SAFETY DATA SHEET
Tangerine Orange Epoxy Pigment

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Product name	Tangerine Orange Epoxy Pigment
Company	Easy Composites Ltd Unit 39 Park Hall Business Village Longton, Stoke-on-Trent ST3 5XA United Kingdom
Email	sales@easycomposites.co.uk
Telephone	+44 (0)1782 454499

2. HAZARDS IDENTIFICATION

Classification (1999/45/EEC) Carc. Cat. 2;R45, Repr. Cat. 1;R61. Repr. Cat. 3;R62. Xi;R36/38. R43. N;R50/53, R33
The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Hazards

Human health: The product is irritating to eyes and skin. Contains lead which can accumulate in the body. Lead is absorbed into the body through inhalation of spray mist or by ingestion.

Environment: The product contains a substance which may cause long term adverse effects in the aquatic environment.

Physical and Chemical Hazards: When handled correctly, undamaged units represent no danger.

Label elements

Contains
C.I.PIGMENT YELLOW 34 (C.I. 77603)
EPOXY RESIN (Number average MW <= 700)
C.I.PIGMENT RED 104 (C.I. 77605)
Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw<=700
OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIV

Label In Accordance With (EC) No. 1272/2008

Signal Word: Toxic

Risk Phrases

R33	Danger of cumulative effects.
R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.
R45	May cause cancer.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61	May cause harm to the unborn child.
R62	Possible risk of impaired fertility.

Safety Phrases

S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.

S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S53	Avoid exposure - obtain special instructions before use.
S57	Use appropriate containment to avoid environmental contamination.
S60	This material and its container must be disposed of as hazardous waste.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.
P1	Contains lead. Should not be used on surfaces that are liable to be chewed or sucked by children.
P5	Contains epoxy constituents. See information supplied by the manufacturer.
P11	Restricted to professional users.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Description	Conc. %	CAS No.	EC No.	Classification (EC 1272/2008)	Classification (67/548/EEC)
C.I.PIGMENT YELLOW 34 (C.I. 77603)	30-40	1344-37-2	215-693-7	Carc. 1B - H350 Repr. 1A - H360Df STOT RE 2 - H373 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Carc. Cat. 2;R45 Repr. Cat. 1;R61 Repr. Cat. 3;R62 R33 N;R50/53
EPOXY RESIN	20-30	25068-38-6	500-033-5	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	R43 Xi;R36/38 N;R51/53
C.I.PIGMENT RED 104 (C.I. 77605)	10-20	12656-85-8	235-759-9	Carc. 1B - H350 Repr. 1A - H360Df STOT RE 2 - H373 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Carc. Cat. 2;R45 Repr. Cat. 1;R61 Repr. Cat. 3;R62 R33 N;R50/53
Formaldehyde, polymer with (chloromethyl)oxirane and phenol	10-20	9003-36-5	500-006-8	Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	Xi;R38. N;R51/53. R43.
OXIRANE, MONO [(C12-14- ALKYLOXY) METHYL] DERIVS	5-10	68609-97-2		Skin Irrit. 2 - H315 Skin Sens. 1 - H317	R43 Xi;R38

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Drink plenty of water. Get medical attention immediately!

Skin contact Remove affected person from source of contamination. Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. 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 and get medical attention. Get medical attention promptly if symptoms occur after washing.

Most important symptoms and effects , both acute and delayed

Inhalation No specific symptoms noted.

Ingestion Get medical attention immediately!
Skin contact Prolonged contact may cause redness, irritation and dry skin.
Eye contact Irritating and may cause redness and pain.

Indication of any immediate medical attention and special treatment needed

Treatment : The presence of lead in the body can be detected by determining the amount of this substance in the body and/or urine.

5. FIRE FIGHTING MEASURES

Extinguishing media

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not known.

Special hazards arising from the substance or mixture

Hazardous combustion products	Lead. Chromium. Antimony, Carbon dioxide (CO2). Carbon monoxide (CO). Halogenated hydrocarbons.
Unusual Fire & Explosion Hazards	Fire causes formation of toxic gases.
Specific hazards Fire or high temperatures create	Toxic gases/vapours/fumes of: Carbon dioxide (CO2). Carbon monoxide (CO). Oxides of: Lead. Chromium.

Advice for firefighters

Special Fire Fighting Procedures	Isolate area. Very toxic to aquatic organisms. Keep run-off water out of sewers and water sources. Dike for water control.
Protective equipment for fire-fighters	Self contained breathing apparatus and full protective clothing must be worn in case of fire. Face mask, protective gloves and safety helmet.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions , protective equipment and emergency procedures

For personal protection, see section 8. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation of vapours and aerosol spray. Isolate area.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Runoff or release to sewer, waterway or ground is forbidden. For waste disposal, see section 13.

Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for more detailed information on health effects and symptoms. Collect and dispose of spillage as indicated in section 13.

7. HANDLING AND STORAGE

Precautions for safe handling	Do not eat, drink or smoke when using the product. Persons susceptible to allergic reactions should not handle this product. Pregnant women should not work with the product, if there is the least risk of lead exposure. Avoid inhalation of vapours and spray mists. Keep in original container. Store in tightly closed original container. Wear suitable protective clothing as protection against splashing or contamination.
Conditions for safe storage	Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from: Oxidising material. Storage Class Chemical storage.
Specific end use (s)	The identified uses for this product are detailed in Section 1.2

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Name	STD	TWA - 8 Hrs
C.I.PIGMENT RED 104 (C.I. 77605)	WEL	0.15 mg/m3
C.I.PIGMENT YELLOW 34 (C.I. 77603)	WEL	0.15 mg/m3

EPOXY RESIN (Number average MW < = 700) (CAS : 25068 - 38 - 6)

DNEL				
Industry	Dermal	Short Term	Systemic Effects	8.3 mg/kg/day
Industry	Inhalation.	Short Term	Systemic Effects	12.3 mg/m3
Industry	Dermal	Long Term	Systemic Effects	8.3 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	12.3 mg/m3
Consumer	Dermal	Short Term	Systemic Effects	3.6 mg/kg/day
Consumer	Inhalation.	Short Term	Systemic Effects	0.75 mg/m3
Consumer	Oral	Short Term	Systemic Effects	0.75 mg/kg/day
Consumer	Dermal	Long Term	Systemic Effects	3.6 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	0.75 mg/m3
PNEC				
Freshwater	3	mg/l		
Marinewater	0.3	mg/l		
Sediment (Freshwater)	0.5	mg/kg		
Sediment (Marinewater)	0.5	mg/kg		
Intermittent release	0.013	mg/l		

Formaldehyde , polymer with (chloromethyl) oxirane and phenol , mw < = 700 (CAS : 9003 - 36 - 5)

DNEL				
Industry	Dermal	Short Term	Local Effect	8.3 ppm
Industry	Dermal	Long Term	Systemic Effects	104.15 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	29.39 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	62.5 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	8.7 mg/m3
Consumer	Oral	Long Term	Systemic Effects	6.25 mg/kg/day
PNEC				
Freshwater	0.003	mg/l		
Marinewater	0.0003	mg/l		
Sediment (Freshwater)	0.294	mg/kg		
Sediment (Marinewater)	0.0294	mg/kg		
Soil	0.237	mg/kg		
Intermittent release	0.0254	mg/l		

Exposure controls

Protective equipment

Process conditions	Provide eyewash station.
Engineering measures	Provide adequate general and local exhaust ventilation.
Respiratory equipment	Wear suitable respiratory protection. Check that mask fits tight and change filter regularly.
Hand protection	Chemical resistant gloves required for prolonged or repeated contact. Use suitable protective gloves if risk of skin contact.
Eye protection	Wear approved safety goggles.
Other Protection	AVOID ALL SKIN AND RESPIRATORY CONTACT! Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
Skin protection	Wear apron or protective clothing in case of contact.
Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid or Coloured paste.
Colour	Variable
Odour	Slight odour.
Flash point (°C)	>150

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal temperature conditions and recommended use.
Chemical stability	No particular stability concerns.
Possibility of hazardous reactions	Hazardous reactions or instability may occur under certain conditions of storage or use.
Conditions to avoid	Avoid releasing to the environment.
Incompatible materials	Materials To Avoid No data recorded.
Hazardous decomposition products	Toxic gases/vapours/fumes of: Carbon dioxide (CO2). Carbon monoxide (CO). Oxides of: Lead. Chromium.

11. TOXICOLOGICAL INFORMATION

General information	Possible reproductive impact. Known or suspected carcinogen for humans. Lead is accumulated in the body ad may cause damage to the brain and nervous system after prolonged exposure. Known or suspected teratogen.
Inhalation	Vapour may irritate respiratory system or lungs.
Ingestion	Toxic if swallowed. Toxic: danger of very serious irreversible effects if swallowed.
Skin contact	Irritating to skin. Prolonged or repeated exposure may cause severe irritation.
Eye contact	Irritation of eyes and mucous membranes.

EPOXY RESIN (Number average MW < = 700) (CAS : 25068 - 38 - 6)

Toxic Dose 1 - LD 50	30, 000 mg/kg (oral rat)			
Toxic Dose 2 - LD 50	2, 000 mg/kg (dermal rabbit)			
Acute toxicity	Inhalation LC50	Not applicable		
Respiratory	sensitisation	Not applicable	Severe skin irritation	
Carcinogenicity :	Not applicable			
Reproductive Toxicity	Not applicable			
Specific target organ toxicity - single exposure	Not applicable			
Aspiration hazard	Skin contact	Not a skin sensitiser.	Eye contact	No specific health warnings noted

C . I . PIGMENT YELLOW 34 (C . I . 77603) (CAS : 1344 - 37 - 2)

Toxic Dose 1 - LD 50	>2, 000 mg/kg (oral rat)
Specific target organ toxicity - single exposure	STOT - Repeated exposure LOAEL 70 mg/kg Oral Ra

C . I . PIGMENT RED 104 (C . I . 77605) (CAS : 12656 - 85 - 8)

Toxic Dose 1 - LD 50	>2, 000 mg/kg (oral rat)
Specific target organ toxicity - single exposure	STOT - Repeated exposure LOAEL 70 mg/kg Oral Ra

OXIRANE , MONO [(C 12 - 14 - ALKYLOXY) METHYL] DERIVS (CAS : 68609 - 97 - 2)

Toxic Dose 1 - LD 50	17, 100 mg/kg (oral rat)			
Acute toxicity	Inhalation LC50	Not applicable	Dermal LD50	Not applicable
Skin Corrosion / Irritation	Moderately Irritating			
Serious eye damage / irritation	Slightly Irritating			
Respiratory or skin sensitisation	Severe skin irritation			

Formaldehyde , polymer with (chloromethyl) oxirane and phenol , mw < = 700 (CAS : 9003 - 36 - 5)

Toxic Dose 1 - LD 50	2, 000 mg/kg (oral rat)	
Toxic Dose 2 - LD 50	2, 000 mg/kg (dermal rabbit)	
Acute toxicity	Inhalation LC50	Not applicable
Respiratory or skin sensitisation	Respiratory sensitisation	Not available
Specific target organ toxicity - single exposure	Not available	

12. ECOLOGICAL INFORMATION

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

C . I . PIGMENT YELLOW 34 (C . I . 77603) (CAS : 1344 - 37 - 2)

Ecotoxicity

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

Toxicity

EPOXY RESIN (Number average MW < = 700) (CAS : 25068 - 38 - 6)

Acute Toxicity - Fish	LC50 96 hours 1.3 mg/l Onchorhynchus mykiss (Rainbow trout)
Acute Toxicity - Aquatic Invertebrates	EC50 48 hours 2.1 mg/l Daphnia magna

C . I . PIGMENT YELLOW 34 (C . I . 77603) (CAS : 1344 - 37 - 2)

Acute Toxicity - Fish	LC50 96 hours > 10, 000 mg/
Acute Toxicity - Aquatic Invertebrates	EC50 48 hours > 100 mg/
Acute Toxicity - Aquatic Plants	EC50 72 hours > 100 mg/l Scenedesmus subspicatu

C . I . PIGMENT RED 104 (C . I . 77605) (CAS : 12656 - 85 - 8)

Acute Toxicity - Fish	LC50 96 hours > 10, 000 mg/
Acute Toxicity - Aquatic Invertebrates	EC50 48 hours > 100 mg/
Acute Toxicity - Aquatic Plants	EC50 72 hours > 100 mg/l Scenedesmus subspicatu

OXIRANE , MONO [(C 12 - 14 - ALKYLOXY) METHYL] DERIVS (CAS : 68609 - 97 - 2)

Acute Toxicity - Fish	LC50 96 hours > 1.8 mg/l Onchorhynchus mykiss (Rainbow trout)
Acute Toxicity - Aquatic Invertebrates	EC50 48 hours 7.2 mg/l Daphnia magna
Acute Toxicity - Aquatic Plants	EC50 72 hours ~ 844 mg/l Freshwater algae
Persistence and degradability	Not applicable as the pigment is an inorganic substance and insoluble in water
Bio accumulative potential	Low bioaccumulation potential. Due to the very low solubility of C.I.Pigment's in water, the bioavailability of the substance is expected to be low. Therefore , the bioaccumulation of the substance is expected to be low
Mobility in soil	No data available
Results of PBT and vPvB assessment	Not Classified as PBT/vPvB by current EU criteria.
Other adverse effects	Due to extreme insolubility in water, this product is not toxic to aquatic life. Because of their chemical stability they do not degrade in water. However, the European Commission stated that all products containing lead and hexavalent chromium must be considered toxic to the environment

13. DISPOSAL CONSIDERATIONS

General information	Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.
Waste treatment methods	Dispose of waste and residues in accordance with local authority requirements. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Do not allow runoff to sewer, waterway or ground.
EWC NUMBER	Allocation of a waste code number in accordance with the European Waste Catalogue, should be carried out in agreement with an EA authorised waste disposal company.

14. TRANSPORT INFORMATION

UN No. (ADR/RID/ADN)	3082

UN No. (IMDG)	3082
UN No. (ICAO)	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN MIXTURE)

Transport hazard class (es)

ADR/RID/ADN Class	9
ADR/RID/ADN Class	Class 9: Miscellaneous dangerous substances and articles.
ADR Label No.	9
IMDG Class	9
ICAO Class/Division	9
Transport Labels	

Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

Environmental hazards

Environmentally Hazardous substance/Marine Pollutant 

Special precautions for user

EMS	F-A, S-F
Emergency Action Code	3Z
Hazard No. (ADR)	90
Tunnel Restriction Code	(E)

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC Code

Not applicable.

15. REGULATORY INFORMATION

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

Uk Regulatory References	Chemicals (Hazard Information & Packaging) Regulations.
Approved Code Of Practice	Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.
EU Legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
Chemical Safety Assessment	Not applicable.

16. OTHER INFORMATION

Risk Phrases In Full

R33	Danger of cumulative effects
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R45	May cause cancer.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic Environment
R61	May cause harm to the unborn child.
R62	Possible risk of impaired fertility.

Hazard Statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H350	May cause cancer.
H360Df	May damage the unborn child and suspected of damaging fertility.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects.
Further information	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process.