

FLINT HIRE & SUPPLY LTD

SAFETY DATA SHEET

FLINTS DRY SCENIC COLOURS - TITANIUM WHITE

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

Product name: Titanium Dioxide White

Supplier: Flint Hire & Supply Ltd Tel: 020 7703 9786
Queens Row Fax: 020 7708 4189
Walworth Email: sales@flints.co.uk
London
SE17 2PX

2. Composition/Information on ingredients

Substance/Preparation: Substance, Titanium dioxide pigments

Chemical Name	Weight %	CAS No.	EINECS	Symbol	R-Phrases
Titanium Dioxide	>80	13463-67-7	238-675-5		
Aluminium Hydroxide	1-5	21645-51-2			
Zirconium Oxide	0.3-1	1314-23-4			

3. Hazards identification

The product is not classified as dangerous according to current EC regulations

4. First-aid Measures

General advice: In all cases of doubt or when symptoms persist seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep the patient warm and at rest. Give symptomatic treatment as necessary.

Ingestion: DO NOT INDUCE VOMITING. Give upto 200mls water. In case of persistent symptoms, consult a doctor.

Skin contact: Wash skin with soap and water.

Eye contact: Make sure to remove any contact lenses. Promptly wash eyes with plenty of water while lifting the eye lids.
Continue for at least 15 minutes. Obtain medical attention if irritation occurs.

5. Fire-fighting measures

Extinguishing media: Use any media appropriate for combustible material in the area.

Recommendations: The product is inert, non-flammable and non-combustible. Fire fighters should use usual protective equipment.

6. Accidental release measures

Personal precautions:	Avoid generation of dust. Ensure adequate ventilation. Wear personal protective equipment (see Section 8).
Environmental precautions:	Prevent run-off from entering ground, storm sewers and ditches which lead to natural waterways.
Clean-up methods: product effluent	Use any feasible mechanical means (e.g. vacuum sweeping) but avoid dust generation during clean-up. The product can cause slippery conditions if wet. Even at low concentration, the product renders the discharge in liquid highly visible.

7. Handling and storage

Handling:	Avoid raising and breathing dust. Observe good industrial hygiene practice for chemical handling. Offloading from bulk tanks can generate static electricity. Systems should be adequately earthed.
Storage:	Pigments should not be stored in outside areas exposed to the weather. Care should be taken to avoid exposure to moisture, particularly with a partly used pallet of material.

8. Exposure controls/personal protection

Engineering controls: and/or worn.	Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of solvent vapours and/or particulates below the relevant occupational limit values, suitable respiratory protective equipment should be worn.
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<u>Ingredient Name</u>	<u>LTEL</u>	<u>STEL</u>	<u>Std.</u>	<u>Notes</u>
Titanium Dioxide (Total Inhalable Dust)	10mg/m ²	-	OES	
(Total Respirable Dust)	4mg/m ²	-	OES	

Ingredient comments:	LTEL	- Long term exposure limit, 8 hour time weighted average
	STEL	- Short term exposure limit, 15 minute reference period
	OES	- Occupational exposure standard

OELs are taken from the current version of EH40 except those marked 'SUP', which are assigned by the supplier of the substance.

Protective Equipment:



Ventilation:	Provide adequate general and local exhaust ventilation.
Respirators:	If exposure to hazardous substances identified above cannot be controlled by the provision of local exhaust ventilation and good general extraction, suitable respiratory protective equipment should be worn e.g. EN149 Filtering half mask with FFP2 filter for up to 10 times Occupational Exposure Limit..
Protective gloves:	When skin exposure may occur, advice should be sought from glove suppliers with regard to suitability and breakthrough times. Barrier cream is recommended but not as a substitute for gloves.
Eyes:	Wear safety glasses designed to protect against dust that meet the requirements of EN166.
Other protection:	Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and laundered before re-use and the skin washed with soap and water or a proprietary skin cleaner.
Hygienic work practices:	DO NOT SMOKE IN THE 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 and launder before re-use. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. No eating or drinking whilst working with this material.

9. Physical and chemical properties

Physical state:	Solid
Colour:	White powder
Odour:	There may be a characteristic odour
Flash point:	Not applicable
Explosive properties:	None
Boiling point/range:	Not applicable
S.g.:	3.5 - 4.2g/cm ³
Vapour density:	Not applicable
Vapour pressure:	Not applicable
Solubility:	Insoluble in water and solvents
Melting point:	~ 1800°C
Flammability:	Not applicable. Non-flammable solid
Oxidising properties:	None

10. Stability and reactivity

Stability:	Stable under normal conditions of use and storage.
Conditions to avoid:	None known.
Materials to avoid:	None reasonably foreseeable.
Hazardous decomposition products:	At high temperature, decomposition products could include traces of alpha-ethylacrolein and formaldehyde.

11. Toxicological information

Route of entry:	Ingestion, Inhalation
Toxicity:	Oral LD ₅₀ (Rat): >10000mg/Kg. No adverse health effects anticipated when accidentally Swallowed in small quantities.
	Dermal LD ₅₀ (Rabbit): >10000mg/Kg. TiO ₂ pigments are not irritant but as with all fine Particles can absorb moisture and natural oils from the surface of the skin during prolonged exposure.
	Inhalative LC ₅₀ /4 Hour (Rat): >6.8mg/l. Overexposure by inhalation of titanium dioxide may induce mild and temporary upper respiratory irritation with cough and shortness of breath.
Sensitisation:	Skin - Non sensitizer.
Chronic effects: lung	Tumours produced in rats on inhalation of very high concentrations are believed to be the result of prolonged overload" and are not considered relevant to man.

12. Ecological information

Ecotoxicity:	Fish LC ₀ (Leuciscus idus, 48hr): > 1000mg/l. No significant adverse environmental effects are anticipated.
Mobility:	Product is not volatile but may be scattered by generation of dust during handling.
Persistence/degradability:	Insoluble in aquatic systems. Non-biodegradable.
Bioaccumulation:	No published data. No bioaccumulation expected.

13. Disposal considerations

Disposal methods:	Dispose of in accordance with Local Authority Regulations.
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14. Transport information

The product is not regulated for carriage.

15. Regulatory information

The product is not classified as hazardous under current EC directives.

Statutory instruments: Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. Control of Substances Hazardous to Health Regulations 2003. Environmental Protection (Duty of Care) Regulations. Health and Safety at work etc. Act 1974.

Approved code of practice: Safety Data Sheets for Substances and Preparations Dangerous for Supply. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance notes: CHIP for everyone HS(G)108. Occupational Exposure Limits EH40. Introduction to Local exhaust Ventilation HS(G)37. Save Your Skin: Occupational Contact Dermatitis MS(B)6. The Idiot's guide to CHIP, INDG350.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of the product.

16. Other information

To the best of our knowledge, the information contained herein is accurate. However, the above named supplier does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Version: 1.00
Printed: 28 April, 2011

