SAFETY DATA SHEET

5578	TITANIUM DIOXIDE

1. Identification of substance/preparation and of the company undertaking

Trade Name:	Titanium Dioxide
Chemical Name:	Titanium Dioxide
Synonyms:	Rutile

2. Composition /information on ingredients

Component	CAS	EINECS	% of composition
Titanium Dioxide TiO_2	13463-64-7	-	>95%
Titanium Dioxide TiO_2	13163-64-7	-	>98%

3. Hazards Identification

Inhalation	Excessive exposure may cause symptoms of chronic lung disease.
Ingestion	The product is of low solubility in body fluids and it is likely to be of low toxicity
Eyes	May cause physical irritation and inflammation.
Skin	The material is not a primary irritant, but as with any abrasive powder it may give rise to minor irritation.

4. First Aid Measures

Inhalation	Remove patient to fresh air, loosen tight clothing and seek medical attention.
Ingestion	Do not induce vomiting, give plenty of water to drink, seek medical advice.
Eyes	Wash immediately with copious amounts of water.
Skin	Wash affected areas with water.

5. Fire Fighting Hazards

Extinguishing Media	Suitable for surrounding fire conditions
Special Exposure Hazard	None
Personal protective equipment	None other than required for surrounding fire conditions.

6. Accidental Release Measure

Leaks and Spills	Use suitable vacuum equipment where reasonably practicable, otherwise damp down and scoop into a receptacle.
Personal Protective equipment	Respiratory protective equipment.

7. Handling & Storage

Handling	Do not eat, drink, or smoke in areas where the material is used. Wash thoroughly after handling the material.
Storage	Store in a dry area.

8. Exposure Control/Personal Protection

Engineering controls	Adequate ventilation should be provided so that Occupational Exposure Limits are not exceeded. Local exhaust Ventilation is normally recommended.
Personal Protective Equipment	Where LEV is not practicable and exposure is likely to be excessive, approved respiratory protection to CEN standards prEN 140, 141, 143 or 149 should be worn. Protective gloves and overalls are recommended for prolonged contact.

9. Physical & Chemical Properties

Appearance and Odour	Pale brown powder, odourless
Flash Point (ºC)	Not applicable
Flammability	Not applicable
Explosive properties	Non-explosive
Oxidising properties	None
Specific gravity	3-5
pH value	7 (insoluble in water)
Melting point (ºC)	Not available

10. Stability & Reactivity

Chemical Stability	The material is stable
Conditions/ materials to avoid	None known
Hazardous decomposition products	None known
Hazardous polymerization products	None

11. Toxicological Information

Acute toxicology	LD50	Oral (mouse)	>10,000mg/kg
	LD50	Dermal	Not known
	LD50	Inhalation	Not known
Health effects	Prolonged or repeated exposure above Occupational Exposure Standards may cause fibrosis of the lungs.		

12. Ecological Information

Ecotoxicity	Not known
Persistence	The product is chemically stable and will persist in the environment.

13. Disposal Considerations

Dispose of in accordance with current waste Disposal regulations (for UK – Control of Pollution {Special Waste} Regulations 1980). Landfill is the most appropriate method.

14. Transport Information

UN/SI No.		Not classified
UN Class		Not classified
Packing Group		Not classified
Road	UK	Not classified
	ADR	Not classified
Sea	IMO	Not classified
Air	ICAO	Not classified

15. Regulatory Information

EC Supply Labelling	Non hazardous	
R phrases	None	
S Phrases	Optional for dusty powders	
	S20/21	When using do not eat, drink or smoke.
	S38	In case of sufficient ventilation wear suitable respiratory equipment.

UK Occupational exposures limits (Refer to HSE Guidance note EH40)	**Mg/m^3**	**8 hr TWA**	**% in product**
Dusts- Total Inhalable		10	-
Total respirable		5	-

In accordance with HSE Approved Code of Practice for CHIP, the recipient is reminded of their obligations under both the Health and Safety at Work Act (HSWA) and the Control of Substances Hazardous to Health Regulations (COSHH), and that the information in any safety data sheet does not constitutes the user's assessment of the workplace risk.

16. Other Information

References	
COSHH ACOP	HSC approved Code of Practice for the Control of Substances Hazardous o Health Regulations 1994
CHIP 96	Chemicals (Hazardous Information and Packaging for Supply) Regulations 1996
CHIP SDS ACOPS	HSC Approved Code of Practice for Safety data Sheets in accordance with Regulation 6 of the CHIP regulations.
HSE EH40	HSE Guidance note EH40 on Occupational Exposure Limits to be used in conjunction with the COSHH regulations.