



John Winter & Co Ltd

Safety Data Sheet

Product Name: Oil Bonded Sands

Application: Moulding

| | | | |
|--|---------------------|------------------|-------------------|
| Date SDS prepared: | January 1997 | Date SDS revised | April 2015 |
| This SDS supersedes all previous dates | | Checked by | DRL |

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE & COMPANY IDENTIFICATION

1.1 Product Name: Petrobond, Mansbond, Bentomix

1.2 Use: Moulding sand

1.3 Supplier: John Winter & Co Ltd
Halifax, West Yorkshire
HX2 7DP

Telephone: 01422 364213

UK contact: Carol White – REACH Coordinator
Email address: carol@johnwinter.co.uk

Emergency telephone no: As above only available during office hours, outside office
Hours please contact your National Chemical hotline

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance
Low toxicity applies to all ingredients

2.2 Label Elements
There are no label elements

2.3 Hazards

Eyes

Based on this ingredient Propylene Carbonate
May cause irritation R36, H319
P280 Wear eye/skin protection

Skin

No problems expected with normal use – normal standard of hygiene/protective equipment required. Prolonged contact with skin should be avoided.

Ingestion

Unlikely to be ingested in normal use

Inhalation

Fumes formed during casting due to the combustion of the process oil may irritate breathing passages & lungs.



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Eco Toxicity

There are no reported eco-toxicity for these products. No special requirement. Practically insoluble in water & separable by most filtration or sedimentation techniques. Discharges to water courses should be avoided to prevent the exclusion of natural light affecting fauna.

HSE CHEMICAL HAZARD ALERT NOTICE 35

The HSE issued a Chemical Hazard Alert Notice for Respirable Crystalline Silica on 7 May 2003. The notice states:

"HSE believes that in most cases it should be reasonably practicable to control exposure to 0.1 mg/m³ (8hour TWA) or less by engineering or process control. Employers should aim to ensure that workers are not exposed to RCS dust concentrations above this level. If exposure cannot be controlled to 0.1 mg/m³ (8 hour TWA) or below by elimination or process or engineering controls, then exposure must be controlled by provision & use of suitable respiratory protective equipment."

3. COMPOSITION / INFORMATION ON THE COMPONENTS

3.1 Mixture

| Substance | % by wt or Range | EINECS Number | CAS Number | Classification |
|---------------------|------------------|---------------------------------------|------------|----------------|
| Silica Sand | 81 to 91% | 238-878-4 | 14808-60-7 | Not classified |
| Iron Oxide Pigment | <1% | 215-277-5 | 20344-49-4 | Not classified |
| Process Oil | 3% to 7% | 265-097-6 | 64741-96-4 | Not classified |
| Modified Clay | <3% | 273-219-4 | 68953-58-2 | Not classified |
| Propylene Carbonate | <0.2% to 3% | 203-572-1 EU Index 607-194-00-1 | 108-32-7 | Xi; R36. H319 |

4. FIRST-AID MEASURES

4.1 Description of First-aid measures

Eyes

Irrigate with plenty of water for 15 minutes & seek medical advice if irritation persists

Skin

Wash with warm soapy water until removed

Inhalation

Remove casualty to fresh air

Ingestion

Do not induce vomiting. Give 250 ml of water to drink. Seek medical advice



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4.2 Most important symptoms & effects, both acute & delayed

4.3 Indication of immediate medical attention & special treatment needed

5. FIRE-FIGHTING MEASURES

This preparation presents no fire or explosive hazards

5.1 Suitable Extinguishing media

Water mist/fog, dry chemical, foam, carbon dioxide. AVOID water jets

5.2 Special hazards arising from the substance or mixture

Fumes formed during casting due to the combustion of the mineral oil may irritate breathing passages & lungs. Toxic fumes may be evolved on burning or exposure to heat from process oil.

5.3 Advice for Fire-Fighters

Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus. Water may be used to cool nearby heat exposed areas/objects/packages. Full protective clothing must be worn in case of fire.

5.4 Further information

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment & emergency procedures

See section 8

6.2 Environmental precautions

6.3 Methods & materials for containment & cleaning up

7. HANDLING & STORAGE

7.1 Handling

Workplace must be well ventilated during use & during casting. Where ventilation is inadequate & concentrations of fumes, dust or vapour are likely, suitable protective equipment should be used. Wash hands before eating. Ensure control of dust produced during the loading of silos. Keep containers closed & store/handle bagged products so as to prevent accidental bursting.



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7.2 Conditions for safe storage, including any incompatibilities

7.3 Specific end use(s)

| |
|---|
| 8. EXPOSURE CONTROLS / PERSONAL PROTECTION |
|---|

8.1 Control parameters

Occupational Exposure Control Limits & Source

Please note this blend is specifically made to reduce the potential of dust exposure & vapour exposure & is expected to be minimal during normal use.

Oil mist

| HSE EH40 Workplace Exposure Limits (WELs) Time Weighted Average (TWAs) | |
|--|----------------------|
| 8 hour TWA | 15 mins |
| 5 mg m ³ | 10 mg m ³ |
| Will not be present in a mist form during normal use | |

8.2 Exposure Controls

Engineering Control Measures

Workplace must be well ventilated during use & during casting. Where ventilation is inadequate & concentrations of fumes, dust or vapour are likely, suitable protective equipment should be used. Wash hands before eating.

Engineering measures may be required should unacceptable respirable dust levels be evident, although this is unlikely to occur in normal use.

Respiratory Protection

If considered necessary, protection equipment should be adequate for protection against respirable silica particles.

Hand Protection

The use of barrier cream or gloves is recommended

Eye Protection

The use of safety glasses with side shields or goggles is recommended.

Hygiene Measures

When using do not eat, drink or smoke. Wash promptly if skin becomes wet or contaminated. Wash at the end of each shift & before eating, smoking & using the toilet.



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9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical & chemical properties

| | |
|-----------------------------|--|
| Physical state (appearance) | Reddish brown oil bonded moulding sand |
| Odour | No perceptible odour |
| Odour threshold | No data available |
| Solubility in water | Not water or fat soluble |
| Flash point | N/a |
| Ph | Not determined |
| Evaporation rate | Not determined |
| Auto ignition temperature | Not applicable |
| Oxidising properties | Not determined |

10. STABILITY & REACTIVITY

10.1 Reactivity

These sands are stable & unlikely to react in a hazardous manner under normal expected conditions of use.

10.2 Chemical stability

Chemically stable

10.3 Possibility of hazardous reactions

No incompatibilities

10.4 Hazardous decomposition products

No hazardous polymerisation reactions will occur

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Not a toxic preparation

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Preparations are non-toxic

Aquatic toxicity

Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired



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Water Hazard Classification – NWG
(Self-assessment)
No hazard to waters
Product is insoluble in water

12.2 Persistence & degradability
Preparations are inherently biodegradable. The modified clay percentage will not degrade but is a naturally occurring mineral.

12.3 Bioaccumulative potential

12.4 Mobility in soil
Spillages may penetrate the soil causing ground water contamination

12.5 Results of PBT & vPvB assessment

12.6 Other adverse effects

13. DISPOSAL

13.1 Waste treatment methods
Dispose of product & packaging in accordance with all applicable local & National regulations.

Do not dispose of near ponds, ditches, drains or onto soil

14. TRANSPORT INFORMATION

14.1 Not classified for transport

Packaging size: 25 kgs bags

14.2 UN Proper shipping name: SAND

15. REGULATORY INFORMATION

15.1 Safety, health & environmental regulations/legislation specific for the substance or mixture

15.2 Chemical Safety Assessment
There has been no chemical safety assessment carried out on this product



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16. ANY OTHER INFORMATION

Training

Workers should be informed of the possible presence of crystalline silica & trained in the proper use & handling of this product as required under applicable regulations

During the making of cores & moulds, vapours & gases from the binder system may be given off & particles of sand, including respirable silica (possibly coated with unreacted or reacted binder materials) can become airborne. When molten metal is poured into moulds decomposition products can be produced from organic binders & additives in the mould. The decomposition products may bind to particles of sand or metal oxide. At knockout and shakeout, sand particles (which may be coated with thermally degraded binder material) are the main contaminants produced. Metal finishing operations can give rise to fume as well as airborne metal, metal oxide particles & coated sand particles.

Hazard statement in full

H319 Causes eye irritation

P280 Wear eye/face protection

The data contained within this SDS is to the best of our knowledge correct but workplace risk assessment should be carried out.