1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME ARBOKOL 2150 CURING AGENT
APPLICATION Curing agent component of: A two-part sealant Floor joints in heavily trafficked areas. Sealing joints in flat roofs.
SUPPLIER Adshead Ratcliffe & Co. Ltd.
Derby Road, Belper
Derbyshire.
DE56 1WJ
Tel. (+44) 01773 826661
Fax. (+44) 01773 821215
sds@arbo.co.uk
EMERGENCY TELEPHONE (+44) 01773 826661 (office hours only)

2 HAZARDS IDENTIFICATION

Harmful if swallowed. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
CLASSIFICATION Xn;R22. R43. N;R51/53.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-DIPHENYLGUANIDINE</td>
<td>203-002-1</td>
<td>102-06-7</td>
<td>1-5%</td>
<td>Rep3;R62 Xn;R22 Xi;R36/37/38 N;R51/53</td>
</tr>
<tr>
<td>MANGANESE DIOXIDE</td>
<td>215-202-6</td>
<td>1313-13-9</td>
<td>30-60%</td>
<td>Xn;R20/22</td>
</tr>
<tr>
<td>THIRAM</td>
<td>205-286-2</td>
<td>137-26-8</td>
<td>1-5%</td>
<td>Xn;R20/22,R48/22 R43 Xi;R36/38 N;R50/53</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION
In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

INHALATION
Unlikely route of exposure. Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

INGESTION
Immediately rinse mouth and drink plenty of water (200-300 ml). Give milk instead of water if readily available. DO NOT induce vomiting. Get medical attention immediately.

SKIN CONTACT
Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

EYE CONTACT
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Water spray, fog or mist. Foam, carbon dioxide or dry powder.

SPECIFIC HAZARDS
Toxic gases/ vapours/fumes of Nitrous gases (NOx). Carbon dioxide (CO2). Carbon monoxide (CO).

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear appropriate protective clothing.
ENVIRONMENTAL PRECAUTIONS
Do not allow to enter drains, sewers or watercourses. Avoid release to the environment.

SPILL CLEAN UP METHODS
Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Avoid spilling, skin and eye contact.

STORAGE PRECAUTIONS
Store in tightly closed original container in a dry, cool and well-ventilated place.

8 EXPOSURE CONTROLS/PERSOAL PROTECTION

INGREDIENT COMMENTS
WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT

ENGINEERING MEASURES
Provide adequate ventilation.

RESPIRATORY EQUIPMENT
No specific recommendations.

HAND PROTECTION
Use protective gloves.

EYE PROTECTION
No specific eye protection noted, but may be required anyway.

HYGIENE MEASURES
DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
Viscous paste

COLOUR
Dark brown.

ODOUR
Mild (or faint).

SOLUBILITY
Insoluble in water

RELATIVE DENSITY
1.77 @ 20°C

VISCOSITY
7,000 - 9,000 Ps @ 20°C

FLASH POINT (°C)
> 100

10 STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions.

CONDITIONS TO AVOID
Avoid contact with acids and oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50
Manganese dioxide: 422 mg/kg (scu-mus)

TOXIC DOSE 2 - LD 50
Manganese dioxide: 45 mg/kg (intravenous rabbit)
INGESTION
Harmful if swallowed. May cause stomach pain or vomiting.

SKIN CONTACT
May cause sensitisation by skin contact.

EYE CONTACT
May cause irritation to eyes.

HEALTH WARNINGS
Product contains: manganese dioxide: which is: poison by intravenous route: moderately toxic. by subcutaneous route.

ROUTE OF ENTRY
Ingestion. Skin and/or eye contact.

MEDICAL CONSIDERATIONS
Skin disorders and allergies.

12 ECOLOGICAL INFORMATION

ECOTOXICITY
The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

LC 50, 96 Hrs, FISH mg/l Not determined.

MOBILITY
The product is insoluble in water.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS
Dispose of waste and residues in accordance with local authority requirements.

WASTE CLASS
H5 - Harmful
H14 - Ecotoxic

Recommended EWC Code 08 04 10

14 TRANSPORT INFORMATION

UK ROAD CLASS 9
PROPER SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
UN NO. ROAD 3077 UK ROAD PACK GR. III
ADR CLASS NO. 9 ADR PACK GROUP III
HAZARD NO. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances. HAZCHEM CODE 2Z
CEIFIC TEC(R) NO. 90GM7-III RID CLASS NO. 9
RID PACK GROUP III UN NO. SEA 3077
IMDG CLASS 9 IMDG PACK GR. III
EMS None UN NO. AIR 3077
AIR CLASS 9 AIR PACK GR. III

15 REGULATORY INFORMATION

LABELLING
ARBOKOL 2150 CURING AGENT

CONTAINS
MANGANESE DIOXIDE
THIRAM

RISK PHRASES
R22 Harmful if swallowed.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES
S24 Avoid contact with skin.
S37 Wear suitable gloves.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

STATUTORY INSTRUMENTS
Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

GUIDANCE NOTES
Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

16 OTHER INFORMATION

REVISION COMMENTS
Revised sections: 2, 3.
REVISION DATE 13/11/08
REV. NO./REPL. SDS GENERATED 06/10/05
SDS NO. 10167

RISK PHRASES IN FULL
R20/22 Harmful by inhalation and if swallowed.
R22 Harmful if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62 Possible risk of impaired fertility.

DISCLAIMER
This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in a process. Such information is, to the best of the company’s knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user’s responsibility to satisfy himself as to the suitability of such information for his own particular use.