves. Wash exposed body areas well before eating, drinking or smoking. Shower after work.*

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	*Liquid at ambient temperature*
Colour:	*Black*
Odour:	*Typical Coal Tar odour*
Boiling point:	*±150°C*
Flash point:	*55°C*
Auto ignition Temperature:	*>500°C*
Relative vapour density:	*4 (Air = 1)*

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Density:	*1.10 kg/l min @ 25°C*
Explosion Properties:	*1-6 volume % in air*
Solubility:	***Water:*** *Insoluble*
	Solvents: *Soluble (gelling can occur)*

10. *STABILITY AND REACTIVITY*

Stability:	*Stable.*
Conditions to avoid:	*Open flames and sparks, and excessive heat.*
Hazardous Decomposition products:	*Strong oxidant. Thermal oxidative decomposition of coal tar pitch can produce oxides of carbon and thick black acrid smoke.*

11. *TOXICOLOGICAL INFORMATION*

Summary of hazards: *Coal tar fumes are toxic by inhalation, ingestion and skin contact. The range of toxicity depends on the concentration, amount and duration of exposure. Effects may include irritation, burns, and several forms of cancer.*

Acute toxicity:

Oral:	*LD_{50} (rat, oral)3.8g/kg:95% confidence limit 2.1-5.1g/kg (IRI Project no 412846, May 1979)*
Inhalation:	*Not considered to be a hazard under normal conditions of use..*
Eye irritation:	*Vapours can be a slight irritant.*
Skin irritation:	*A slight irritant.*
Respiratory irritation:	*If vapours are inhaled, slight irritation of the respiratory tract may occur.*
Chronic toxicity:	*Dermatitis, skin cancer and lung cancer.*

Medical conditions aggravated by long term exposure:

Chronic respiratory or skin diseases.

Carcinogen:	*In 1990 the IARC and OSHA listed and identified coal-tar as a carcinogen.*
Acute effects:	*Photosensitization (worsening of rash when exposed to sunlight) may occur. Exposure to large doses (particularly by ingestion) may be fatal.*

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12. ECOLOGICAL INFORMATION

Basis for assessment:	*Ecotoxicological data has not been determined specifically for this product. Information given is based on the ecotoxicology of similar products.*
Mobility:	*Material will cover top layer of soil. Some of the oils will evaporate over a long period of time*
Biodegradability:	*Biodegradable.*
Bioaccumulation:	*No bioaccumulation.*
Ecotoxicity:	*Poorly soluble mixture. Practically, non-toxic, LC/EC_{50} 50-100mg/l to Leuciscus idus melanotus (goldfish), 48 hrs*
Sewage treatment:	*Practically non-toxic, EC_{50} 50 - 100 mg/l, to organisms in sewage treatment plants.*

13. DISPOSAL CONSIDERATIONS

Waste and product disposal:

Waste arising from a spillage or tank cleaning operation should be disposed of in accordance with prevailing regulations, preferably by a registered collector or contractor. The competence of the collector or Contractor should be established beforehand. Waste product should not be allowed to contaminate soil or water.

14. TRANSPORT INFORMATION

UN number:	*1136*
Class/Packing group:	*3,1-111*
Hazard Label:	*Flammable Liquid*

15. REGULATORY INFORMATION

Prevailing national legislation must be adhered to.

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16. *OTHER INFORMATION*

General: *Studies have shown that exposure to coal tar products may increase the risk of cancer. Eliminating skin contact and working in well-ventilated conditions will reduce the risk to practically zero. Wear impervious gloves, boots and aprons to prevent all skin contact. Applying a layer of barrier cream to the face reduces vapour contact and penetration through skin. Frequent change of protective garments is an additional protective measure.*

MSDS Distribution: *This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.*

Bibliography:

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9. Bitumen safety handbook, Manual 8.
10. Dangerous Goods Regulations, 33rd Edition, Effective 1 January 1992.
11. Republic of South Africa, Government Gazette 25 August 1995.

This information is based on current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.

**Published data relates to analysis conducted on a sample submitted, on an "as received basis"*

Tests performed are limited to the listed test items. Test items not listed in the MSDS are either undetermined, or below our detection limits.

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