

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Name : OPACI-COAT®
Product code : OC/RC

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

1.2.1. Relevant identified uses

Main use category : Professional use, Industrial use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Coating

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ICD High Performance Coatings
7350 S. Union Ridge Parkway
Ridgefield, WA 98642
United States of America

Tel: +1 (360) 546 2286
Fax: +1 (360) 546 2287

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
UNITED STATES OF AMERICA	ICD High Performance Coatings	7350 S. Union Ridge Parkway Ridgefield, WA 98642	: +1 (360) 546 2286

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS Classification according to Regulation (EC) No. 1272/2008 [CLP]

H316 Skin irritation : Category 3
H320 Eye Irritation : Category 2A

Full text of H-phrases mentioned in this Section: see Section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes mild skin irritation
Causes serious eye irritation

Precautionary statements : **Prevention:**
Wash skin and face thoroughly after handling.
Wear protective gloves and eye protection.

Response:

IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical attention.

If eye irritation persists: Get medical attention.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Hazardous ingredients:

No reportable quantities of hazardous materials present

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. In case of accident or if you feel unwell, seek medical advice (show the label where possible). When symptoms persist or in all cases of doubt seek medical advice.
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest. Get medical attention
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Causes skin irritation. Causes eye irritation. Suspected of damaging fertility or the unborn child.
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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Alcohol-resistant foam. Carbon dioxide (CO ₂). Dry chemical.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	: Exposure to combustion products may be a hazard to health.
Hazardous combustion products	: Carbon oxides. Silicon oxides. Formaldehyde.

5.3. Advice for firefighters

Firefighting instructions	: Use extinguishing methods that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Protection during firefighting	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

6.2. Environmental precautions

Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the clean-up of releases. You will need to determine which regulations are applicable.

6.4. Reference to other sections

Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Local/Total ventilation	: Use only with adequate ventilation.
Precautions for safe handling	: Avoid inhalation of vapor or mist. Do not swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the environment.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash Skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep in properly labeled containers. Store in accordance with the particular national regulations.
Incompatible materials	: Strong oxidizing agents.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredients with workplace control parameters:

No reportable quantities of hazardous materials present

8.2. Exposure controls

Appropriate engineering controls	: Processing may form hazardous compounds (see section 10). Ensure adequate ventilation, especially in confined areas. Minimize workspace exposure concentrations.
Personal protective equipment	: Protective clothing. Protective goggles or safety glasses. Gloves.
Hand protection	: Wear protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: No personal respiratory protective equipment normally required.



Other information	: Do not eat, drink or smoke during use.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Various.
Odour	: Slight.
Odour threshold	: No data available
pH	: 10 - 11
Relative evaporation rate (butylacetate=1)	: No data available

Melting point	: No data available
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: > 101.1 °C Method: closed cup
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.02 g/cm³
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: Various
Explosive properties	: Not explosive
Oxidising properties	: This mixture is not classified as oxidizing.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not classified as a reactivity hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Use at elevated temperatures may form highly hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Oxidizing agents, strong acids

10.6. Hazardous decomposition products

Carbon oxides. Silicon oxides. Formaldehyde.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	: Inhalation. Skin contact. Ingestion. Eye contact.
Acute toxicity	: Not classified. May be irritating to respiratory system, eyes and skin
Acute dermal toxicity	: Acute toxicity estimate: >5000 mg/kg Method: calculation method
Skin corrosion/irritation	: May cause skin irritation
Serious eye damage/eye irritation	: May cause eye irritation.
Skin sensitization	: Not classified based on available information.
Respiratory sensitization	: Not classified based on available information.
Germ cell mutagenicity	: Not classified based on available information.
Carcinogenicity	: Not classified based on available information.

Ingredient	Results	Remarks
Diethylamine	Negative.	Species: Rat Exposure time: 104 weeks Application Route: Inhalation Information taken from reference works and the literature.

OPACI-COAT-300®

Safety Data Sheet

Titanium dioxide	IARC 2B Possibly carcinogenic to humans.	<p>Suspected of causing cancer. IARC has classified TiO₂ as 2B. Possibly carcinogenic to humans. However, the only evidence of carcinogenicity is in rats exposed to very high concentrations. Two major epidemiology studies among titanium dioxide workers in the US and in EUROPE could not demonstrate an elevated lung cancer risk.</p> <p>Boffetta et. al. Mortality among workers employed in the titanium dioxide production industry in Europe. <i>Cancer Causes Control</i>. 2004 Sep;15(7):697-706. Fryzek et. al. A cohort mortality study among titanium dioxide manufacturing workers in the United States. <i>J Occup Environ Med</i>. 2003 Apr;45(4):400-9. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. IARC Monographs, Volume 93 (Summary)</p>
Carbon black	IARC 2B Possibly carcinogenic to humans.	IARC monographs report that certain carbon blacks have been found to be carcinogenic to animals in laboratory experiments.
Cobalt Titanate Green Spinel	Carcinogenic IARC 2B	<p>IARC and the NTP consider nickel compounds to be carcinogenic to humans. IARC has classified cobalt and cobalt compounds as possibly carcinogenic to humans.</p> <p>This product is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides.</p>
Iron oxide	Not carcinogenic	<p>IARC and NTP both contain listings for the underground hematite mining. These listings are for the occupational exposures associated with the mining process which includes radon, a known lung carcinogen. NIOSH in the Registry of Toxic Effects of Chemical Substances (RTECS) lists iron oxide as a suspected human carcinogen. However, the IARC reference to underground hematite mining is the source for this classification. Based on information currently available this material is not considered a carcinogen.</p>
Cobalt Aluminate Blue Spinel	IARC 2B Possibly carcinogenic to humans	<p>IARC has classified cobalt and cobalt compounds as possibly carcinogenic to humans.</p> <p>This product is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides.</p>

Reproductive toxicity	: Not classified based on available information.
Specific target organ toxicity (single exposure)	: Not classified based on available information.
Specific target organ toxicity (repeated exposure)	: Not classified based on available information.
Repeated dose toxicity	: Not classified based on available data.
Aspiration hazard	: Not classified based on available data.
Potential adverse human health effects and symptoms	: Not classified based on available data.
Further Information	: No chronic effects are known from repeated exposure to iron oxide <i>pigment</i> . Prolonged inhalation (6 to 10 years) of iron oxide <i>fumes</i> has been reported to produce changes in lung x-rays of exposed individuals. This condition, siderosis, is considered to be benign pneumoconiosis that exhibits no adverse health effects. Siderosis has been observed among occupations such as arc welders where iron oxide <i>fumes</i> are present. To the best of our knowledge, this condition has not been observed after prolonged exposure to iron oxide pigment. There are no iron oxide fumes contained in this product and none should be generated under normal use.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	: Not classified based on available data
Chronic aquatic toxicity	: Not classified based on available data

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- | | | |
|---|---|--|
| Resource Conservation and Recovery Act (RCRA) | : | This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form. |
| Waste from residues | : | Dispose of in accordance with local regulations. |
| Contaminated packaging | : | Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product. |

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not dangerous goods in terms of transport regulations

14.2. UN proper shipping name

- | | | |
|-----------------------------|---|----------------|
| Proper Shipping Name (ADR) | : | Not applicable |
| Proper Shipping Name (IMDG) | : | Not applicable |
| Proper Shipping Name (IATA) | : | Not applicable |
| Proper Shipping Name (ADN) | : | Not applicable |
| Proper Shipping Name (RID) | : | Not applicable |

14.3. Transport hazard class(es)

ADR

- | | | |
|----------------------------------|---|----------------|
| Transport hazard class(es) (ADR) | : | Not applicable |
|----------------------------------|---|----------------|

IMDG

- | | | |
|-----------------------------------|---|----------------|
| Transport hazard class(es) (IMDG) | : | Not applicable |
|-----------------------------------|---|----------------|

IATA

- | | | |
|-----------------------------------|---|----------------|
| Transport hazard class(es) (IATA) | : | Not applicable |
|-----------------------------------|---|----------------|

ADN

- | | | |
|----------------------------------|---|----------------|
| Transport hazard class(es) (ADN) | : | Not applicable |
|----------------------------------|---|----------------|

RID

- | | | |
|----------------------------------|---|----------------|
| Transport hazard class(es) (RID) | : | Not applicable |
|----------------------------------|---|----------------|

14.4. Packing group

- | | | |
|----------------------|---|----------------|
| Packing group (ADR) | : | Not applicable |
| Packing group (IMDG) | : | Not applicable |
| Packing group (IATA) | : | Not applicable |
| Packing group (ADN) | : | Not applicable |
| Packing group (RID) | : | Not applicable |

EN (English)

14.5. Domestic regulation

49 CFR

UN/ID/NA number	: UN 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethylamine)
Class	: 9
Packing group	: III
Labels	: CLASS 9
ERG Code	: 171
Marine pollutant	: No
Remarks	: THE ABOVE INFORMATION ONLY APPLIES TO PACKAGE SIZES WHERE THE HAZARDOUS SUBSTANCE MEETS THE REPORTABLE QUANTITY

14.6. Special precautions for user

14.6.1. Overland transport

14.6.2. Transport by sea

14.6.3. Air transport

14.6.4. Inland waterway transport

Carriage prohibited (ADN)	: No
Not subject to ADN	: No

14.6.5. Rail transport

Carriage prohibited (RID)	: No
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

EPCRA – Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No	Component RQ (lbs)	Calculated product RQ (lbs)
Diethylamine	109-89-7	100	15152

SARA 302/304 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazard Categories : Chronic Health Hazard

SARA 313 : THIS PRODUCT CONTAINS A CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372. THIS INFORMATION MUST BE INCLUDED IN ALL MSDS THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

100% Cobalt Compound

100% Nickel Compound

100% Zinc Compound

46% Antimony Compound

15.1.2. National regulations

US State Right To Know Regulations

Ingredient	CAS No.
Water	7732-18-5
Dimethyl siloxy silsesquioxane	Not Assigned
Silicon dioxide	7631-86-9
Titanium dioxide	13463-67-7
Carbon black	1333-86-4
Cobalt aluminate blue spinel	1345-16-0*
Cobalt titanate green spinel	68186-85-6*

Antimony nickel titanium oxide yellow

8007-18-9*

Composition Comments

: This product is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides.

California Prop. 65

WARNING! This product contains chemicals known in the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient	CAS No.	Remarks
Sulphuric acid	7664-93-9	
Titanium dioxide	13463-67-7	Titanium dioxide is listed as a carcinogen by the State of California under Proposition 65. This listing is a qualified listing which applies only to airborne, unbound, particles of respirable size and does not require warnings on products containing titanium dioxide such as plastics, paper, and paint.
Iron oxide	1309-37-1	
Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro-	1047-16-1	

The ingredients of this product are reported in the following inventories:

REACH	: All ingredients (pre)registered or exempt.
TSCA	: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
DSL	: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or are exempt from listing on the Canadian Domestic Substances List (DSL).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources	: 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. Internal technical data, data from raw material SDS's, and OECD eChem Portal search results.
Other information	: None.
Full text of H- phrases:	
H315	Causes skin irritation
H319	Causes serious eye irritation

SDS EU_NSC

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.