



SAFETY DATA SHEET

Revision date 21-Dec-2022

Revision Number 8

1. IDENTIFICATION

Product identifier

Product Name RAL 8028 TERRA BROWN

Other means of identification

Product Code(s) PLSF40153CN

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

Unknown acute toxicity

2.87705 % of the mixture consists of ingredient(s) of unknown toxicity

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, 1,3,5-tris(oxiranylmethyl)-	2451-62-9	1 - 5	*
Iron oxide (Fe ₂ O ₃)	1309-37-1	1 - 5	*
Titanium dioxide	13463-67-7	1 - 5	*
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.

Notes to Physician

Treat symptomatically.

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 Up

Pick 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/m ³ inhalable	TWA: 15 mg/m ³	TWA: 10 mg/m ³	-

7727-43-7	particulate matter, particulate matter containing no asbestos and <1% crystalline silica	TWA: 5 mg/m ³ (vacated) TWA: 10 mg/m ³ (vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³	
1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-2451-62-9	TWA: 0.05 mg/m ³	-	-	-
Iron oxide (Fe ₂ O ₃) 1309-37-1	TWA: 5 mg/m ³ respirable particulate matter	TWA: 10 mg/m ³ TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 10 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³	-
Titanium dioxide 13463-67-7	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter	TWA: 15 mg/m ³ (vacated) TWA: 10 mg/m ³	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ TWA: 0.3 mg/m ³	-
Carbon black 1333-86-4	TWA: 3 mg/m ³ inhalable particulate matter	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³	-
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 50 µg/m ³ (vacated) TWA: 0.1 mg/m ³	IDLH: 50 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 Measures

Do 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	Odor	Odorless
Appearance	Powder	Odor threshold	No data available
Color	Varies		
Property	Values	Remarks • Method	
pH	No information available		
Melting point / freezing point	No data available		
Boiling Point / Boiling Range	No information available		
Flash point	No information available		
Evaporation rate	No information available		
Flammability	No information available		
Flammability Limit in Air			
Upper flammability or explosive limits	70 g/m ³		
Lower flammability or explosive limits	30 g/m ³		
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 coefficient	No information available
Autoignition temperature	No data available
Decomposition temperature	No information available
Kinematic viscosity	No 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 Solids	Specific test data for the substance or mixture is not available 100%
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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)-trione, 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
Iron oxide (Fe2O3) 1309-37-1	> 10000 mg/kg (Rat)	-	-
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/m ³ (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
Mutagenic Effects

May cause sensitization in susceptible persons.
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
Iron oxide (Fe2O3) 1309-37-1	-	Group 3	-	-
Titanium dioxide 13463-67-7	A3	Group 2B	-	X
Carbon black 1333-86-4	A3	Group 2B	-	X
Quartz 14808-60-7	A2	Group 1	Known	X

Reproductive Toxicity
STOT - single exposure
STOT - repeated exposure
Chronic Toxicity

No information available
No information available.
No information available.
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.
No information available.

Aspiration Hazard

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	2,090.20
ATEmix (dermal)	29,985.90
ATEmix (inhalation-dust/mist)	13.20

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)-trione, 1,3,5-tris(oxiranylmethyl)- - 2451-62-9	Not applicable	LC50: >77mg/L (96h, Danio rerio)	Not applicable
Iron oxide (Fe2O3) - 1309-37-1	Not applicable	LC50: =100000mg/L (96h, Danio rerio)	Not applicable

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)- 2451-62-9	-0.8

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

<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

15. REGULATORY INFORMATION

TSCA 8(b)	All components are listed or exempt
DSL	At least one component is not listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - 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 hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

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

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CWA (Clean Water Act)

See information supplied by the manufacturer

CERCLA

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

NFPA	Health hazards 2	Flammability 1	Instability 0	Special hazards -
HMIS	Health hazards 2	Flammability 1	Physical hazards 0	Personal Precautions X

Revision date 21-Dec-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