



SAFETY DATA SHEET

TO COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR.1910.1200 & THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product Form: Substance
Substance Name: Orca Guard Black 9000 Gel Coat
Product Code(s): 0579000015, 0579000115
Chemical Family: Aromatic
Synonyms: Not Available

1.2 Details of the Manufacturer of the Safety Data Sheet

Orca Composites
1468 Northgate Blvd
Sarasota, FL 34234
T 206-782-0660
F 888-782-0662
www.OrcaComposites.com

1.3 Emergency Telephone Number

Emergency Number: CHEMTREC: Domestic - 800-424-9300
International- 703-527-3887

2. Hazards Identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.1 Classification of the Substance or Mixture

Flammable liquid and vapor. – Category 3, H226
Acute toxicity – Inhalation – Category 4, H332
Eye irritation – Category 2, H319
Skin irritation – Category 2, H315
STOT-SE = Specific Target Organ Toxicity – Single Exposure – Category 3, H335
STOT-RE = Specific Target Organ Toxicity – Repeated Exposure – Category 1, H372

2.2 Label Elements

GHS-US Labeling:



Signal Word (GHS-US):
Hazard Statement:

DANGER
H226-Flammable liquid vapor

H315-Causes skin irritation
 H319-Causes serious eye irritation
 H332-Harmful if inhaled
 H335-May cause respiratory irritation
 H372-Causes damage to organs through prolonged or repeated exposure if inhaled
 H304-May be fatal if swallowed and enters airways

Precautionary Statements (GHS-US)

General

P101-If medical advice is needed, have product container or label at hand

Prevention

P102-Keep out of reach of children
 P210-Keep away from heat/sparks/open flames/hot surfaces. NO smoking
 P233-Keep container tightly closed
 P240-Ground/bond container and receiving equipment
 P241-Use explosion-proof electrical/ventilating/lighting/equipment
 P242-Use only non-sparking tools
 P243-Take precautionary measures against static discharge
 P280-Wear protective gloves/protective clothing/eye protection/face protection
 P264-Wash with water thoroughly after handling
 P271-Use only outdoors or in a well-ventilated area
 P270-Do not eat, drink or smoke when using this product
 P261-Do not breathe vapor or mist
 P370+P378-In case of fire: Use DRY chemicals, CO², water spray foam

Response:

P308+P313-IF exposed or concerned: Get medical attention
 P304+P340+P312-IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell
 P303+P361+P353-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
 P333+P313-If skin irritation occurs: Get medical attention
 P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337+P313-If eye irritation persists: Get medical attention/advice
 P391-Collect spillage

Storage:

P403+P235-Store in a well-ventilated place. Keep cool
 P233-Keep container tightly closed

Disposal:

P405-Store locked up
 P501-Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other Hazards

Hazards not otherwise classified: None known

3. Composition/Information on Ingredients

3.1. Substances: Mixture

Component	Concentration (%)	CAS Number
Styrene	31-33	100-42-5
Carbon Black	≥10 - <25	1333-86-4
Methyl Methacrylate	6.3	80-62-6
Talc	≥5 - <10	14807-96-6
Silica, Amorphous	≥1 - <3	7631-86-9

Cobalt 2-Ethylhexanoate	≥0.1 - <0.3	136-52-7
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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.

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

4. First Aid Measures

4.1. First Aid Measures

Inhalation:	Move the victim to a safe area as soon as possible. Allow the victim to rest in a well-ventilated area. If breathing is difficult, give oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Ingestion:	Wash out mouth with water. Remove dentures if any. 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. Seek immediate medical attention.
Skin Contact:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. If irritation persists, seek medical attention. Wash contaminated clothing before reuse. Clean shoes thoroughly before reuse.
Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Use of buffered baby shampoo will aid in removal. If irritation persists, get medical attention.
Most important symptoms/effects, Acute and Delayed:	EYE CONTACT: Causes serious eye irritation INHALATION: Harmful if inhaled. May cause respiratory irritation. SKIN CONTACT: Causes skin irritation. INGESTION: Irritating to mouth, throat and stomach.
Over-exposure signs/symptoms:	EYE CONTACT: Adverse symptoms may include the following: pain or irritation, watering, redness INHALATION: Adverse symptoms may include the following: respiratory tract irritation, coughing SKIN CONTACT: Adverse symptoms may include the following: irritation, redness INGESTION: Adverse symptoms may include the following: irritating to mouth, throat and stomach
Notes for physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SEE TOXICOLOGICAL INFORMATION (SECTION 11)

5. Fire Fighting Measures

EXTINGUISHING MEDIA

5.1. Suitable Extinguishing Media

Use dry chemical, CO₂, water spray (fog) or foam

5.2. Unsuitable Extinguishing Media

Do not use water jet

5.3. Special Hazards Arising from the Chemical

Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is harmful to

aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

5.4. Hazardous Thermal Decomposition Products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides, halogenated compounds, metal oxide/oxides

5.5. Special protective actions for fire-fighters

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain

5.6. 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

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

6.1. For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation.

6.2. For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. See also the information in 'For non-emergency personnel'

6.3. 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

6.4. Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

6.5. Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: See Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and Storage

Precautions for safe handling

7.1. Protective measures

Put on appropriate personal protective equipment (see Section 8). 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. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling)

equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

7.2. 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.

7.3. 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. Eliminate all ignition sources. Segregate from oxidizing materials. Keep container tightly closed and sealed until ready for 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. Refer to the product label and/or technical data sheet for further information.

8. Exposure Controls/Personal Protection

Control Parameters

8.1. Occupational Exposure Limits

Component	Exposure Limits
Styrene	<p>ACGIH TLV (United States, 3/2012) Absorbed through skin TWA: 20 ppm 8 hours TWA: 85 mg/m³ 8 hours STEL: 40 ppm 15 minutes STEL: 170 mg/m³ 15 minutes</p> <p>OSHA PEL Z2 (United States, 11/2006). TWA: 100 ppm 8 hours AMP: 600 ppm 5 minutes CEIL: 200 ppm</p> <p>NIOSH REL (United States, 6/2009). TWA: 50 ppm 10 hours TWA: 215 mg/m³ 10 hours STEL: 100 ppm 15 minutes STEL: 425 mg/m³ 15 minutes</p>
Methyl Methacrylate	<p>ACGIH TLV (United States, 3/2012) Skin sensitizer TWA: 50 ppm 8 hours TWA: 205 mg/m³ 8 hours STEL: 100 ppm 15 minutes STEL: 410 mg/m³ 8 hours</p> <p>NIOSH REL (United States, 6/2009). TWA: 100 ppm 10 hours TWA: 410 mg/m³ 10 hours</p> <p>OSHA PEL (United States, 6/2010). TWA: 100 ppm 8 hours TWA: 410 mg/m³ 8 hours</p>
Talc	<p>NIOSH REL (United States, 6/2008). TWA: 2 mg/m³ 10 hours Form: Respirable fraction</p> <p>OSHA PEL Z3 (United States, 9/2005). : 1 f/cc 30 minutes. Form: not containing asbestos</p> <p>TWA: 20 mppcf 8 hours Form: not containing asbestos</p> <p>ACGIH TLV (United States, 1/2008). TWA: 0.1 f/cc 8 hours</p>
Silica, Amorphous	<p>NIOSH REL (United States, 6/2009). TWA: 6 mg/m³ 10 hours</p>
Cobalt 2-Ethylhexanoate	<p>OSHA PEL (United States). TWA: 0.1 mg/m³</p>

Appropriate engineering controls: Use only with adequate ventilation. 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.

8.2. Individual protection measures

Eye/Face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.



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. Ensure that eyewash stations and safety showers are close to the workstation location.

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.

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.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Physical state:	Liquid
Color:	Black
Odor:	Aromatic
Odor Threshold:	0.01 – 0.1 ppm (styrene)
pH:	Not applicable
Evaporation rate:	<1 (Butyl acetate = 1)
Melting Point:	-23.8°F (-30.6°C) (styrene)
Boiling point:	293°F (145°C) (styrene)
Flash point:	88°F (31°C) (styrene)
Auto-ignition Temperature:	914°F (490°C) (styrene)
Decomposition Temperature:	Not available
Flammability (solid, gas):	Not applicable
Vapor pressure:	5.0 mm Hg@ 68°F (20°C) (styrene)
Vapor density:	3.6 (Air = 1) (styrene)
Relative density:	1.1 - 1.4 (water=1)
Solubility:	Slight
Partition coefficient	
N-Octanol/water:	Not available
Viscosity:	Not available

Molecular Weight: 10,000 to 15,000
Explosive Limits: Upper - 6.1% Lower – 1.1% (styrene)

9.2. Other Information

None available

10. Stability and Reactivity

10.1. Reactivity

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

10.2. Possibility of hazardous reactions

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

10.3. Chemical Stability

This product is stable. Stable under recommended storage and handling conditions (see Section 7)

10.4. Conditions to Avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition

10.5. Incompatible Materials

Reactive or incompatible with the following materials: oxidizing materials

10.6. Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute toxicity

Component	Result	Species	Dose	Exposure
Styrene	LC50 Inhalation Gas.	Rat	2770 ppm	4 hours
	LC50 Inhalation Vapor	Rat	11800 mg/m ³	4 hours
	LD50 Oral	Rat	2650 mg/kg	-----
Methyl Methacrylate	LC50 Inhalation Gas.	Rat	7094 ppm	4 hours
	LC50 Inhalation Vapor	Rat	78000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	-----
	LD50 Oral	Rat	7872 mg/kg	-----
Cobalt 2-Ethylhexanoate	LD50 Dermal	Rabbit	>5 g/kg	-----
	LD50 Oral	Rat	1.22 g/kg	-----
	LD50 Oral	Rat	6171 mg/kg	-----

Irritation/Corrosion

Component	Result	Species	Score	Exposure	Observation
Styrene	Eyes – Mild irritant	Human	-----	50 ppm	-----
	Eyes – Moderate irritant	Rabbit	-----	24 hours 100	-----
	Eyes – Severe irritant	Rabbit	-----	milligrams	-----
	Skin – Mild irritant	Rabbit	-----	100 milligrams	-----
	Skin – Moderate irritant	Rabbit	-----	500 milligrams	-----
Silica/Amorphous	Eyes – Mild irritant	Rabbit	-----	100 Percent	-----
				24 hours 25 milligrams	

Sensitization: May cause sensitization by skin contact

Carcinogenicity Classification

Component	ACGIH	IARC	NTP
Styrene	-----	2B	Reasonably anticipated to be a human carcinogen

Methyl Methacrylate	-----	3	-----
Talc	-----	1	Known to be a human carcinogen
Silica, Amorphous	-----	3	-----
Cobalt 2-Ethylhexanoate	-----	2B	-----

1. **Negative Study:** A published study concluded that the mechanism for producing cancer in mice exposed to styrene is not applicable in human metabolism. (June 2013 Pharmacology & Toxicology 66 (2013))
2. **Negative Study:** A recent update to an extensive study of reinforced plastic workers from 1948-1977 concluded that there was no coherent evidence that styrene exposure increased risk of cancer (March 2013 Epidemiology Vol. 24 Issue 2).
3. **Positive Study:** Styrene induced pulmonary toxicity and carcinogenicity in mice was shown to be caused by a metabolite of styrene, probably styrene oxide. (Dec. 2001 Toxicology Vol. 169 Issue 2).

Mutagenicity: No mutagenic effect

Reproductive toxicity: Not considered to be toxic to the reproductive system

Teratogenicity: No known effect according to our database

Specific target organ toxicity (single exposure): No known effect according to our database

Specific target organ toxicity (repeated exposure): A study of long term effects of workers exposed to styrene levels in the range of 25-35 ppm, 8 hour TWA, indicated a possible mild hearing loss.

Aspiration hazard: No known effect according to our database

Potential acute health effects

Eye contact: No known effect according to our database

Inhalation: Harmful if inhaled. May cause respiratory irritation.

Skin contact: Causes skin irritation

Ingestion: Irritating to mouth, throat and stomach

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following: pain or irritation, watering, redness

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing

Skin contact: Adverse symptoms may include the following: irritation, redness

Ingestion: Adverse symptoms may include the following: irritating to mouth, throat and stomach

12. Ecological Information

12.1. Toxicity

Component	Result	Species	Exposure
Styrene	Acute EC50 4.7 mg/l Fresh water	Daphnia-Daphnia magna	48 hours
	Acute LC50 4.02 mg/l Fresh water	Fish- Pimephales promelas	96 hours
Methyl Methacrylate	Acute LC50 130000 µg/l Fresh water	Fish- Pimephales promelas - Adult	96 hours

12.2. Persistence and Degradability

Component	Test	Result	Dose	Inoculum
Styrene	EU	100% - Readily- 1 days	-----	-----

Component	Aquatic half-life	Photolysis	Biodegradability
Styrene	-----	-----	Readily

12.3. Bio-Accumulative Potential

Component	LogPow	BCF	Potential
Styrene	2.95	13.49	low
Methyl Methacrylate	1.38	-----	low

12.4. Mobility in Soil

NA

12.5. Other Adverse Effects

No known effect according to our database

13. Disposal Considerations

13.1. Waste Treatment Methods

Disposal methods:

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid disposal. Attempt to use product completely in accordance with intended use. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions:

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. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information

14.1 UN Number

UN-No. (DOT): 1866

14.2 UN Proper Shipping Name

DOT Proper Shipping Name: Resin Solution
DOT Hazard Class: 3-Class 3-Flammable and combustible liquid
49 CFR 173.120
Environmental Hazards: Marine Pollutant: NO

Hazard Labels (DOT):
Packing Group (DOT):
Special precautions for user:



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Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident of spillage.

14.3 Additional Information

Other Information: No supplementary information available

15. Regulatory Information

15.1. Inventories (National and International)

United States Inventory (TSCA 8b):	All Components are listed or exempted.
Australia:	Not determined
Canada:	All Components are listed or exempted.
China:	All Components are listed or exempted.
Europe:	Not determined
New Zealand:	Not determined
Philippines:	Not determined
Japan:	Not determined
Malaysia:	Not determined

Republic of Korea:
Taiwan:
SARA 311/312

All Components are listed or exempted.
Not determined

Composition/information on ingredients

Name	Fire Hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Styrene	Yes	No	No	No	Yes
Methyl Methacrylate	Yes	No	No	Yes	No
Talc	No	No	No	No	Yes
Silica, Amorphous	No	No	No	Yes	No
Cobalt 2-Ethylhexanoate	No	No	No	Yes	Yes

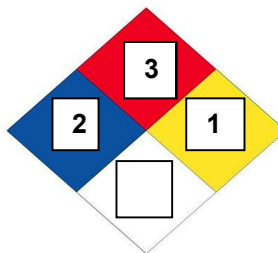
SARA 313

	Product Name	CAS Number
Form R – Reporting requirements	Styrene	100-42-5
	Methyl Methacrylate	80-62-6
	Cobalt 2-Ethylhexanoate	136-52-7

State regulations

Prop65 WARNING: This product can expose you to chemicals including styrene which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

15. Other Information



HMIS III Rating

Health: 2-Moderate Hazard
Flammability: 3-Serious Hazard
Physical: 1-Slight Hazard
Personal Protection: C

ORCA Composites believes the law requires us to inform you that detectable amounts of any of the listed chemicals might be present in ORCA products. Based on a review of the list, ORCA products, like all synthetic and naturally occurring chemical substances, may conceivably contain trace contaminants of some of the listed substances. While not necessarily added to our products as ingredients, some of the listed chemicals may be present in the raw materials as received from suppliers over which we have no control.

Preparation Date: 9/2/2018

Prepared by: Kevin Aber

Comments: This Safety Data Sheet was prepared using information provided by Orca Composites

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and ORCA Composites assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.