

SAFETY DATA SHEET



REVISION DATE: JUNE 11, 2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: TOPAZ
Product Code: PC-1161-P
Chemical Name: Unsaturated Polyester Resin Pigment

Relevant identified uses of the substance or mixture and restrictions on use

Recommended use Industrial colouring applications

Restrictions on use This product must not be used for children's articles (including toys, paints, jewelry and equipment), food and food packaging, drugs and medical devices, ceramics and glassware and cosmetics.

Details of the supplier of the safety data sheet

Manufacturer: Vengar Colours & Coatings Inc.
#106, 12940 - 80th Avenue
Surrey, BC, Canada, V3W 3B2
Tel: 604-501-4872, Fax: 604-501-4873
Email: vengar@telus.net

Emergency telephone number +1 613-996-6666 (CANUTEC) 24 hours, 7 days a week

2. HAZARD(S) IDENTIFICATION

GHS Classification

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS):

Carc.2 H351
Repr.1A H360
STOT RE 2 H373

Adverse physiochemical, human health and environmental effects:

No additional information available.

GHS label elements

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS):

Hazard pictogram



GHS08

| | |
|---------------------------------|---|
| Signal Word | :Danger |
| Hazard Statements | :H351 – Suspected of causing cancer H360 – May damage fertility of the unborn child H373 – May cause damage to organs through prolonged or repeated exposure |
| Precautionary Statements | :P201 – Obtain special instructions before use P202 – Do not handle until all safety precautions have been read and understood P270 – Do not eat, drink or smoke when using this product P280 – Wear eye protection, protective clothing, protective gloves P308 + P313 – If exposed or concerned: Get medical advice / Attention P501 – Dispose of contents / container in accordance with local, national and international regulation |

Other Hazards None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/mixture Mixture
Other means of identification Unsaturated Polyester Resin Pigment

| Ingredient Name | Product Identifier | % | GHS Classification |
|------------------------|--------------------|-------|--------------------------------------|
| Resin mixture | Not Available | 55.00 | Not Hazardous |
| C.I. Pigment Yellow 34 | 1344-37-2 | 2.43 | Carc.2 H351 STOT RE 2 H373 |
| Titanium Dioxide | 13463-67-7 | 29.03 | Not Hazardous |
| Magnesium Ferrite | 12068-86-9 | 10.17 | Not Hazardous |

Any concentration shown as a range is to protect confidentiality or is due to batch variation. Any concentration shown as exact is based on formula.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES

General advice

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10minutes. Get medical attention.

Inhalation If breathed in, move person into fresh air. If unconscious place in

recovery position and seek medical attention. If symptoms persist, get medical attention.

Ingestion Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention if irritation occurs.

Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact Causes eye irritation.
Inhalation May be harmful if inhaled.
Ingestion Irritation in mouth, throat and stomach.
Skin contact May cause skin irritation.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments No specific treatment.
See toxicological information (Section 11)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, Foam, Carbon Dioxide CO₂, Dry chemical.

Specific hazards during fire-fighting Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous combustion products No hazardous combustion products are known.

Specific extinguishing methods Product is compatible with standard fire-fighting agents.

Further information Standard procedure for chemical fires.

Special protective Fire-fighters should wear appropriate protective equipment and

equipment for fire-fighters self-contained breathing apparatus (SCBA) with a full face-piece.

6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions, protective equipment and emergency procedure | Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. |
| Environmental precautions | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| Methods and materials for containment and cleaning up | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed container for disposal. Dispose contaminated material as waste according to Section 13. |
| Other information | Comply with all applicable federal, state, and local regulations. |

7. HANDLING AND STORAGE

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| Precautions for safe handling | Smoking, eating and drinking should be prohibited in the application area. For personal protection see Section 8. |
| Conditions for safe storage | Electrical installations / working materials must comply with the technological safety standards. |
| Materials to avoid | No materials to be especially mentioned. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Control parameters

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| OSHA PEL (TWA)(mg/m³) | 0.05mg/m³ Lead 0.005mg/m³ Chromium (VI) |
| ACGIH TWA (mg/m³) | 0.05mg/m³ Lead 0.012mg/m³ Chromium (VI) |

Engineering measures General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and / or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection No personal respiratory protective equipment normally required.

Eye protection Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

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| Skin and body protection | Wear protective clothing, safety shoes and chemical resistant Gloves. |
| Hygiene measures | General industrial hygiene practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

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| Physical State | Liquid |
| Appearance | Various colours |
| Colour | Various colours |
| Odour | Slight odour |
| Odour Threshold | Not Available |
| pH | Not Available |
| Melting Point | Not Available |
| Freezing Point | Not Available |
| Solidification Point | Not Available |
| Boiling Point | 145.2°C (293.4°F) |
| Flash Point | >93.34°C (>200.01°F) |
| Evaporation Rate | > 1(Ethyl Ether (anhydrous) =1) |
| Flammability (Solid/Gas) | Not Available |
| Upper Explosive Limit | Not Available |
| Lower Explosive Limit | Not Available |
| Vapor Pressure | Not Available |
| Vapor Density | >1 (AIR=1) |
| Relative Density | 2.1 to 3.0 |
| Water Solubility | Insoluble |
| Solubility in Other Solvents | Not Available |
| Partition Coefficient | Not Available |
| Auto ignition Temperature | Not Available |
| Decomposition Temperature | Not Available |
| Viscosity, Kinematic | Not Available |
| Viscosity, Dynamic | Not Available |
| Explosive Properties | Not Available |
| Oxidizing Properties | Not Available |

10. STABILITY AND REACTIVITY

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|---|---|
| Reactivity | In the event of a fire, oxides of lead and chromium may be generated. |
| Chemical stability | This product is stable at normal handling and storage conditions. |
| Possibility of hazardous reactions | Product will not undergo hazardous polymerization. |
| Conditions to avoid | None known. |
| Incompatible materials | Reactive or incompatible with strong oxidizing materials. |
| Hazardous decomposition products | Thermal decomposition or burning may release oxides of lead and chromium, toxic gases / vapours. |

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Information on likely routes of exposure Inhalation, skin contact, eye contact, ingestion.

Acute toxicity Not classified based on available information.

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| C.I. Pigment Yellow 34 (1344-37-2) | |
| LD50 oral rat | >10000mg/kg bodyweight (OECD 401 method) |
| LD50 dermal rat | No Data Available |

Skin corrosion / irritation :Not classified.
(Rabbit / Non-Irritant (OECD 404). As substance is not Irritating, corrosivity is not expected.)

Serious eye irritation / injury :Not classified.
(Rabbit / Non-Irritant (OECD 405). The toxicological tests were carried out on product with comparable composition.

Respiratory or skin sensitization :Not classified.
See Section 16 for further information.

Germ cell mutagenicity :Not classified.
Ames Test: In vitro: positive / In vivo: negative

Carcinogenicity :Suspected of causing cancer
According to International Agency for Research on Cancer (IARC):2B
According to American Conference of Governmental Industrial Hygienists (ACGIH):A2
See Section 16 for further information.

Reproductive toxicity :May damage the unborn child. Suspected of damaging fertility. (based on review of lead (Pb)).

STOT – single exposure :Not classified based on available information.

STOT – repeated exposure :May cause damage to organs through prolonged or Repeated exposure.
(route: oral, target organs: liver, kidney, blood production / hematopoiesis).

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| C.I. Pigment Yellow 34 (1344-37-2) | |
| LOAEL (oral, dog, 90 days) | 75.4mg/kg body weight/day |

Aspiration toxicity :Not classified based on available information.

Further information :See Section 16 for further information.

12. ECOLOGICAL INFORMATION

Toxicity

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| C.I. Pigment Yellow 34 (1344-37-2) | |
| LC50 fishes 1 | >10000mg/l <i>Leuciscus idus</i> 96h (test method comparable to OECD 203) |
| EC50 <i>Daphnia</i> 1 | >100 mg/l <i>Daphnia magna</i> 48 (est method comparable to OECD 202) Based on review of lead (Pb):300ug/l <i>Daphnia magna</i> (3weeks) Based on review of hexavalent chromium (Cr(VI)): 2000ug/l <i>Daphnia magna</i> (3 weeks) |
| EC50 other aquatic organisms 1 | >10000mg/l <i>Pseudomonas putida</i> 30m |
| EC50 other aquatic organisms 2 | >100ml/l <i>Desmodesmus subspicatus</i> 72h (OECD 201) |
| LOEC (acute) | Based on review of lead (Pb): 13ug/l <i>Onchorhynchus mykiss</i> (3 weeks) |
| NOEC chronic fish | Based on review of hexavalent chromium (Cr(VI)): 1mg/l <i>Pimephales promelas</i> 412 d |
| NOEC chronic algae | >50mg/l <i>Desmodesmus subspicatus</i> 72h (OECD 201) |

Persistence and degradability

| | |
|---|----------------|
| C.I. Pigment Yellow 34 (1344-37-2) | |
| Persistence and degradability | Not Applicable |
| Biodegradation | Not Applicable |

Bioaccumulative potential

| | |
|---|--|
| C.I. Pigment Yellow 34 (1344-37-2) | |
| Log Pow | Not Applicable |
| Log Kow | Not Applicable |
| Bioaccumulative potential | Due to the very low solubility of C.I. Pigment Yellow 34 in water the bioavailability of the substance is expected to be low. Therefore, the bioaccumulation potential of the substance is expected to be low. |

Mobility in soil

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|---|---|
| C.I. Pigment Yellow 34 (1344-37-2) | |
| Mobility in soil | Based on the review of lead (Pb): 5.71 log Kd (predicted) |
| Ecology – soil | This product is not expected to adsorb to soil or sediment. |

Other adverse effects :Due to its extreme water insolubility this product is non toxic to aquatic life. Because of its chemical stability it does not degrade in water.

13. DISPOSAL CONSIDERATIONS

Disposal methods Disposal of this product, solutions and any by-products should at all times comply with all applicable local, state and federal requirements of environmental protection and waste disposal legislation. Disposal of surplus

and non-recyclable products via a licensed waste disposal contractor.

14. TRANSPORT INFORMATION

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| Special transport precautions | : No special requirements Not classified as dangerous goods under transport regulations. |
| Transport Canada – Road | Not dangerous goods. |
| Transport Canada – Rail | Not dangerous goods. |
| Transport Canada – Inland Waterways | Not dangerous goods. |
| U.S. DOT – Road | Not dangerous goods. |
| U.S. DOT – Rail | Not dangerous goods. |
| U.S. DOT – Inland Waterways | Not dangerous goods. |
| International Maritime Dangerous Goods | Not dangerous goods. |
| International Air Transport Association – Cargo | Not dangerous goods. |
| International Air Transport Association – Passenger | Not dangerous goods. |

15. REGULATORY INFORMATION

CANADA

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|------------------------------------|--|
| C.I. Pigment Yellow 34 (1344-37-2) | |
| WHMIS Classification | Class D Division 2 Subdivision A – Very toxic material causing other Toxic effects |

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

US Federal regulations

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|------------------------------------|--|
| C.I. Pigment Yellow 34 (1344-37-2) | |
| SARA 313 | This product contains the following listed chemical(s) subject to the Reporting requirements of section 313 of the Emergency Planning And Community Right to Know Act of 1986 and 40CFR372. |
| Chromium (CAS 7440-47-3) | <4.8% |
| Aluminum (CAS 7429-90-5) | <0.64% |
| Lead (CAS 7439-92-1) | <21.12% |
| California Proposition 65 | Warning! Chromium (VI) This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Lead This product contains a chemical known to the State of California to cause cancer. The conclusion that all chromium (VI) and lead compounds have the same toxicological properties is not supported by current toxicological data for lead chromate based pigments. This information must be included in all SDS that are copied and |

distributed for these materials.

International Inventories

Canadian Inventory Status: All components of this material are listed on the Canadian Domestic Substance List (DSL).

TSCA Inventory Status: All components of this material are listed on the US Toxic Substances Control Act (TSCA) Inventory.

16. OTHER INFORMATION

Hazardous Material Information System (USA)

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|------------------------|----------|
| HEALTH | 2 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High/Serious, 4 = Extreme, * = Chronic

National Fire Protection Association (USA)



| | |
|------------------|--|
| Carc.2 | Carcinogenicity, Category 2 |
| Repr. 1A | Reproductive toxicity, Category 1A |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 |
| H351 | Suspected of causing cancer |
| H360 | May damage fertility or the unborn child |
| H373 | May cause damage to organs through prolonged or repeated exposure |

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to

be considered a warranty or quality specification. The 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, unless specified.
