SAFETY DATA SHEET



Revision date 28-Jul-2022 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Name RAL 9011 Graphite Black

Other means of identification

Product Code(s) PLSF10137CN Product Type Powder Coating.

Recommended use of the chemical and restrictions on use
Recommended Use Industrial Coating.
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

IFS Coatings Inc. 3601 North I-35 Gainesville, TX 76240

940-668-1062

Emergency telephone number

Emergency Telephone Number CHEMTREC (800) 424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

WHMIS Statement

Classification complies with Canadian Hazardous Products Regulations (WHMIS 2015).

| Serious eye damage/eye irritation | Category 1 |
|--|-------------|
| Skin sensitization | Category 1 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1A |
| Specific target organ toxicity (repeated exposure) | Category 2 |

Label elements

Emergency Overview

Signal Word Danger

Hazard Statements

Causes serious eye damage. May cause an allergic skin reaction. May cause genetic defects. May cause cancer. May cause damage to organs through prolonged or repeated exposure.



Appearance Powder Physical state Solid, Powder Odor None

Precautionary Statements

Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace. Do not breathe dust/fume/gas/mist/vapors/spray.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention. Specific treatment (see Section 4 on this SDS).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

IF ON SKIN: Wash with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Precautionary Statements - Storage

Store in a dry place.

Precautionary Statements - Disposal

Dispose of in accordance with federal, state and local regulations.

Hazards not otherwise classified (HNOC)

Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Product dust may be irritating to eyes, skin and respiratory system.

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical name | CAS No | Weight-% | Trade Secret |
|--|------------|-----------|--------------|
| Barium sulfate | 7727-43-7 | 10 - 30 | * |
| 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, | 2451-62-9 | 1 - 5 | * |
| 1,3,5-tris(oxiranylmethyl)- | | | |
| Titanium dioxide | 13463-67-7 | 0.1 - 1.0 | * |
| Carbon black | 1333-86-4 | 0.1 - 1.0 | * |
| Quartz | 14808-60-7 | 0.1 - 1.0 | * |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water. Take off contaminated clothing and

wash before reuse. In the case of skin irritation or allergic reactions see a physician.

Inhalation Remove to fresh air.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Clean

mouth with water and drink afterwards plenty of water. Consult a physician if necessary.

None under normal use conditions.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam, Dry chemical or CO2

Unsuitable Extinguishing Media

Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

Specific Hazards Arising from the Chemical

Prevent fire extinguishing water from contaminating surface water or the ground water system. Fine dust dispersed in air may ignite.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition

source is a potential dust explosion hazard.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protection equipment. Ensure adequate ventilation. Avoid dust formation. If

exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in

accordance with current local regulations.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Cleaning UpPick up and transfer to properly labeled containers. Use non-sparking tools. Prevent

environmental discharge consistent with regulatory requirements. Disposal should be in

accordance with applicable regional, national and local laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Use personal protection equipment. Avoid contact with eyes, skin and clothing. Avoid dust

formation. Fine dust dispersed in air may ignite. Do not breathe dust. Do not ingest.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed. Store in accordance with local regulations. Store in a dry

place. Store at room temperature. Keep away from open flames, hot surfaces and sources

of ignition.

Incompatible Products Strong oxidizing agents, strong acids, and strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH | AIHA - WEEL |
|----------------|---------------------------------|-------------------------------------|---------------------------|-------------|
| Barium sulfate | TWA: 5 mg/m³ inhalable | TWA: 15 mg/m ³ | TWA: 10 mg/m ³ | - |
| 7727-43-7 | particulate matter, particulate | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ | |
| | matter containing no | (vacated) TWA: 10 mg/m ³ | _ | |
| | asbestos and <1% crystalline | (vacated) TWA: 5 mg/m ³ | | |

| | silica | | | |
|------------------------------|--------------------------------------|--------------------------------------|------------------------------|---|
| 1,3,5-Triazine-2,4,6(1H,3H,5 | TWA: 0.05 mg/m ³ | - | - | - |
| H)-trione, | | | | |
| 1,3,5-tris(oxiranylmethyl)- | | | | |
| 2451-62-9 | | | | |
| Titanium dioxide | TWA: 0.2 mg/m ³ nanoscale | TWA: 15 mg/m ³ | IDLH: 5000 mg/m ³ | - |
| 13463-67-7 | respirable particulate matter | (vacated) TWA: 10 mg/m ³ | TWA: 2.4 mg/m ³ | |
| | TWA: 2.5 mg/m ³ finescale | | TWA: 0.3 mg/m ³ | |
| | respirable particulate matter | | | |
| Carbon black | TWA: 3 mg/m ³ inhalable | TWA: 3.5 mg/m ³ | IDLH: 1750 mg/m ³ | - |
| 1333-86-4 | particulate matter | (vacated) TWA: 3.5 mg/m ³ | TWA: 3.5 mg/m ³ | |
| | | | TWA: 0.1 mg/m ³ | |
| Quartz | TWA: 0.025 mg/m ³ | TWA: 50 µg/m³ | IDLH: 50 mg/m ³ | - |
| 14808-60-7 | respirable particulate matter | (vacated) TWA: 0.1 mg/m ³ | TWA: 0.05 mg/m ³ | |

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. Eye protection.

Skin and Body Protection Wear protective gloves/protective clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene MeasuresDo not eat, drink or smoke when using this product. Take off contaminated clothing and

wash before reuse. Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid, Powder

AppearancePowderOdorOdorless

Color Varies Odor threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No information available
Melting point / freezing point
Boiling Point / Boiling Range
Flash point
Evaporation rate
Flammability
No information available
No information available
No information available
No information available

Flammability Limit in Air

Upper flammability or explosive 70 g/m³

limits

Lower flammability or explosive 30 g/m³

limits

Vapor pressure Negligible

Relative vapor density

No information available

Specific Gravity 1.2-1.8

Water Solubility Immiscible in water

Solubility in other solvents Specific test data for the substance or

mixture is not available

Partition coefficientNo information availableAutoignition temperatureNo data availableDecomposition temperatureNo information availableKinematic viscosityNo information available

Dynamic viscosity Specific test data for the substance or

mixture is not available

Explosive Properties No information available

Oxidizing Properties No information available

Other information

Softening Point Specific test data for the substance or mixture is not available

Solids 100%

10. STABILITY AND REACTIVITY

Reactivity

No data available Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Excessive heat. Avoid dust formation. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Substances which cause concern for man owing to possible mutagenic effects but for which

the available information is not adequate for making a satisfactory assessment.

Inhalation May cause irritation of respiratory tract.

Eye Contact Contact with eyes may cause irritation.

Skin Contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Repeated exposure may cause skin dryness or cracking. May cause irritation.

Ingestion May be harmful if swallowed. Not an expected route of exposure.

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|-------------------|--|
| Barium sulfate 7727-43-7 | = 307000 mg/kg (Rat) | - | - |
| 1,3,5-Triazine-2,4,6(1H,3H,5H)-trion e, 1,3,5-tris(oxiranylmethyl)- 2451-62-9 | = 302 mg/kg(Rat) | > 2000 mg/kg(Rat) | = 0.65 mg/L (Rat) 4 h > 0.65 mg/L (Rat) 4 h |
| Titanium dioxide 13463-67-7 | > 10000 mg/kg(Rat) | - | = 5.09 mg/L (Rat) 4 h |
| Carbon black 1333-86-4 | > 15400 mg/kg(Rat) | - | > 4.6 mg/m³ (Rat) 4 h |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Specific test data for the substance or mixture is not available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization in susceptible persons.

Mutagenic Effects This product contains one or more substances which are classified in the EU as

carcinogenic, mutagenic and/or reprotoxic.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| | | | , | |
|--------------------------------|-------|----------|-----|------|
| Chemical name | ACGIH | IARC | NTP | OSHA |
| Titanium dioxide 13463-67-7 | A3 | Group 2B | 1 | X |
| Carbon black 1333-86-4 | A3 | Group 2B | - | X |

| Quartz | A2 | Group 1 | Known | X |
|------------|----|---------|-------|---|
| 14808-60-7 | | | | |

Reproductive Toxicity
STOT - single exposure
STOT - repeated exposure
No information available.
No information available.

Chronic Toxicity Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and

sensitization of susceptible persons. Experiments have shown reproductive toxicity effects

on laboratory animals. See Section 11 for additional Toxicological Information.

Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

 ATEmix (oral)
 2,214.30

 ATEmix (dermal)
 31,069.90

 ATEmix (inhalation-dust/mist)
 14.40

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|--------------------------------------|----------------------|----------------------------------|----------------|
| 1,3,5-Triazine-2,4,6(1H,3H,5H)-trion | Not applicable | LC50: >77mg/L (96h, Danio rerio) | Not applicable |
| e, 1,3,5-tris(oxiranylmethyl) | | | |
| 2451-62-9 | | | |

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

| Chemical name | Partition coefficient |
|--|-----------------------|
| 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- | -0.8 |
| 2451-62-9 | |

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Disposal Methods Dispose of in accordance with federal, state and local regulations.

Contaminated Packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

TSCA 8(b)

All components are listed or exempt

DSL

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazardYesChronic Health HazardYesFire hazardYesSudden release of pressure hazardNoReactive HazardNo

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

| Chemical name | Weight-% | HAPS data |
|-----------------|----------|-----------|
| Ethylene glycol | < 0.1% | Present |
| 107-21-1 | | |

CWA (Clean Water Act)

See information supplied by the manufacturer

CFRCI A

See information supplied by the manufacturer

US State Regulations

California Proposition 65

WARNING: This product can expose you to one or more chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information go to www.P65Warnings.ca.gov. See section 3 of the SDS for Proposition 65 substances present at or above 0.1 weight percent. Please contact the Regulatory Department if additional information is required.

U.S. EPA Label Information

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPAHealth hazards2Flammability1Instability0Special hazards-HMISHealth hazards2Flammability1Physical hazards0Personal PrecautionsX

Revision date 28-Jul-2022

Revision Note

No information available

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet