



SAFETY DATA SHEET

Section 1. Product and Company Identification

1.1 Product Identifier

Product name : RAL 2001 PURE ORANGE
Product code : PO-0224-G
Other means of identification : Not available.
Product type : Powder.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product Use : Industrial applications.
Use of the substance / mixture : Coating. Paints. Painting-related materials.
Uses advised against : Not applicable.

1.3 Details of the supplier of the safety data sheet

Canadian Supplier : Prism Powder Coatings Ltd.
321 Edgeley Blvd.
Concord, Ontario, Canada
L4K 3Y2
U.S. Supplier : Prism Powder Coatings Ltd.
2890 Carquest Drive
Brunswick, Ohio, U.S.A.
44212

1.4 Emergency telephone number

Emergency telephone number : (330) 225-5626 (U.S.)
(905) 660-5361 (Canada)
Technical phone number : 1-800-774-7611

Section 2. Hazards Identification

2.1 Hazard Classification

OSHA/HCS Status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture : SKIN SENSITIZATION - Category 1 ACUTE TOXICITY (oral) – Category 3 GERM CELL MUTAGENICITY – Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) – Category 2 COMBUSTIBLE DUST

2.2 Label elements

Hazard Pictograms



Signal Word

: Danger

Hazard Statements

: May form combustible dust concentrations in air. Toxic if swallowed. May cause an allergic skin reaction. May cause genetic defects. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fumes/gas/mist/vapours/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response

: IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF ON SKIN: wash with plenty of soap and water. If exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell. Rinse mouth. IF SKIN irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage

: Store locked up.

Disposal

: Dispose of contents/container in accordance with all local, regional, national and international regulations.

Supplemental Label Elements

: Keep container tightly closed. Keep away from heat, sparks, open flames and hot elements surfaces. No smoking. Prevent dust accumulation. Emits toxic fumes when heated.

2.3 Other hazards

Hazards not otherwise classified

: Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition / Information on Ingredients

3.1 Substance

Substance/mixture

: Mixture

Product name

: RAL 2001 PURE ORANGE

3.2 Ingredients

Ingredient Name	%	CAS Number
1,3,5-Triglycidyl isocyanurate	2.5% to 4.5%	2451-62-9
Bisphenol A	0% to 1%	80-05-7
Bismuth Vanadate Pigment	5% to 6%	14059-33-7

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 and hence require reporting in this section.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

Section 4. First Aid Measures

NOTE: If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately and have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

4.1 Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Move into fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

4.2.1 Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : Toxic if swallowed.

4.2.2 Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
Irritation
Redness
- Inhalation** : Adverse symptoms may include the following:
Respiratory tract irritation
Coughing
- Skin contact** : Adverse symptoms may include the following:
Irritation
Redness
- Ingestion** : No specific data.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11).

Section 5. Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Specific hazards arising from the chemical** : Fine dust clouds may form explosive mixtures with air.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

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).

6.3 Methods for containment and cleaning up

Small spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

7.1 Conditions for safe storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready to use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.2 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Avoid breathing dust. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before

transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 8. Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits

1,3,5-Triglycidyl isocyanurate (2451-62-9)	
ACGIH TLV-TWA	0.05 mg/m ³
Bisphenol A (80-05-7)	
ACGIH TLV-TWA	10 mg/m ³
OSHA PEL-TWA	15 mg/m ³
Bismuth Vanadate Pigment (14059-33-7)	
No Data Available	No Data Available

Key to abbreviations

NIOSH = National Institute for Occupational Safety and Health	R = Respirable
ACGIH = American Conference of Governmental Industrial Hygienists.	STEL = Short term Exposure limit values
OSHA = Occupational Safety and Health Administration.	TD = Total dust
F = Fume	TLV = Threshold Limit Value
C = Ceiling Limit	TWA = Time Weighted Average
REL = Recommended Exposure Limit	PEL = Permissible Exposure Limit

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Appropriate engineering controls

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

8.3 Environmental exposure controls

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.

8.4 Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses with side shields.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Skin Protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : Butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Not available.

Flash point	: Closed cup: Not applicable.
Material supports combustion	: Yes.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Evaporation rate	: 0 (butyl acetate = 1)
Vapor pressure	: 0 kPa (0 mm Hg) [room temperature]
Vapor density	: Not available.
Specific Gravity	: 1.524108
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol / water	: Not available.
Viscosity	: Kinematic (40°C (104°F)): Not applicable.
Volatility	: 0% (v/v), 0% (w/w)
% Solid. (w/w)	: 100

Section 10. Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur

10.4 Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products

Decomposition products may include the following materials: carbon monoxide, carbon dioxide

Section 11. Toxicological information

11.1 Information on the likely routes of exposure

11.1.1 Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : Toxic if swallowed.

11.1.2 Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
Irritation
Redness
- Inhalation** : Adverse symptoms may include the following:
Respiratory tract irritation
Coughing
- Skin contact** : Adverse symptoms may include the following:
Irritation
Redness
- Ingestion** : No specific data.

11.2 Delayed and immediate effects and also chronic effects from short and long term exposure

- Conclusion/Summary** : There are no data available on the mixture itself. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

11.2.1 Short term exposure

- Potential immediate effects** : There are no data available on the mixture itself.
- Potential delayed effects** : There are no data available on the mixture itself.

11.2.2 Long term exposure

- Potential immediate effects** : There are no data available on the mixture itself.
- Potential delayed effects** : There are no data available on the mixture itself.

11.2.3 Potential chronic health effects

- General** : May cause damage to organs through prolonged or repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory

irritation. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : May cause genetic defects.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

11.3 Information on toxicological effects

11.3.1 Acute Toxicity

1,3,5-Triglycidyl isocyanurate (2451-62-9)			
RAT	LD50	ORAL	100-200 mg/kg
RAT	LC50	INHALATION	>650 mg/m3
RAT	LD50	DERMAL	>2000 mg/kg
Bisphenol A (80-05-7)			
RAT	LD50	ORAL	5000 mg/kg
No Data Available	LC50	INHALATION	No Data Available
RABBIT	LD50	DERMAL	3000 mg/kg
Bismuth Vanadate Pigment (14059-33-7)			
No Data Available	LD50	ORAL	No Data Available
No Data Available	LC50	INHALATION	No Data Available
No Data Available	LD50	DERMAL	No Data Available

Conclusion/Summary : There are no data available on the mixture itself.

11.3.2 Irritation/Corrosion

Conclusion/Summary

- Skin : There are no data available on the mixture itself.
- Eyes : There are no data available on the mixture itself.
- Respiratory : There are no data available on the mixture itself.

11.3.3 Sensitization

Conclusion/Summary

- Skin : There are no data available on the mixture itself.
- Respiratory : There are no data available on the mixture itself.

11.3.4 Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

11.3.5 Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

11.3.6 Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

11.3.7 Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

11.3.8 Aspiration hazard

Conclusion/Summary : There are no data available on the mixture itself.

11.4 Specific target organ toxicity

11.4.1 Specific target organ toxicity (single exposure)

Not available.

11.4.2 Specific target organ toxicity (repeated exposure)

1,3,5-Triglycidyl isocyanurate (2451-62-9): Category 2

11.4.3 Target organs

Contains material which causes damage to the following organs: lungs, upper respiratory tract, eyes, skin, kidneys, the reproductive system, testes.

Section 12. Ecological information

12.1 Toxicity

1,3,5-Triglycidyl isocyanurate(2451-62-9)

LC50 > 77 mg/L	96h	Fish	OECD 203	N/A	N/A
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The Environmental impact of this product has not been fully investigated.

12.2 Persistence and degradability

No Information Available

12.3 Bioaccumulative potential

No Information Available

12.4 Mobility in soil

Soil / water partition coefficient (K_{oc}) : No Information Available

Section 13. Disposal considerations

13.1 Disposal

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 6: Accidental release measures, Section 7: Handling and storage, and Section 8: Exposure controls / personal protection, for additional handling information and protection of employees.

Section 14. Transport information

14.1 UN Number

Not applicable.

14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Transport in bulk

Not applicable.

14.7 Special precautions for user

Not applicable.

Section 15. Regulatory information

15.1 Canadian Federal Regulations

WHMIS Statement : This safety data sheet has been prepared in accordance with the Canadian Hazardous Products Regulations (HPR) and contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) : Not available.

Domestic Substances List (DSL) : All components are listed or exempted.

15.2 U.S. Federal & State Regulations

OSHA Statement : This safety data sheet has been prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the supplier notification requirements of SARA Title III Section 313.

CERCLA : Not available.

Toxic Substances Control Act (TSCA) : All components are listed or exempted.

Chemicals listed below, if any, are required to be identified under **SARA Section 313 (40 CFR 372.65)** and/or **California Proposition 65**.

Bisphenol A (80-05-7)
SARA 313 1.0% de minimis concentration

Section 16. Other Information

Hazardous Material Information System (HMIS)

Health : 2
Flammability : 0
Reactivity : 0
Physical hazards : E

HMIS Rating System: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe, * = Chronic Effects

Caution: HMIS ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS ratings are not required on MSDSs the preparer may choose to provide them. HMIS ratings are to be used with a fully implemented HMIS program. HMIS is a registered mark of the National Paint & Coatings Association.

Prepared by Prism Powder Coatings Ltd.: May 29, 2018

Disclaimer: *The information contained in this safety data sheet is based on present scientific and technical knowledge and is accurate to the best of our knowledge. It is the responsibility of the user to determine the suitability of the product for its intended use and to comply with all federal, state and local regulations applicable to the safe handling and use of the product. 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.*