

SAFETY DATA SHEET

Issue Date 29-May-2015 Revision Date 18-Dec-2017 Version 2

1. IDENTIFICATION

Product identifier

Product Name EF HI-SQUARE SUPER WHITE

Other means of identification

Product Code 3DSE1000

Synonyms 3DSE100001, 3DSE100003, 3DSE100004, 3DSE100005, 3DSE100007, 3DSE100008, 3DSE100001, 3DSE100001, 3DSE100013, 3DSE100013, 3DSE100014, 3DSE100015, 3DSE100

3DSE100009, 3DSE100010, 3DSE100012, 3DSE100013, 3DSE100014, 3DSE100015, 3DSE100016, 3DSE100017, 3DSE100019, 3DSE100020, 3DSE100021, 3DSE100022,

3DSE100023, 3DSE100033, 3DSE100035, 3DSE100055

Recommended use of the chemical and restrictions on use

Recommended Use Textile ink. Restricted to professional users.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Rutland Group 10021 Rodney Street

Pineville, NC 28134 Tel: 704-553-0046

E-mail address product_safety@rutlandinc.com

Emergency telephone number

Emergency Telephone INFOTRAC 1-352-323-3500

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance viscous Physical state liquid Odor Low

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable

Unknown acute toxicity 64.7% of the mixture has not undergone testing for acute toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|-----------------------|------------|----------|--------------|
| PVC HOMOPOLYMER RESIN | 9002-86-2 | 15 - 40 | * |
| TITANIUM DIOXIDE | 13463-67-7 | 10 - 30 | * |
| CALCIUM CARBONATE | 1317-65-3 | 7 - 13 | * |

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

Revision Date 18-Dec-2017

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 skin with soap and water.

Inhalation Remove to fresh air.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth. Drink plenty of

water. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

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 Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth

or other non-combustible absorbent material. Take up mechanically, placing in appropriate

containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Advice on safe handling

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place Store at temperatures not exceeding 35 $^{\circ}\text{C}/$ 95 $^{\circ}\text{F}$ **Storage Conditions**

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------------------------|--|---|------------------------------|
| PVC HOMOPOLYMER RESIN 9002-86-2 | TWA: 1 mg/m³ respirable particulate matter | - | - |
| TITANIUM DIOXIDE 13463-67-7 | TWA: 10 mg/m ³ | TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust | IDLH: 5000 mg/m ³ |
| CALCIUM CARBONATE 1317-65-3 | - | TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction | |

NIOSH IDLH Immediately Dangerous to Life or Health

| Chemical Name | Alberta OEL | British Columbia OEL | Manitoba OEL | New Brunswick OEL |
|-------------------|---------------------------|----------------------------|---------------------------|---------------------------|
| PVC HOMOPOLYMER | = | TWA: 1 mg/m ³ | TWA: 1 mg/m ³ | - |
| RESIN | | | _ | |
| 9002-86-2 | | | | |
| TITANIUM DIOXIDE | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ |
| 13463-67-7 | _ | TWA: 3 mg/m ³ | _ | _ |
| CALCIUM CARBONATE | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | - | TWA: 10 mg/m ³ |
| 1317-65-3 | _ | TWA: 3 mg/m ³ | | _ |
| | | STEL: 20 mg/m ³ | | |

| Chemical Name | Newfoundland OEL | Northwest Territories OEL | Nova Scotia OEL | Nunavut OEL |
|-------------------|---------------------------|----------------------------|---------------------------|----------------------------|
| PVC HOMOPOLYMER | TWA: 1 mg/m ³ | - | TWA: 1 mg/m ³ | - |
| RESIN | _ | | _ | |
| 9002-86-2 | | | | |
| TITANIUM DIOXIDE | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ |
| 13463-67-7 | _ | STEL: 20 mg/m ³ | _ | STEL: 20 mg/m ³ |
| CALCIUM CARBONATE | - | TWA: 10 mg/m ³ | - | TWA: 10 mg/m ³ |
| 1317-65-3 | | STEL: 20 mg/m ³ | | STEL: 20 mg/m ³ |

| Chemical Name | Ontario OEL | Prince Edward Island OEL | Quebec OEL | Saskatchewan OEL | Yukon OEL |
|---------------------------------------|---------------------------|-----------------------------|---------------------------|---------------------------------|--|
| PVC HOMOPOLYMER RESIN 9002-86-2 | TWA: 1 mg/m ³ | TWA: 1 mg/m ³ | - | - | - |
| TITANIUM DIOXIDE 13463-67-7 | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | TWA: 10 mg/m³ STEL: 20 mg/m³ | STEL: 20 mg/m ³ TWA: 30 mppcf TWA: 10 mg/m ³ |
| CALCIUM CARBONATE 1317-65-3 | - | - | TWA: 10 mg/m ³ | TWA: 10 mg/m³ STEL: 20 mg/m³ | STEL: 20 mg/m ³ TWA: 30 mppcf TWA: 10 mg/m ³ |

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). if a risk assessment indicates this is

necessary.

Skin and body protection Wear protective gloves and protective clothing. if a risk assessment indicates this is

necessary.

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.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid
Appearance viscous Odor Low

Color White to off-white Odor threshold No information available

Property Values Remarks • Method

pH 7

Melting point/freezing pointNo information availableBoiling point / boiling range232 °C / 450 °FFlash pointNo information availableEvaporation rateNo information available

Flammability (solid, gas)

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available
No information available

Specific Gravity 1.25

Water solubility Insoluble in water

Solubility in other solvents No information available Partition coefficient No information available No information available **Autoignition temperature Decomposition temperature** No information available No information available Kinematic viscosity Dynamic viscosity No information available **Explosive properties** No information available **Oxidizing properties** No information available

Other Information

Softening point No information available Molecular weight No information available

VOC Content 50 g/L

Density
No information available
No information available

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

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information No data available

Inhalation No data available.

Eye contact No data available.

Skin contact No data available.

Ingestion No data available.

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------|---------------------|-------------|-----------------|
| TITANIUM DIOXIDE | > 10000 mg/kg (Rat) | - | - |
| 13463-67-7 | | | |

Information on toxicological effects

Symptoms No information available.

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

SensitizationNo information available. **Germ cell mutagenicity**No information available.

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

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|------------------|-------|----------|-----|----------|
| PVC HOMOPOLYMER | - | Group 3 | - | - |
| RESIN | | · | | |
| 9002-86-2 | | | | |
| TITANIUM DIOXIDE | - | Group 2B | - | X |
| 13463-67-7 | | • | | <u>'</u> |

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

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

Target Organ Effects Eyes, Lungs, Respiratory system, Skin.

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) 67625 ATEmix (dermal) 5970

ATEmix (inhalation-gas)
ATEmix (inhalation-dust/mist)
ATEmix (inhalation-vapor)

No information available
No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

65.2 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories On Inventory (Yes/No)

TSCA Yes **DSL/NDSL** Yes **EINECS/ELINCS** Yes **ENCS** Nο **IECSC** No **KECL** No **PICCS** No **AICS** No

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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 | No |
|-----------------------------------|----|
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |
| | |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------------|------------|---------------|--------------|
| PVC HOMOPOLYMER RESIN 9002-86-2 | X | - | - |
| CALCIUM CARBONATE 1317-65-3 | Х | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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

NFPA Health hazards 1 Flammability 1 Instability 0 Physical and Chemical

Properties -

Health hazards 1 Flammability 1 Physical hazards 0 Personal protection B

 Issue Date
 29-May-2015

 Revision Date
 18-Dec-2017

Revision Note

SDS sections updated 4 7 9

Disclaimer

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet