TATA PIGMENTS

MATERIAL SAFETY DATA SHEET
Synthetic Iron Oxide Orange Pigment

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME Synthetic Iron Oxide 960

PRODUCT NO. Synthetic Orange Oxide

SYNONYMS, TRADE NAMES 960

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2 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content of Fe2O3	Classification
Orange Iron Oxide	215-570-8	1309-37-1 51274-00-1	86% min	-

COMPOSITION COMMENTS

Inorganic Powder. Fe2O3 C.I. Pigment red , C.I. No. 77491

Inorganic Powder. FeOOH C.I. Pigment yellow , C.I. No. 77492

Alternative CAS No.: 1309-37-1 Alternative EINECS No.: 215-168-2

3 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

4 FIRST-AID MEASURES

GENERAL INFORMATION

Contaminated clothing should be removed and washed before being re-used.

INHALATION

Remove victim immediately from source of exposure. Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION

Rinse mouth thoroughly with water. Victims who are not unconscious should drink large quantities of milk or water, or self induce Vomiting (e.g. by sticking own finger into the throat). NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Get medical attention if any discomfort continues.

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES

No specific fire fighting procedure given.

UNUSUAL FIRE & EXPLOSION HAZARDS

No unusual fire or explosion hazards noted.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing if dust in the atmosphere is a problem.

ENVIRONMENTAL PRECAUTIONS

Avoid washing into water courses. Avoid contaminating public drains or water supply.

SPILL CLEAN UP METHODS

Avoid dust formation. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid handling which leads to dust formation.

STORAGE PRECAUTIONS

No special storage precautions noted. Store in tightly closed original container in a dry, cool and well-ventilated place.

STORAGE CLASS

Unspecified storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
Orange Iron Oxide	NUI	-	-	-	-

INGREDIENT COMMENTS

NUI = Nuisance Dust.

The UK HSE guidance note EH40, recommends adequate control of exposure to dusts and where there is no indication of the need for a lower value, personal exposure should be kept below:-

8h TWA 10 mg/m3 total inhalable dust.

8h TWA 4 mg/m3 respirable dust

PROCESS CONDITIONS

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

No specific recommendation made, but protection against nuisance dust must be used when the general level exceeds 10 mg/m3.

HAND PROTECTION

Use suitable protective gloves if risk of skin contact.

EYE PROTECTION

Wear dust resistant safety goggles where there is danger of eye contact.

OTHER PROTECTION

Wear appropriate clothing to prevent repeated or prolonged skin contact.

HYGIENE MEASURES

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Change work clothing daily before leaving work place.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Powder, dust
COLOUR	Orange
ODOUR	Odourless
PHYSICAL DATA COMMENTS	pH : 3 - 7 typically
SOLUBILITY	Insoluble in water

SPECIFIC GRAVITY 4.5

10 STABILITY AND REACTIVITY

STABILITY

No particular stability concerns.

MATERIALS TO AVOID

No incompatible groups noted.

HAZARDOUS DECOMPOSITION PRODUCTS

No hazardous decomposition products.

11 TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION

From literature surveys undertaken:-

Iron oxides:-

LD50: oral, rat = > 5000 mg/kg

Rabbit: eyes = non irritant

Rabbit: skin (24h) = non irritant

GENERAL INFORMATION

No specific health warnings noted.

INHALATION

Repeated and prolonged inhalation of iron oxide fume has been reported to produce changes in lung X-Rays of exposed individuals. This condition, siderosis, is considered to be a benign pneumoconiosis that exhibits no adverse health effects. To the best of our knowledge, this condition has not been observed after prolonged exposure to iron oxide pigments.

INGESTION

No specific health warnings noted.

SKIN CONTACT

Powder may irritate skin.

EYE CONTACT

May cause irritation.

OTHER HEALTH EFFECTS

This substance has no evidence of carcinogenic properties.

MEDICAL SYMPTOMS

Prolonged or repeated exposure may cause: Skin irritation. Irritation of eyes and mucous membranes

12 ECOLOGICAL INFORMATION

ECOTOXICITY

From literature surveys undertaken:-

Aquatic toxicity (fish): = Leuciscus idus (Golden Orfe) LCo: >1000 mg/l

Bacterial toxicity: = harmless against Pseudomonas putida at >1000 mg/l

Water hazard classification = According to present state of knowledge, these pigments are generally not hazardous to water. Separation: these pigments are separated in most filtration and/or sedimentation processes. Biological/Chemical Oxygen Demand: Not applicable.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Recover and reclaim or recycle, if practical. Contact specialist disposal companies. Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

GENERAL	Not classified as dangerous for transport purposes.
	No transport warning sign required.
ROAD TRANSPORT NOTES	Not classified as dangerous for road transport.
RAIL TRANSPORT NOTES	Not classified as dangerous for rail transport.
SEA TRANSPORT NOTES	Not classified as dangerous for sea transport.
AIR TRANSPORT NOTES	Not classified as dangerous for air transport.

15 REGULATORY INFORMATION

RISK PHRASES

NC Not classified.

16 OTHER INFORMATION

GENERAL INFORMATION

See technical literature for details of suitable applications of this product.

REVISION COMMENTS

RISK PHRASES IN FULL

NC Not classified.

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 any 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.