



SAFETY DATA SHEET

FR GRANICOAT[®]

Version 1.0
Revision Date
05/11/2015

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY UNDERTAKING

1.1 Product identifier

Product name	FR GRANICOAT [®]
Chemical name	Unsaturated Polyester Resin
Product code	Alexander, Alicon, Nury, Accent, Starlight, Solids, Sparkle, Mountain, Spray Chip2, Custom Colors & Designs
CAS number	Not applicable

1.2 Manufacturer, Importer or Responsible Party

Name	SAFAS Corporation
Address	2 Ackerman Avenue Clifton New Jersey, 07011 USA
Telephone	+1 973 772 5252

1.5 Emergency phone number

Telephone	<u>USA</u> : 1-800-424-9300 <u>International</u> : 1-703-527-3887
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1.6 Relevant use of the product

Applications	Residential, commercial or transportation applications
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1.7 Product Uses advised against

No data available

2. HAZARDS IDENTIFICATION

2.1. The hazard classification of the chemical according to HazCom 2012 (US-GHS)

Flam. Liq. 3	H226 Flammable liquid and vapour
Acute Tox. 4	H332 Harmful if inhaled
Eye Irrit. 2	H319 Causes serious eye irritation
Skin Irrit. 2	H315 Causes skin irritation
Skin Sens. 1	H317 May cause an allergic skin reaction

2.2. Signal word

Warning

2.3. Hazard statements

H226 Flammable liquid and vapour
H332 Harmful if inhaled
H319 Causes serious eye irritation
H315 Causes skin irritation
H317 May cause an allergic skin reaction

2.4. Danger symbols



2.5. Precautionary statements

Prevention

P271 Use only outdoors or in a well-ventilated area

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P280 Wear protective gloves/protective clothing/eye protection/face protection

Response

P312 Call a POISON CENTER or doctor/physician if you feel unwell

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal

P501 Dispose of contents/container in accordance with local / regional / national / international regulations

2.6. Description of any hazards not otherwise classified

Primary routes of entry: Inhalation and skin absorption.

2.7. % ingredient(s) with unknown acute toxicity

29,5%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-Nr.	Concentration %
Unsaturated Polymers ⁽¹⁾	mixture	33
Aluminum hydroxide (ATH)	21645-51-2	21
Organic Pigments (TiO ₂)	13463-67-7	1
BYK R605 ⁽²⁾	mixture	0.5
Styrene Monomer	100-42-5	17
Methyl Methacrylate	80-62-6	7
Galaxy Granules ⁽³⁾	mixture	20
Tinuvin 328 (2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol)	25973-55-1	0.5

(1) The component unsaturated polymers is a mixture consisting basically of Styrene, Methyl methacrylate.

(2) BYK R605 is a mixture consisting basically of Solvent naphtha and Xylene.

(3) Galaxy Granules is a mixture consisting basically of unsaturated polymers and ATH.



4. FIRST AID MEASURES

4.1 First Aid measures after Inhalation

Following inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If victim is unconscious, administer artificial respiration and/or oxygen as needed. Seek medical aid.

4.2 First Aid measures after Skin exposure

Following skin contact Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

4.3 First Aid measures after Eye exposure

Following eye contact Rinse cautiously with water for at least 10 minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.

4.4 First Aid measures after Ingestion

Following ingestion Wash mouth with water. Keep patient calm, remove to fresh air, seek medical attention. DO NOT INDUCE VOMITING (aspiration hazard).

4.5 Most important symptoms and effects, both acute and delayed

INHALATION	Vapours may cause mucous membrane irritation and upper respiratory tract discomfort. High concentrations may result in headache, nausea, insensibility and other central nervous system effects.
SKIN	Prolonged or frequent contact may cause defatting and dryness of the skin with resultant irritation and possible dermatitis. Styrene may be absorbed through the skin in toxic amounts.
EYES	May cause irritation. Liquid splashes may result in more serious injuries. May cause Lacrymation (tears).
INGESTION	May cause gastrointestinal disturbances, pain and discomfort.

4.6 Indication of any immediate medical attention and special treatment needed

Not determined

5. FIREFIGHTING MEASURES

5.1 Extinguishing media *Suitable:* Water spray, foam, dry chemical, carbon dioxide or any Class B extinguishing agent.

Unsuitable: Not determined

5.2 Special hazards arising from chemical or mixture during the fire At elevated temperatures, such as in a fire, polymerization may take place. If polymerization takes place in a closed container, there is the possibility of violent rupture of the container. Product vapour may form an explosive mixture in air.



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5.3 Special Protective

Precautions or equipment for firefighters

Fire fighters and others exposed to vapours or products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment

Remove all sources of ignition. Ventilate area. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.2 Emergency procedures

Use breathing apparatus if exposed to vapours/dust/aerosol. Wear protective gloves/protective clothing/eye protection/face protection. Use of dust mask required to avoid inhaling the nuisance type dust.

6.3 Methods and materials used for containment

Absorb spill with an absorbent material such as sawdust, vermiculite or sand and place in a closed container. If large spill, dike the area to prevent this material from entering water systems or sewers. This material contains the following ingredients which, if spilled or released in quantities equal to or greater than the Reportable Quantity (RQ), are subject to the reporting requirements of CERCLA and/or SARA (40 CFR parts 302 & 355):

Styrene Monomer: RQ Value = 1,000 lbs

Methyl Methacrylate: RQ Value = 1,000 lbs

6.4 Cleanup procedures

Collect in closed and suitable containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid breathing dust /fume /gas /mist /vapours /spray. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands with water and soap thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.

7.2 Conditions for safe storage

Avoid storage above 72°F. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid improper addition of promoter and/or catalyst. A promoter and catalyst used with this product should be mixed separately with the product and must never be mixed together.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ACGIH-Threshold Limit Value (TLV)

Exposure limit values of the components:

Component / CAS	STEL, 15 min (OSHA, ACGIH)
	ppm
Styrene, 100-42-5	100
Organic Pigments (TiO ₂), 13463-67-7	-
Methyl Methacrylate, 80-62-6	-

8.2 OSHA-Permissible Exposure Limit (PEL)

Exposure limit values of the components:

Component / CAS	TLV, 8H (OSHA, PEL, ACGIH)
	ppm
Styrene, 100-42-5	50
Organic Pigments (TiO ₂), 13463-67-7	-
Methyl Methacrylate, 80-62-6	100

8.3 Any other exposure limit used or recommended by chemical manufacturer

No data available

8.4 Engineering Controls

General ventilation is required during normal use. Local ventilation may be required during certain operations to keep exposure levels below the exposure limit values listed above.

8.5 Personal Protective Equipment

Respiratory protection: If an exposure limit value listed above is exceeded, then suitable respiratory protection must be worn to prevent overexposure. Use of dust mask is required.

Hand protection: Wear appropriate impervious gloves to prevent skin contact.

Eye protection: Wear a face shield or protective goggles. Eye wash station and safety shower should be available.

Body protection: Wear protective clothing to prevent skin contact.

Hygiene measures: Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Information of basic physical and chemical properties

Appearance (physical state, colour, etc.)	Liquid with high viscosity
Odor	Not determined
Odor threshold	Not determined
pH	Not applicable
Melting point/freezing point;	Not applicable
Boiling point	270-300°F
Boiling Range	Not applicable
Flash point	92°F
Evaporation rate	Slower than n-Butyl Acetate
Flammability	Flammable (Flammability Class: 1C)
Upper/lower flammability or explosive limits	LEL: 1.1
Oxidising properties	Not determined
Vapor pressure	Not determined
Vapor density	Heavier than air
Relative density	Not determined
Solubility in water	Not determined
Other Solvents	Not determined
Partition coefficient (n-octanol/water)	Not determined
Auto ignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity	Not determined

Other information

Specific gravity	1.5
Volatile %	28 by weight



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10. STABILITY AND REACTIVITY

10.1 Reactivity	Reactive (HMIS Rating = 2)
10.2 Chemical stability	Stable
10.3 Possibility of hazardous reactions	Hazardous polymerization may occur at elevated temperatures (such as in a fire).
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	Strong acids and oxidizing agents, promoter and/or catalyst.
10.6 Hazardous decomposition products	Heating of this material to decomposition may cause the emission of irritating acid fumes.

11. TOXICOLOGICAL INFORMATION

11.1 Routes of exposure	
Acute toxicity:	This mixture may be harmful if inhaled
Skin corrosion/irritation:	This mixture may cause skin irritation
Serious eye damage/irritation:	This mixture may cause serious eye irritation
Respiratory or skin sensitisation:	This mixture may cause skin sensitisation
11.2 Measures of Toxicity (e.G, LD50, LC50) + expected amount to kill 50%	Not determined
11.3 Listed in IARC or considered carcinogen by NTP or OSHA	No data available
11.4 Related symptoms	No data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity	Not determined
12.2 Persistence and degradability	Not determined
12.3 Bioaccumulative potential	Not determined



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- 12.4 Mobility in soil** Not determined
- 12.5 Other adverse effects** Not determined

13. DISPOSAL CONSIDERATIONS

- 13.1 Disposal methods to employ** This material has been tested and found to have to have a flash point below 140°F. If discarded, this material and containers should be treated as hazardous wastes based on the characteristic of ignitability as defined under the federal RCRA regulations (40 CFR 261). Disposal of this material and its container requires compliance with applicable labelling, packaging, and record keeping standards. Solidified and/or scrap finished product is Nonhazardous under RCRA. Check local regulation for details on disposal. For further information, contact your state or local waste agency or the Federal EPA RCRA hotline (800-424-9346 or 202-382-3000).
- 13.2 Description of appropriate disposal containers to use** No data available
- 13.3 Description of the physical and chemical properties that may affect disposal activities** No data available
- 13.4 Language discouraging sewage disposal.** No data available
- 13.5 Any special precautions for landfills or incineration activities** No data available

14. TRANSPORT INFORMATION

- UN Number** 1866
- UN proper shipping name** Resin Solution, flammable
- Transport hazard classes** 3
- Packing group** III
- Environmental hazards** Not determined
- Guidance On transport in bulk** Not determined
- Special precautions for user** Not determined



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15. REGULATORY INFORMATION

National and/or regional regulatory information of the chemical or mixtures

SCAQMD Rule 1162 establishes specific process, control, housekeeping and record keeping requirements for fabrication operations using polyester resin materials. It is the responsibility of the fabricator to ensure compliance with these requirements.

Styrene is NOT currently listed as a carcinogen by California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

SARA HAZARD CLASSIFICATION: This material has been categorized as having the following hazard(s) as defined by SARA Title III regulations (40 CFR 370): acute, fire.

SARA SECTION 313 LISTED INGREDIENTS: The following ingredients in this material are subject to the reporting requirements of section 313 of SARA and 40 CFR 372 {see Section 3 for percentage of ingredient(s)}.

Styrene Monomer (100-42-5)

Methyl Methacrylate (80-62-6)

HMIS Rating: Health = 2

Fire = 3

Reactivity = 2

16. OTHER INFORMATION

Indications on the revision

Revision on 11th of May 2015:

Addition of all fields as required by regulation (US) HazCom 1910.1200 [HCS 2012].

Update of the classification information and update of related sections accordingly.

Abbreviations and acronyms used

CAS N^o.: Chemical Abstract Service Number

CFR: Code of Federal Regulations

HMIS: Hazardous Materials Identification System

UN N^o.: United Nations Number

Methods of evaluation for the classification of mixtures

The classification of the mixture was set based on the regulation (US) HazCom 1910.1200 [HCS 2012].

Other information

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