

SAFETY DATA SHEET

RUSTSHIELD®

Revision Date: 11/30/2015

SECTION I - PRODUCT AND COMPANY IDENTIFICATION



PRODUCT NAME : RUSTSHIELD®
PRODUCT GRADE/TYPE : **A120**
 SDS NUMBER : J253-P-G-012
 PRODUCT USE : Rust-inhibitive acrylic primer
 MANUFACTURER : National Coatings Corporation
 1201 Calle Suerte
 Camarillo, CA 93012
www.nationalcoatings.com
 PRODUCT INFORMATION : 1-800-423-9557
 CHEMTREC NORTH AMERICA : 1-800-424-9300
 CHEMTREC INTERNATIONAL : 703-527-3887

SECTION II - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Reproductive Toxicity, category 1A
 Hazardous to the aquatic environment, Chronic, Category 2

GHS LABEL:

Hazard Category	Signal Word	Hazard Statement	Pictogram
Reproductive Toxicity, Chronic Category 1A	Danger	H360-1A-May damage fertility to unborn child	
Hazardous to aquatic environment, Chronic, Category 2	None	H411 Toxic to aquatic life with long lasting effects	

GHS Precaution Phrases:

Hazard Category	Prevention	Response	Storage	Disposal
Reproductive Toxicity, 1A	P201-Obtain special instructions before use P202-Do not handle until all safety precautions have been read and understood P284-Wear respiratory protection	P308+P313-If exposed or concerned: Get medical attention.	P405-Store Locked up	P501-Dispose of content/container...in accordance with local/regional/national/international regulation (to be specified)
Hazardous to aquatic environment, Chronic, Category 2	P273-Avoid release to the environment	P391-Collect spillage.		P501-Dispose of content/container...in accordance with local/regional/national/international regulation (to be specified)

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Weight %	GHS Symbol (Pictograms)	GHS Hazard Statement
Titanium dioxide (unbound only)	13463-67-7	10-25		
Limestone	1317-65-3	2.5-10	GHS07	H315-319
Zinc Oxide	1314-13-2	1.0-2.5	GHS09	H400-410
Zinc Phosphate	7779-90-0	2.5-10	GHS09	H332-400-410
Glycol Ether solvent	112-34-5	1.0-2.5	GHS07	H319
DM Glycol ether	111-77-3	1.0-2.5	GHS08	H361
Dibutyl phthalate	84-74-2	1.-2.5	GHS08-GHS09	H360-400
Carbon Black	1333-86-4	0.1-1.0	GHS08	H351
Additive	Trade Secret	0.1-1.0		

The hazards of the listed titanium dioxide, crystalline silica (Quartz) from limestone and ZnO are for their powder unbound form. In the bound form and when used for application as a roof coating for which the products are designed, these ingredients are not hazardous.

GHS Pictograms	Hazard Statement
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H360	May damage fertility of the unborn child
H361	Suspected of damaging fertility of unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effect.

SECTION IV – FIRST AID MEASURES

Eye Contact: Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin Contact: Itching or burning of the skin. Immediately flush the skin with plenty of water while removing contaminated clothing and shoes. Get immediate medical attention.

Inhalation: Nasal irritation, headache, dizziness, nausea, vomiting. Heart palpitations, breathing difficulty, cyanosis, tremors, weakness, red flushing of face, irritability. Remove exposed person from source of exposure to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR). Avoid mouth to mouth resuscitation. Get medical attention immediately.

Ingestion : If ingested, do not induce vomiting unless directed to do so by a medical personnel. Get medical attention.

SECTION V – FIRE-FIGHTING MEASURES

Suitable Extinguishing Media : Use dry chemical, foam or carbon dioxide to extinguish fire.

Specific hazards arising from the chemical: Dangerous when exposed to heat or flame. Will form flammable or explosive mixtures with air at room temperature. Irritating or toxic substances may be emitted upon thermal decomposition. Thermal decomposition products may include oxides of carbon and nitrogen. Vapor or gas may spread to distant ignition sources and flash back. Vapors or gas may accumulate in low areas. Runoff to sewer may cause fire or explosion hazard. Containers may

explode in heat of fire. Containers may explode in heat of fire. Vapors may concentrate in confined areas. Liquid will float and may reignite on the surface of water.

Special protective action for fire-fighters: Water should be used to cool fire-exposed containers, structures and to protect personnel. Use water to dilute spills and flush them away from sources of ignition. Do not flush down sewers or other drainage systems. Exposed fire-fighters must wear NIOSH approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment.
Keep people away from and upwind of spill/leak.
Material can create slippery conditions.

Environmental Precautions: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Methods of Cleaning up: Contain spills immediately with inert materials (e.g. sand, warth).
Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

SECTION VII – HANDLING AND STORAGE

Precautions for safe handling:

Avoid breathing dust, vapor or mist. Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Use personal protective equipment in handling and observe personal hygiene after use of the product.

Conditions for safe storage : **Storage :** **DO NOT FREEZE.** Keep containers tightly closed in a dry, cool and well-ventilated place.

Storage Period: 12 months

Keep container closed when not in use. Protect from freezing.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Component	CAS #	Regulation	Type of Listing	Occupational Exposure Limits
Titanium dioxide	13463-67-7	JSOH OELs (05 2009	TWA	1 mg/m ³ (Respirable dust)
		US ACGIH (2011)	TWA	4 mg/m ³ (Total dust)
Zinc oxide	1314-13-2	ACGIH	TWA	2 mg/m ³
		OSHA	STEL	10 mg/m ³
Calcium Carbonate (in Limestone)	1317-65-3	OSHA	PEL	5 mg/m ³ (fume, respirable fraction)
		NIOSH	TWA	15 mg/m ³ (Total dust)
Quartz (in limestone)	14808-60-7	OSHA	TWA	5 mg/m ³ (Respirable fraction)
		NIOSH	TWA	15 mg/m ³ (Total dust)
Zinc Phosphate	7779-90-0	ACGIH	TWA	10 mg/m ³
		OSHA	PEL	N/E
DM Glycol ether	111-77-3	ACGIH TLV	STEL	10 mg/m ³
		OSHA	PEL	N/E

		ACGIH TLV	STEL	N/E
Glycol ether solvent	112-34-5	ACGIH OSHA ACGIH TLV	TWA PEL STEL	10 mg/m3 N/E N/E
Dibutyl phthalate	84-74-2	ACGIH OSHA ACGIH TLV	TWA PEL STEL	5 mg/m3 N/E 5 mg/m3
Additive	Trade Secret	ACGIH OSHA ACGIH TLV	TWA PEL STEL	5 mg/m3 5 mg/m3 10 mg/m3
Carbon black	1333-86-4	ACGIH OSHA ACGIH TLV	TWA PEL STEL	3 mg/m3 3.5 mg/m3 N/E

- Engineering Controls** : Mechanical local exhaust ventilation at point of containment release.
- Protective Measures** : Employees should wash their hands and face before eating, drinking or using tobacco products. Educate and train employees in the safe use and handling of this product.
EMERGENCY SHOWERS AND EYE WASH STATIONS SHOULD BE AVAILABLE.
- Eye/face Protection** : Safety glasses with side-shields.
- Skin Protection** : Impervious (Neoprene gloves)
- Respiratory Protection** : Use only with ventilation to keep levels below exposure guidelines reported in this document. If not sure, and/or not able to monitor, use Stae or federally approved supplied air-respirator. Wear suitable respirator (MSHA/NIOSH approved or equivalent) where exposure limits are exceeded.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Viscous liquid
Odour:	Slight amine odor
Odour threshold:	Not available
pH:	Not determined
Melting point/freezing point:	0°C (32°F) similar to water
Boiling Point/boiling range:	100°C (212°F) similar to water
Flash Point:	Not applicable (water based product), however, solid material will support combustion if water has been evaporated.
Evaporation Rate:	slower than ether
Flammability:	Not available
Upper/Lower Flammability or explosive limits:	Not available
Vapor Pressure:	22.7 mm Hg at 20°C (68.°F) similar to water
Vapor density	Not available
Relative density:	10.17#/gal (1.22g/cc)
Solubility: in water	Soluble
Partition Coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not determined
VOC Content g/l:	100

Note: The above data are typical values and must not be construed as a specification.

SECTION X – STABILITY AND REACTIVITY

Reactivity:	Non-reactive
Chemical Stability:	Stable

Possibility of hazardous reactions: None known.

Conditions/Materials to avoid: Keep from freezing/No known materials to avoid

Incompatible Materials: Strong oxidizing agents.

Hazardous decomposition: By Thermal decomposition: carbon monoxide, carbon dioxide, Oxides of nitrogen (NOx), other potentially toxic fumes, dense black smoke.

SECTION XI – TOXICOLOGICAL INFORMATION

Acute Toxicity:

Component	Acute Oral	Acute Dermal	Acute Inhalation
Titanium Dioxide	LD50 rat >5000 mg/kg	LD50:>5000 mg/kg (Rabbit)	LC50/4h/rat (dust/mist):>6.82 mg/l, 4 h (Rat)
Limestone	LD50 rat >6450 mg/kg	Not available	Not available
Zinc Oxide	Not available	Not available	LC50>2500 mg/m3, (mouse)
Mixture	Not available	Not available	Not available
Zinc Phosphate	LD50 rat -3846 mg/kg	Not available	11.54 mg/L, inh
Glycol Ether solvent	3305 mg/kg, oral rat	2700 mg/kg, dermal, rabbit	Not available
DM Glycol ether	7000 mg/kg, oral rat	Not available	Not available
Dibutyl phthalate	Not available	Not available	Not available
Carbon Black	Not available	Not available	Not available
Additive	8000mg/kg, oral, rat	Not available	Not available

Skin/Eye Irritation:

Titanium Dioxide Rabbit, Exposure Time, 24 h, Non-Irritating

Limestone & Zinc Oxide Not available

Mixture Not available

Mutagenicity:

Titanium Dioxide with/without Genetic Toxicity in Vitro: Ames: negative (Salmonella typhimurium, Metabolic Activation: Genetic Toxicity in Vivo: Drosophila SLRL test: negative (Drosophila melanogaster)

Limestone & Zinc Oxide Mixture Not available

Mixture Not available

Carcinogenicity:

Titanium dioxide (Ti-Pure, DuPont) Rat, Male/Female, inhalation-According to IARC, several rat inhalation and intratracheal installation studies using titanium dioxide have shown increases in benign and malignant lung tumors.

Based upon all study results, DuPont scientists conclude that titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experience in the workplace.

Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and cancer. Additionally, the IARC working group determined that, “No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints.”

Quartz (in Limestone) ACGIH: A2-suspected human carcinogen
NIOSH: Potential occupational carcinogen
IARC : Monograph 68 (1997) (Listed under Crystalline Silica inhaled in the form of quartz or

cristobalite

From occupational sources) (Group 1-Carcinogenic to humans)

Limestone & Zinc Oxide Not available
Mixture Not available

Sensitization:

Titanium dioxide Dermal: non-sensitizer (Guinea pig, Maximization Test), non-sensitizer (Human, Patch Test)
Repeated Dose toxicity: 28 days, Inhalation: NOAEL: 35mg/m3, (Rat)

Quartz, zinc oxide, mixture Not available

Reproductive toxicity, STOT, Aspiration hazard- Not available for components and mixture in the products listed.

Other Toxicological Information:

*Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and cancer. Additionally, the IARC working group determined that, “No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints.’

SECTION XII – ECOLOGICAL INFORMATION

Ecotoxicity:

Titanium dioxide Aquatic Toxicity: 96 hr LC50: Fathead minnow>1,000mg/l; LC50: > 1000 mg/l (Golden Orfe (Leuciscus idus), 48 hours) ;
Acute Toxicity to Aquatic invertebrates: EC50> 3mg/l (Water Flea (Daphnia Magna))
Toxicity to Microorganisms : EC50> 10,000 mg/l, (Pseudomas fluorescens, 24 h)

Limestone Acute and Prolonged toxicity to Fish: LC50: 56,000 mg/l (Mosquitofish (Gambusia affinis), 48 hours)

Persistence and Degradability, Bioaccumulative Potential, Mobility in Soil: Not available for components and mixtures in the products listed

SECTION XIII – DISPOSAL INFORMATION

Environmental Precautions:

Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Waste Disposal Method:

Waste disposal should be in accordance with existing federal, state and local environmental laws.

Empty Container Precautions:

Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning.

SECTION XIV – TRANSPORT INFORMATION

UN Number : **Not applicable**
UN proper Shipping Name : Not regulated
Transport Hazard Class : None
Packing Group : Not applicable
Environmental Hazards : Unknown

Land Transport (DOT) : Non-Regulated

Sea Transport (IMDG) : Non-Regulated

Air Transport (ICAO/IATA) : Non-Regulated

Special Precautions : No data available

SECTION XV – REGULATORY INFORMATION

Unites States TSCA Inventory (US.TSCA): All components of this product are in compliance with the inventory listing requirement of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

CERCLA Information (40CFR302.4): SARA HAZARD CATEGORY:
This product has been reviewed according to the EPA ‘Hazard Categories’ promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:
NONE KNOWN

SARA TITLE III, Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund and Reauthorization Act of 1986 and 40 CR part 372:

Chemical Name	CAS#
Zinc Phosphate	7779-90-0
DM Glycol ether	111-77-3
Glycol ether solvent	112-34-5
Dibutyl phthalate	81314-13-24-74-2
Zinc Oxide	

STATE REGULATIONS:

The following materials are non-hazardous but are among the 5 top components in this product:

State Right-To-Know:

STATE	Chemical Name	CAS#
New Jersey	Water	7732-18-5
	Acrylic Resin	Trade Secret
Pennsylvania	Water	7732-18-5
	Acrylic Resin	Trade Secret
	Iron Oxide	1332-37-2

Workplace Classification:

OSHA : This product is considered not hazardous under OSHA Hazard Communication Standard (29CFR 1910.1200).

WHMIS : No information

Proposition 65 : This product contains a chemical known to cause cancer or reproductive toxicity:

Component	CAS #
Titanium dioxide (airborne, unbound particles of respirable size)	(none), several substances for single listing
Silica, crystalline (airborne particles of respirable size); 0.5% in Limestone	(none), several substances for single listing
Carbon Black	1333-86-4

SECTION XVI –OTHER INFORMATION

HMIS Rating:

Legend:

Acronym	Meaning
ACGIH	American Conference of Governmental Hygienists
OSHA	Occupational Safety Health Administration
SARA	Superfund Amendment Reauthorization Act
TRI	Toxic Release Inventory
GHS	Globally Harmonized System (of Classification and Labeling of Chemicals)
DOT	Department of Transportation
IMDG	International Maritime Dangerous Goods
ICAO	International Civil Aviation Organization
IATA	International Air Transport Association

The information in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. The information relates only to the specific material designated and may not be valid for such material used in combination with or any other material in any process, unless specified in the test.

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This SDS adheres to the standards and regulatory requirements of the United States and has been written under the guidance of the Globally harmonized System of Classification and Labeling of Chemicals.

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