



Metalflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes Date: 01/01/2005

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Metalflex

1.2. Intended Use of the Product

Use of the substance/mixture: UV-Resistant Decorative Roof Coating

1.3. Name, Address, and Telephone of the Responsible Party

Company

GAF
1 Campus Drive
Parsippany, NJ 07054 USA
1-800-766-3411

Emergency Number : CHEMTREC [DAY OR NIGHT] 1-800-424-9300
Outside USA and Canada: 1 703-741-5970

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US classification

Skin Irrit. 2	H315
Eye Dam. 1	H318
Aquatic Acute 2	H401
Aquatic Chronic 3	H412

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Warning

Hazard Statements (GHS-US)

: H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H401 - Toxic to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US)

: P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P302+P352 - If on skin: Wash with plenty of water.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.
P321 - Specific treatment (see section 4 on this SDS).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

Metaflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Colorant 1	(CAS No) Proprietary†	<= 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Colorant 2	(CAS No) Proprietary†	<= 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Colorant 3	(CAS No) Proprietary†	<= 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Colorant 4	(CAS No) Proprietary†	<= 10	Not classified
Colorant 5	(CAS No) Proprietary†	<= 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Colorant 6	(CAS No) Proprietary†	<= 10	Not classified
Colorant 7	(CAS No) Proprietary†	<= 10	Eye Dam. 1, H318 Skin Sens. 1, H317
Colorant 8	(CAS No) Proprietary†	<= 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
Colorant 9	(CAS No) Proprietary†	<= 10	Skin Irrit. 2, H315 Eye Dam. 1, H318
Colorant 10	(CAS No) Proprietary†	<= 10	Eye Irrit. 2B, H320
Colorant 11	(CAS No) Proprietary†	<= 10	Not classified
Colorant 12	(CAS No) Proprietary†	<= 10	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318
Colorant 13	(CAS No) Proprietary†	<= 10	Skin Irrit. 2, H315 Eye Dam. 1, H318
Colorant 14	(CAS No) Proprietary†	<= 10	Eye Dam. 1, H318
Colorant 15	(CAS No) Proprietary†	<= 10	Not classified
Colorant 16	(CAS No) Proprietary†	< =10	Eye Dam. 1, H318 Skin Sens. 1, H317
Proprietary Pigment 1	(CAS No) Proprietary	3 - 15	Not classified
Titanium dioxide	(CAS No) 13463-67-7	3 - 15	Not classified
Proprietary Pigment 2	(CAS No) Proprietary	3 - 15	Not classified
Cosolvent 1	(CAS No) Proprietary	0.5 - 5	Not classified
Cosolvent 2	(CAS No) Proprietary	0.5 - 5	Flam. Liq. 4, H227 Eye Irrit. 2A, H319
Zinc oxide	(CAS No) 1314-13-2	0.5 - 2	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Cosolvent 3	(CAS No) Proprietary	0.5 - 2	Aquatic Acute 3, H402
Silica, amorphous	(CAS No) 7631-86-9	0.1 - 1	Not classified
UV Stabilizer 1	(CAS No) Proprietary	0.1 - 0.5	Skin Sens. 1, H317 Aquatic Chronic 2, H411
UV Stabilizer 2	(CAS No) Proprietary	0.1 - 0.5	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Petroleum distillates, hydrotreated light	(CAS No) 64742-47-8	0.1 - 0.5	Flam. Liq. 4, H227 Asp. Tox. 1, H304 Aquatic Acute 2, H401

Metalflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

UV Stabilizer 3	(CAS No) Proprietary	0.1 - 0.5	Flam. Liq. 4, H227 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Surfactant 1	(CAS No) Proprietary	0.05 - 0.2	Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Cosolvent 4	(CAS No) Proprietary	0.05 - 0.2	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Cosolvent 5	(CAS No) Proprietary	0.05 - 0.2	STOT SE 3, H335
Quartz	(CAS No) 14808-60-7	0.01 - 0.02	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
Cellulose	(CAS No) 9004-34-6	< 0.01	Comb. Dust

Full text of H-phrases: see section 16

†These components are colorants that may be included on a customer specific basis up to 10% of the total weight of the mixture in any combination desired. The hazards in Section 2 associated with them are derived from each colorant being at 10% of the mixture.

The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]. In the event of an emergency, chemical identities and exact percentages of the proprietary ingredients may need to be disclosed to emergency personnel upon request.

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Skin sensitization.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Water spray, dry chemical, foam, carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive. Containers may rupture when exposed to excessive heat.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Metaflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid breathing (vapor, mist, spray). Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Take up large spills with pump or vacuum. Transfer spilled material to a suitable container for disposal. If spilled directly onto the ground, remove sufficient soil to ensure material is fully recovered. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Protect from freezing.

Incompatible Products: Strong acids, strong bases, strong oxidizers. Anhydrides. Acid anhydrides. Water reactive materials. Metal salts.

Storage Temperature: 4 - 32 °C

7.3. Specific End Use(s)

UV-Resistant Decorative Roof Coating

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Cosolvent 4 (Proprietary)		
USA ACGIH	ACGIH Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
Cosolvent 2 (Proprietary)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm (inhalable fraction and vapor)
Cosolvent 1 (Proprietary)		
USA AIHA	WEEL TWA (mg/m ³)	10 mg/m ³
Titanium dioxide (13463-67-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA IDLH	US IDLH (mg/m ³)	5000 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust)
Silica, amorphous (7631-86-9)		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	6 mg/m ³
USA IDLH	US IDLH (mg/m ³)	3000 mg/m ³

Metaflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

Zinc oxide (1314-13-2)		
USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (respirable fraction)
USA ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³ (dust and fume)
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	10 mg/m ³ (fume)
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	15 mg/m ³ (dust)
USA IDLH	US IDLH (mg/m ³)	500 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ (fume) 15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Proprietary Pigment 2 (Proprietary)		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable fraction)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.05 mg/m ³ (respirable dust)
USA IDLH	US IDLH (mg/m ³)	50 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (STEL) (mg/m ³)	250 mppcf/%SiO ₂ +5, 10mg/m ³ /%SiO ₂ +2
Cellulose (9004-34-6)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Proprietary Pigment 1 (Proprietary)		
USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Cosolvent 5 (Proprietary)		
USA AIHA	WEEL TWA (mg/m ³)	10 mg/m ³ (MW>200, aerosol)

8.2. Exposure Controls

Appropriate Engineering Controls

- : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment

- : Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing

- : Chemically resistant materials and fabrics.

Hand Protection

- : Wear protective gloves.

Eye Protection

- : Chemical safety goggles.

Skin and Body Protection

- : Wear suitable protective clothing.

Respiratory Protection

- : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls

- : Avoid release to the environment.

Other Information

- : When using, do not eat, drink or smoke.

Metalflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: White viscous liquid
Odor	: Mild acrylic/ammonia
Odor Threshold	: No data available
pH	: 9 - 9.5
Evaporation Rate	: < 1 (n-Butyl Acetate=1)
Melting Point	: No data available
Freezing Point	: ≈ 0 °C (32 °F)
Boiling Point	: ≈ 100 °C (212 °F)
Flash Point	: > 200 °F (> 93.33 °C) (PMCC)
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: Heavier than air
Relative Density	: No data available
Specific Gravity	: 1.27 - 1.29
Specific gravity / density	: 9.8 - 11 lb/gal
Solubility	: Miscible with water.
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: 4000 - 8000 cP

9.2. Other Information: No additional information available

SECTION 10: STABILITY AND REACTIVITY

- 10.1. **Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. **Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. **Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Anhydrides. Acid anhydrides. water reactive materials. Metal salts.
- 10.6. **Hazardous Decomposition Products:** Carbon oxides (CO, CO₂). Nitrogen oxides. Hydrocarbons. Acrylates. Methyl methacrylate. Metal oxides. Organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Cosolvent 4 (Proprietary)	
LD50 Dermal Rat	10600 mg/kg
ATE (Oral)	500.00 mg/kg body weight
Surfactant 1 (Proprietary)	
LD50 Dermal Rat	> 2000 mg/kg
Cosolvent 2 (Proprietary)	
LD50 Oral Rat	5660 mg/kg
LD50 Dermal Rabbit	2700 mg/kg
Cosolvent 1 (Proprietary)	
LD50 Oral Rat	20 g/kg
LD50 Dermal Rabbit	20800 mg/kg
Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 5.2 mg/l/4h

Metaflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

Titanium dioxide (13463-67-7)	
LD50 Oral Rat	> 10000 mg/kg
Silica, amorphous (7631-86-9)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 2.2 mg/l (Exposure time: 1 h)
Zinc oxide (1314-13-2)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
Cellulose (9004-34-6)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 5800 mg/m ³ (Exposure time: 4 h)
Cosolvent 3 (Proprietary)	
LD50 Oral Rat	3200 mg/kg
LD50 Dermal Rat	> 15200 mg/kg
LC50 Inhalation Rat	> 3.55 mg/l (Exposure time: 6 h)
Proprietary Pigment 1 (Proprietary)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg
UV Stabilizer 3 (Proprietary)	
LD50 Oral Rat	2615 mg/kg
Cosolvent 5 (Proprietary)	
LD50 Oral Rat	47000 mg/kg
LD50 Dermal Rabbit	> 20 ml/kg
Colorant 12 (Proprietary)	
ATE (Oral)	500.00 mg/kg body weight

Skin Corrosion/Irritation: Causes skin irritation.

pH: 9 - 9.5

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: 9 - 9.5

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Titanium dioxide (13463-67-7)	
IARC group	2B
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Silica, amorphous (7631-86-9)	
IARC group	3
Quartz (14808-60-7)	
IARC group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Metaflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

Chronic Symptoms: None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Cosolvent 4 (Proprietary)	
LC50 Fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
Surfactant 1 (Proprietary)	
LC50 Fish 1	42 mg/l (Exposure time: 96 h - Species: Cyprinus carpio)
EC50 Daphnia 1	91 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Cosolvent 2 (Proprietary)	
LC50 Fish 1	1300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	> 100 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Cosolvent 1 (Proprietary)	
LC50 Fish 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
LC 50 Fish 2	41 - 47 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Petroleum distillates, hydrotreated light (64742-47-8)	
LC50 Fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC 50 Fish 2	2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
Silica, amorphous (7631-86-9)	
LC50 Fish 1	5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)
Zinc oxide (1314-13-2)	
LC50 Fish 1	780 µg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	0.122 mg/l
NOEC chronic fish	0.026 mg/l (Species: Jordanella floridae)
Cosolvent 3 (Proprietary)	
LC50 Fish 1	30 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
LC 50 Fish 2	33 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
UV Stabilizer 3 (Proprietary)	
LC50 Fish 1	0.97 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
12.2. Persistence and Degradability	
Metaflex	
Persistence and Degradability	May cause long-term adverse effects in the environment.
12.3. Bioaccumulative Potential	
Metaflex	
Bioaccumulative Potential	Not established.
Cosolvent 4 (Proprietary)	
Log Pow	-1.93
Cosolvent 2 (Proprietary)	
BCF fish 1	(no bioconcentration expected)
Cosolvent 1 (Proprietary)	
BCF fish 1	< 1
Log Pow	-0.92
Petroleum distillates, hydrotreated light (64742-47-8)	
BCF fish 1	61 - 159
Silica, amorphous (7631-86-9)	
BCF fish 1	(no bioaccumulation expected)
Cosolvent 3 (Proprietary)	
Log Pow	3.47 (at 25 °C)

Metaflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

UV Stabilizer 3 (Proprietary)	
Log Pow	0.37 (at 25 °C)

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way.

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology – Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Metaflex	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Cosolvent 4 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule
SARA Section 313 - Emission Reporting	1.0 %
Surfactant 1 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Cosolvent 2 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule
Cosolvent 1 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule
Petroleum distillates, hydrotreated light (64742-47-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Titanium dioxide (13463-67-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
Silica, amorphous (7631-86-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Zinc oxide (1314-13-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Metaflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

Proprietary Pigment 2 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Quartz (14808-60-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Cellulose (9004-34-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Cosolvent 3 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Proprietary Pigment 1 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
UV Stabilizer 3 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
UV Stabilizer 2 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
UV Stabilizer 1 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Cosolvent 5 (Proprietary)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
15.2 US State Regulations	
Cosolvent 4 (Proprietary)	
U.S. - California - Proposition 65 - Developmental Toxicity	WARNING: This product contains chemicals known to the State of California to cause birth defects.
Titanium dioxide (13463-67-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
Quartz (14808-60-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
Cosolvent 4 (Proprietary)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Cosolvent 1 (Proprietary)	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Titanium dioxide (13463-67-7)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Silica, amorphous (7631-86-9)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Zinc oxide (1314-13-2)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Proprietary Pigment 2 (Proprietary)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Quartz (14808-60-7)	

Metaflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Cellulose (9004-34-6)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Proprietary Pigment 1 (Proprietary)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 07/18/2016
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
Skin Sens. 1B	Skin sensitization Category 1B
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H227	Combustible liquid
Comb. Dust	May form combustible dust concentrations in air
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled

Metalflex

Safety Data Sheet 4018

Revision Date: 07/18/2016

Date of issue: 03/08/2016

Supersedes

H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Disclaimer

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Revision Information

Conversion to GAF SDS.