

PT MONOKEM SURYA

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Identification

Product Names Ilmenite

Recommended Uses Raw material for titanium dioxide pigment manufacture. Raw material for synthetic rutile production. Also used in welding rod flux, BOF steelmaking furnaces, drilling mud.

Supplier Identification

Company PT MONOKEM SURYA

Address Rukan Permata Senayan Blok D No. 53
Jl. Tentara Pelajar Jakarta 12210 Indonesia

Telephone Number 62-21-57941388 - 89
Fax Number 62-21-57941390

2. HAZARDS IDENTIFICATION

Not classified as hazardous according to criteria of Worksafe Indonesia

Dangerous Goods

Class and Subsidiary Risk None allocated

Hazchem Code None allocated

Poisons Schedule None allocated

Potential Health Effects

Acute

Swallowed Non-toxic. There are no known hazards resulting from accidental ingestion of small amounts as may occur during normal handling. Ingestion of larger amounts may cause irritation to the digestive system due to abrasiveness.

Eye Solid and dust can cause moderate irritation due to abrasiveness.

Skin Low hazard

Inhaled Normally regarded as a general nuisance dust, but can be irritating if inhaled at high concentration. Dust controls shall be employed for situations where materials handling or processing has the potential for significant dust generation.

Chronic

Silica Crystalline silica is a known cause of lung fibrosis (silicosis). It has also has been classified as a human carcinogen. Ilmenite sand contains a small amount of free quartz, and precautions should be taken to avoid inhaling the dust.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mineral	CAS Number	Weight %
Ilmenite	103170-28-1	Min 50% as TiO ₂

4. FIRST AID MEASURES

Swallowed First aid is unlikely to be needed, but if necessary, wash the mouth out with water ensuring the mouthwash is not swallowed. Seek medical attention as a precaution if discomfort occurs.

Eye Hold eyelid open and flush with plenty of clean water. Continue for at least 15 minutes or until grit is removed. Seek medical attention if soreness or irritation

	persists.
Skin	Gently remove contaminated clothing to avoid generating dust. Wash material from the skin. If repeated contact results in skin irritation, seek medical advice. Launder clothing before re-use.
Inhaled	Move to fresh air. Blow nose to remove particulates from nasal passages. If any adverse reaction develops, seek medical attention.
First Aid Facilities	Eye wash facilities
Advice to Physician	Treat symptomatically

5. FIRE FIGHTING MEASURES

Flashpoint	Not applicable
Flammability Limits	Not applicable
General Hazard	This product is not flammable and does not support combustion.
Extinguishing Media	Use media suitable for the material that is burning.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal	Wear safety equipment as for normal handling. Avoid generating dust. Vacuum up if possible, otherwise sweep up and re-cycle. If the spilled product is not suitable for re-use, damp down, collect and where possible return to manufacturer for re-processing. Otherwise dispose of to an approved landfill site and cover with clean fill.
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7. HANDLING AND STORAGE

Handling	Avoid breathing dust. Wash thoroughly after handling.
Storage	Storage areas should be ventilated and dust generation minimised when handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards	Dust TWA – 10mg/m ³ (inhalable general nuisance dust) Respirable free silica TWA – 0.1mg/m ³ Radiation (combined alpha and gamma) exposure should be as low as reasonably achievable, (ALARA), but should not exceed a total of 100 milli-seiverts over 5 consecutive years.
Engineering Controls	Ventilation requirements will depend on handling methods and the amount in use, but should be sufficient to maintain dust levels below exposure limits. Points of dust generation such as conveyor and hopper discharges should be equipped with an effective extraction system.
Personal Protection	Safety glasses with side shields or goggles. If risk of inhaling dust is present, wear at minimum, an approved P1 respirator (disposable or cartridge type).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (Form)	Normally a black, free running sand. Opaque under a microscope. Odourless and tasteless.
Chemical Formula	FeO.TiO ₂
Melting Point	Not applicable
Vapour Pressure	Not applicable
Evaporation Rate	Not applicable
Specific Gravity	4.3 - 4.6
Solubility in Water	Insoluble
pH	Neutral
Bulk Density	2400 - 2700 kg/m ³

10. STABILITY AND REACTIVITY

Reactivity	Inert
Chemical Stability	Stable
Incompatibilities	None in normal or expected use
Decomposition	Decomposition will not occur

11. TOXICOLOGICAL INFORMATION

This product is non-toxic. Refer section 2. Hazards Identification.

12. ECOLOGICAL INFORMATION

The material is unlikely to cause any environmental damage. It is insoluble in water and is unlikely to contaminate waterways or food chains.

13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with Federal, State and Local Council regulations. If approved, may be transferred to an approved landfill site.

14. TRANSPORT INFORMATION

Transport is not regulated, however trucks transporting the dry bulk material should be covered to prevent dust creation.

15. REGULATORY INFORMATION

None noted.

16. OTHER INFORMATION

This MSDS has been prepared by Technical Services, PT Monokem Surya

Date of Issue August 2008

This MSDS is valid for five (5) years from the date of issue but readers should refer to PT Monokem Surya to ensure that this is the latest issue. As per the Worksafe Guidance Note NOHSC 3017, each user should review the information in the specific context of the intended application.

Abbreviations

mg/m ³	Milli gram per cubic metre
NOHSC	National Occupational Health & Safety Commission
TLV	Threshold Limit Value
TWA	Time Weighted Average

*Note: PPE (Personal Protective Equipment) designation to be supplied by user depending upon use in their specific situation. HMIS guidelines do not permit this designation to be specified by the manufacturer/supplier
– only by the end user.

For more information contact Product Safety at

PT Monokem Surya
Technical Service Department
62 267 848 5 214

End of MSDS