

Safety Data Sheet
DynaSHIELD White Coating

SECTION 1: Identification

Product identifier

Product name	DynaSHIELD White Coating
Product number	7891500
Brand	DynaSHIELD

Recommended use of the chemical and restrictions on use
Roof repair and/or reflective coating.

Supplier's details

Name	Ace Roof Coatings, Inc.
Address	4821 Grisham Drive Rowlett, TX 75088 United States
Telephone	972-864-0240
Fax	469-366-9219
email	info@arcroofcoat.com
Emergency phone number(s)	INFOTRAC - 800-535-5053 OUTSIDE UNITED STATES CALL COLLECT 1-352-323-3500

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with OSHA (29 CFR 1910.1200)

- Flammable liquids (chapter 2.6), Cat. 3
- Acute toxicity (chapter 3.1), Cat. 4
- Eye damage/irritation (chapter 3.3), Cat. 2A
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 2
- Flammable liquids (chapter 2.6), Cat. 2

GHS label elements, including precautionary statements

Pictogram



Signal word

Danger

Safety Data Sheet

DynaSHIELD White Coating

Hazard statement(s)

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. 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.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370+P378	In case of fire: Use foam, fog, dry chemical CO2, or water to extinguish.
P403+P235	Store in a well ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with Federal, State and local regulations
P264	Wash any exposed skin thoroughly after handling.
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 advice/attention.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P405	Store locked up.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P321	Specific treatment (see first aid instructions on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P273	Avoid release to the environment.
P391	Collect spillage.

Other hazards which do not result in classification

No data available.

Statement regarding ingredients of unknown toxicity (OSHA)

Not applicable.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Component 1 (trade secret)

Concentration 20 - 25 % (Weight)

2. Calcium carbonate

Concentration 10 - 20 % (Weight)

CAS no. 471-34-1

3. TITANIUM DIOXIDE

Concentration 10 - 20 % (Weight)

CAS no. 13463-67-7

4. 1,2,4-Trimethylbenzene

Concentration 5 - 10 % (Weight)

EC no. 202-436-9

CAS no. 95-63-6

Index no. 601-043-00-3

- Flammable liquids (chapter 2.6), Cat. 3
- Acute toxicity (chapter 3.1), Cat. 4
- Eye damage/irritation (chapter 3.3), Cat. 2
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 2

H226	Flammable liquid and vapor
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H411	Toxic to aquatic life with long lasting effects

5. XYLENES (MIXED)

Concentration 10 - 20 % (Weight)

EC no. 215-535-7

CAS no. 1330-20-7

Index no. 601-022-00-9

- Flammable liquids (chapter 2.6), Cat. 3
- Acute toxicity (chapter 3.1), Cat. 4
- Skin corrosion/irritation (chapter 3.2), Cat. 2

H226	Flammable liquid and vapor
H312	Harmful in contact with skin
H315	Causes skin irritation
H332	Harmful if inhaled

Safety Data Sheet

DynaSHIELD White Coating

6. ETHYLBENZENE

Concentration	10 - 20 % (Weight)
EC no.	202-849-4
CAS no.	100-41-4
Index no.	601-023-00-4

- Flammable liquids (chapter 2.6), Cat. 2
- Acute toxicity (chapter 3.1), Cat. 4

H225	Highly flammable liquid and vapor
H332	Harmful if inhaled

7. Component 7 (trade secret)

Concentration	10 - 15 % (Weight)
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Trade secret statement (OSHA 1910.1200(i))

Specific chemical identity and exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	In case of accident or if you feel unwell, seek medical advice IMMEDIATELY. (Show the product label where possible)
If inhaled	Remove victim from exposure to well-ventilated area. If breathing is labored, qualified personnel should administer oxygen. Apply artificial respiration if breathing has ceased or shows signs of failing. Call a Physician.
In case of skin contact	Remove contaminated clothing. Immediately wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse.
In case of eye contact	Immediately flush eyes running water for a minimum of 15 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY.
If swallowed	Do NOT induce vomiting. Provided the patient is conscious, wash out mouth with water then give 1 or 2 glasses of water to drink. This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage. Refer person to medical personnel for immediate attention.

Personal protective equipment for first-aid responders
None.

Most important symptoms/effects, acute and delayed

No data available.

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

No data available.

Safety Data Sheet

DynaSHIELD White Coating

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use foam, fog, dry chemical CO₂, or water.

Specific hazards arising from the chemical

Carbon oxides

Special protective actions for fire-fighters

As appropriate for surrounding materials/equipment. If electrical equipment is involved, the use of foam should be avoided. No unusual fire or explosion hazards.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ventilate area.

Environmental precautions

In case of large spill, dike the area to prevent this material from entering water systems or sewers.

Methods and materials for containment and cleaning up

Absorb spill with an absorbent material such as sawdust, vermiculite or sand, and place in a closed container.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid open flames, electrical sparks or static electricity.

Conditions for safe storage, including any incompatibilities

Keep containers properly sealed and when stored indoors, in a well-ventilated area. Avoid storage above 110 °F

SECTION 8: Exposure controls/personal protection

Control parameters

1. Titanium dioxide - Total dust (CAS: 13463-67-7)

PEL (Inhalation): 15 mg/m³ (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

2. Titanium dioxide - Total dust (CAS: 13463-67-7)

PEL (Inhalation): See PNOR (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

3. Titanium dioxide - Total dust (CAS: 13463-67-7)

REL (Inhalation): Ca, (ultrafine particles), 2.4 mg/m³ (fine), 0.3 mg/m³ (ultrafine), See Appendix A, See Appendix C (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

4. Xylenes (o-, m-, p-isomers) (CAS: 1330-20-7)

PEL (Inhalation): 100 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

5. Xylenes (o-, m-, p-isomers) (CAS: 1330-20-7)

PEL (Inhalation): 435 mg/m³ (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

Safety Data Sheet

DynaSHIELD White Coating

6. Xylenes (o-, m-, p-isomers) (CAS: 1330-20-7)

PEL (Inhalation): 100 ppm, (ST) 150 ppm, (C) 300 ppm (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

7. Xylenes (o-, m-, p-isomers) (CAS: 1330-20-7)

REL (Inhalation): 100 ppm, (ST) 150 ppm (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

8. Ethyl benzene (CAS: 100-41-4)

PEL (Inhalation): 100 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

9. Ethyl benzene (CAS: 100-41-4)

PEL (Inhalation): 435 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

10. Ethyl benzene (CAS: 100-41-4)

PEL (Inhalation): 100 ppm, (ST) 125 ppm (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

11. Ethyl benzene (CAS: 100-41-4)

REL (Inhalation): 100 ppm, (ST) 125 ppm (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

Appropriate engineering controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV (s). General ventilation is recommended. Additional local exhaust ventilation is recommended where vapors, mists, or aerosols may be released. For guidance on engineering control measures refer to publications such as the ACGIH current edition of "Industrial Ventilation, a manual of Recommended Practice."

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other types of safety glasses. (Consult your safety equipment supplier)

Skin protection

Wear protective clothing to prevent skin contact. Keep exposed skin area to a minimum. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH. Eye wash station and safety shower should be available.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

This product has demonstrated no observable effects at room temperature; however, it is highly recommended that an air-purifying respirator with organic filter cartridges be worn. In addition, in any interior, confined space, spray application, a supplied air source must be provided. When the product is sprayed or heated without adequate ventilation, an approved MSHA/NIOSH positive-pressure, supplied-air respirator may be required. Air purifying respirators equipped with organic vapor cartridges and a Hepa (P100) particulate filter may be used under certain conditions when a cartridge change-out schedule has been developed in accordance with the OSHA preparatory protection standard (29 CFR. 1910.134).

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Safety Data Sheet
DynaSHIELD White Coating

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Viscous liquid
Odor	Solvent odor
Odor threshold	No data available.
pH	8.5 – 9.0
Melting point/freezing point	No data
Initial boiling point and boiling range	313°F - 572°F (156°C - 300°C)
Flash point	114°F
Evaporation rate	.36
Flammability (solid, gas)	No data available.
Upper/lower explosive limits	0.5% / 6.0%
Vapor pressure	2.9
Vapor density	Heavier than air
Relative density	No data
Solubility(ies)	Insoluble in water
Partition coefficient: n-octanol/water	No data
Auto-ignition temperature	No data
Decomposition temperature	No data
Viscosity	4,000 - 12,000 cps

SECTION 10: Stability and reactivity

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None known.

Conditions to avoid

Avoid storage above 110°F.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

By fire: Carbon Dioxide, Carbon Monoxide

SECTION 11: Toxicological information

Information on toxicological effects

Skin corrosion/irritation

Exposure causes skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking. Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use

Serious eye damage/irritation

Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

Safety Data Sheet

DynaSHIELD White Coating

Respiratory or skin sensitization

Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts may cause overexposure symptoms, such as headache, nausea, and irritation of nose and throat.

Carcinogenicity

The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSDHA, and not listed as carcinogens by NTP.

SECTION 12: Ecological information

No data available

SECTION 13: Disposal considerations

Disposal of the product

Liquid waste must be disposed of in accordance with Federal, State and local regulations. Incineration is the preferred method.

Disposal of contaminated packaging

Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

Waste treatment

This product, as supplied, is regulated as a hazardous waste by the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. If discarded in its purchased form, this product is a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or residue of the product remains classified a hazardous waste as per 40 CFR 261, Subpart C. State or local regulations may also apply if they differ from the federal regulation.

Sewage disposal

Chemical waste, even small quantities should never be poured down drains, sewers or waterways.

Other disposal recommendations

RCRA HAZARD CLASS: D001, Ignitable Hazardous Waste

SECTION 14: Transport information

IMDG

UN Number: UN 1263

Class: 3

Packing Group: III

EMS Number: ERG #128

Proper Shipping Name: Paint Related Material

Safety Data Sheet

DynaSHIELD White Coating

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Toxic Substances Control Act (TSCA) Inventory

This material or its components are listed on the TSCA Chemical Substance Inventory and is in compliance with all applicable rules and orders. One or more of the components may be exempt from listing on the TSCA Inventory.

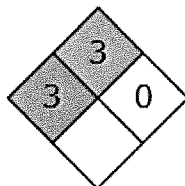
SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard, Fire Hazard

HMIS Rating

DynaSHIELD White Coating	
HEALTH	3
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

NFPA Rating



SECTION 16: Other information

CHANGES SINCE PREVIOUS SDS: GHS formatting changes.

Further information/disclaimer

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.

Preparation information

Emily Mendel
05/28/2015

A·R·C·HITECTURAL

ROOF COATINGS

DynaSHIELD WHITE COATING

● PRODUCT DATA SHEET

● DESCRIPTION

DynaSHIELD White Coating is a proprietary blend of polymers. This is an oil-based product. DynaSHIELD White Coating flashes leaving a non-breathing, heat-reducing, monolithic, Energy Star and CRRC listed coating. It forms a water-repellent surface that easily cleans while resisting microorganisms. Performs under standing water better than all other water-based coatings.

● RECOMMENDED USES

This product may be applied over most roofing materials such as metal, BUR, Modified Asphalt Membranes, and Single-Plies.

● APPLICATION

Roof Insulation and roof surface to be treated must be clean and dry. If necessary, remove all dirt, grease, loose debris and residue before applying. DynaSHIELD White Coating may be applied with a roller, squeegee, brush or sprayer. Apply at the rate of 1 gallon per 100 square feet per pass, depending on the warranty level desired. When applying to thermoplastics, concrete or other masonry surfaces, use a recommended primer. Apply evenly at a surface temperature of 30° F or greater.

● BENEFITS

Energy Savings	Cleans Easily
Freeze Resistant	Can Be Tinted
Flexible	Prevents Rust
Waterproofs	

● TECHNICAL DATA

TENSILE:	1600 psi ASTM D-2370
ELONGATION:	600 % ASTM D-2370
EMITTANCE:	.90 ASTM C-1371
REFLECTANCE:	.83% ASTM C-1549
COLOR:	White (<i>can be tinted - special order</i>)
PERMEABILITY:	Non-breathing ASTM D-1653
SOLIDS:	Weight 50% +/- 2% ASTM D-1353
SOLIDS:	Volume 37% +/- 2% ASTM D-2697
WEIGHT:	9.1 lbs. per gallon +/- 2%
VISCOSITY:	7,000 to 12,000 cps.
ABRASION:	Passed ASTM D-986
HARDNESS:	55 Shore A ASTM D-2240
STORAGE:	3 years unopened between 40° F - 100° F
DRY TIME:	1 hr. at 75° F and a thickness of 12 wet mils
FULL CURE:	24 - 72 hours depending on humidity, air movement, and temperature
CLEAN-UP:	Biodegradable citrus cleaning products or ARC's Cleaning Solvent for oil-based products
ADHESION:	Pass ASTM D-3359
PIGMENT:	Titanium
VOC:	<548 grams per liter

● Avoid breathing fumes and prolonged contact with skin. Do not ingest. Keep containers covered when not in use. When using, provide proper ventilation. Dispose of product and container in accordance with local disposal codes.

DISTRIBUTED BY:

There is no warranty given, expressed or implied, through the values or statements made here, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by our in house and independent third party labs in order to obtain approval and/or classification. Acceptance, purchase and selection of these products are the sole responsibility of the buyer, buyer's agent, or the buyer's customer. ARC assumes no responsibility for coverage, performance, or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER GUARANTY OR WARRANTY OF ANY KIND IS MADE BY ROOF COATINGS, INC. OR ITS SUBSIDIARIES, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.