MFI SYSTEMS

SAFETY DATA SHEET

1. Identification

Product identifier 2.1 VOC Industrial Epoxy Sealer Gray

Other means of identification

Product code MFI-590 (all sizes)
Recommended use Primer Sealer
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name MFI Systems[™] a division of Teknol Inc.

Address 5751 N. Webster Street

Dayton, Ohio 45414

United States

Telephone TECH SUPPORT

SALES 937-890-6547

937-890-6547

PHONE 800-257-6547

Website www.mfisystems.com

E-mail info@rubber-seal.net

Emergency phone number EMERGENCY 24 Hrs. 800-424-9300

(Chemtrec)

2. Hazard(s) identification

Physical hazards Flammable liquids Category 2 **Health hazards** Acute toxicity, oral Category 4 Acute toxicity, dermal Category 3 Acute toxicity, inhalation Category 3 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Sensitization, skin Category 1 Carcinogenicity Category 2 Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

Hazardous to the aquatic environment,

Category 3

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Highly flammable liquid and vapor. Harmful if swallowed. Toxic in contact with skin. Causes skin

irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if inhaled. Suspected of causing cancer. Causes damage to organs through prolonged or repeated

exposure. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Call a poison center/doctor if you feel unwell. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor. Rinse mouth. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

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

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information

83.39% of the mixture consists of component(s) of unknown acute oral toxicity. 84.99% of the mixture consists of component(s) of unknown acute dermal toxicity. 59.84% of the mixture consists of component(s) of unknown acute inhalation toxicity. 94.35% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 93.65% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|-------------|-----------|
| parachlorobenzotriflouride | | 98-56-6 | 25 - < 45 |
| Talc | | 14807-96-6 | 10 - < 25 |
| Titanium Dioxide | | 13463-67-7 | 5 - < 15 |
| Xylene | | 1330-20-7 | 5 - < 15 |
| Acetone | | 67-64-1 | 5 - < 10 |
| 4-4-Isopropylidene Phenol Epich | | 25068-38-6 | 0< 5 |
| Aluminum Hydroxide | | 21645-51-2 | 0< 5 |
| Butyl Cellosolve/Glycol Ether EB | | 111-76-2 | 0 - < 5 |
| Carbon Black | | 1333-86-4 | 0< 5 |
| Crystalline Quartz | | 14808-60-7 | 0< 5 |
| Silica | | 7631-86-9 | 0< 5 |
| Silicon dioxide | | 112945-52-5 | 0< 5 |
| Other components below reportable leve | ls | | 20 - < 30 |

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or Inhalation artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance.

Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical

attention and take along these instructions. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Ingestion

Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis.

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

General information

Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Rash. Prolonged exposure may cause chronic effects.

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods

General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials.

Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

| Components | Type | Value | Form |
|--|---------|------------|-------------|
| Acetone (CAS 67-64-1) | PEL | 2400 mg/m3 | |
| | | 1000 ppm | |
| Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2) | PEL | 240 mg/m3 | |
| | | 50 ppm | |
| Carbon Black (CAS 1333-86-4) | PEL | 3.5 mg/m3 | |
| Titanium Dioxide (CAS 13463-67-7) | PEL | 15 mg/m3 | Total dust. |
| Xylene (CAS 1330-20-7) | PEL | 435 mg/m3 | |
| | | 100 ppm | |
| US. OSHA Table Z-3 (29 CFR 1910 | 0.1000) | | |
| Components | Туре | Value | Form |
| Crystalline Quartz (CAS 14808-60-7) | TWA | 0.3 mg/m3 | Total dust. |
| , | | 0.1 mg/m3 | Respirable. |
| | | 2.4 mppcf | Respirable. |
| Silica (CAS 7631-86-9) | TWA | 0.8 mg/m3 | |
| | | 20 mppcf | |
| Silicon dioxide (CAS 112945-52-5) | TWA | 0.8 mg/m3 | |
| • | | 20 mppcf | |
| Talc (CAS 14807-96-6) | TWA | 0.3 mg/m3 | Total dust. |
| • | | 0.1 mg/m3 | Respirable. |
| | | | • |
| | | 20 mppcf | |

| Components | Туре | | Val | ue | Form |
|--|---------------------|-------------|----------|------------|----------------------|
| Acetone (CAS 67-64-1) | STEL | | 750 | ppm | |
| | TWA | | 500 | ppm | |
| Aluminum Hydroxide (CAS 21645-51-2) | TWA | | 1 m | g/m3 | Respirable fraction. |
| Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2) | TWA | | 20 դ | opm | |
| Carbon Black (CAS 1333-86-4) | TWA | | 3 m | g/m3 | Inhalable fraction. |
| Crystalline Quartz (CAS 14808-60-7) | TWA | | 0.02 | 25 mg/m3 | Respirable fraction. |
| Talc (CAS 14807-96-6) | TWA | | 2 m | g/m3 | Respirable fraction. |
| Titanium Dioxide (CAS 13463-67-7) | TWA | | 10 r | mg/m3 | |
| Xylene (CAS 1330-20-7) | STEL | | 150 | ppm | |
| | TWA | | 100 | ppm | |
| US. NIOSH: Pocket Guide | to Chemical Hazards | | | | |
| Components | Туре | | Val | ue | Form |
| Acetone (CAS 67-64-1) | TWA | | | mg/m3 | |
| | | | 250 | ppm | |
| Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2) | TWA | | 24 r | mg/m3 | |
| | | | 5 pp | om | |
| Carbon Black (CAS 1333-86-4) | TWA | | 0.1 | mg/m3 | |
| Crystalline Quartz (CAS 14808-60-7) | TWA | | 0.05 | 5 mg/m3 | Respirable dust. |
| Silica (CAS 7631-86-9) | TWA | | 6 m | g/m3 | |
| Silicon dioxide (CAS 112945-52-5) | TWA | | 6 m | g/m3 | |
| Talc (CAS 14807-96-6) | TWA | | 2 m | g/m3 | Respirable. |
| ogical limit values | | | | | |
| ACGIH Biological Exposi | ure Indices | | | | |
| | | | | | |
| Components | Value | Determinant | Specimen | Sampling 7 | Гime |

200 mg/g Butyl Cellosolve/Glycol Creatinine in Butoxyacetic Ether EB (CAS 111-76-2) acid (BAA). urine with hydrolysis Xylene (CAS 1330-20-7) Methylhippuric Creatinine in 1.5 g/g

acids

Exposure guidelines

US - California OELs: Skin designation

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2) Skin designation applies.

US - Tennessee OELs: Skin designation

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2) Can be absorbed through the skin.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

urine

^{* -} For sampling details, please see the source document.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid.
Color Gray
Odor Solvent.
Odor threshold Not available.
pH Not available.

Melting point/freezing point -138.46 °F (-94.7 °C) estimated Initial boiling point and boiling 132.89 °F (56.05 °C) estimated

range

Flash point -4.0 °F (-20.0 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

2.6 % estimated

(%)

Flammability limit - upper

(%)

12.8 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 552.29 hPa estimated

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 869 °F (465 °C) estimated

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Density

1.84 g/cm3 estimated

Flammability class

Flammable IB estimated

49.65 w/w % By Weight

60.24 v/v % By Volume

Specific gravity 1.84 estimated

VOC (Weight %) 1.16 lb/gal (Actual VOC - With Water With Exempts)

2.09 lb/gal (Regulatory VOC - Less Water Less Exempts) 138.97 g/L (Actual VOC - With Water With Exempts)

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stabilityMaterial is stable under normal conditions.Possibility of hazardousHazardous polymerization does not occur.

reactions

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials Strong acids. Acids. Strong oxidizing agents. Halogens. Hazardous decomposition No hazardous decomposition products are known.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation Toxic if inhaled. May cause damage to organs through prolonged or repeated exposure by

inhalation.

Skin contactToxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

Eye contact Causes serious eye irritation.

Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction.

Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Toxic if inhaled. Toxic in contact with skin. Harmful if swallowed. May cause an allergic skin

reaction.

| Components | Species | Test Results |
|------------------------------|----------------------|--------------------|
| Acetone (CAS 67-64-1) | | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rabbit | 20000 mg/kg |
| | | 20 ml/kg |
| Inhalation | | |
| LC50 | Rat | 76 mg/l, 4 Hours |
| | | 50.1 mg/l, 8 Hours |
| Oral | | |
| LD50 | Mouse | 3000 mg/kg |
| | Rabbit | 5340 mg/kg |
| | Rat | 5800 mg/kg |
| Aluminum Hydroxide (CAS | 21645-51-2) | |
| Acute | · | |
| Oral | | |
| LD50 | Rat | > 5000 mg/kg |
| Butyl Cellosolve/Glycol Eth- | er EB (CAS 111-76-2) | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rabbit | 400 mg/kg |
| Inhalation | | |
| LC50 | Mouse | 700 ppm, 7 Hours |

450 ppm, 4 Hours

Rat

| Components | Species | Test Results |
|-----------------------------|------------|--------------------|
| Oral | | |
| LD50 | Guinea pig | 1.2 g/kg |
| | Mouse | 1.2 g/kg |
| | Rabbit | 0.32 g/kg |
| | Rat | 560 mg/kg |
| Carbon Black (CAS 1333-86 | 6-4) | |
| <u>Acute</u> | | |
| Oral | | |
| LD50 | Rat | > 8000 mg/kg |
| Silica (CAS 7631-86-9) | | |
| <u>Acute</u> | | |
| Oral | | |
| LD50 | Mouse | > 15000 mg/kg |
| | Rat | > 22500 mg/kg |
| Silicon dioxide (CAS 112945 | 5-52-5) | |
| <u>Acute</u> | | |
| Oral | | |
| LD50 | Mouse | > 15000 mg/kg |
| | Rat | > 22500 mg/kg |
| Xylene (CAS 1330-20-7) | | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rabbit | > 43 g/kg |
| Inhalation | | |
| LC50 | Mouse | 3907 mg/l, 6 Hours |
| | Rat | 6350 mg/l, 4 Hours |
| Oral | | |
| LD50 | Mouse | 1590 mg/kg |
| | Rat | 3523 - 8600 mg/kg |

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye Causes serious eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)

Carbon Black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

Crystalline Quartz (CAS 14808-60-7)

1 Carcinogenic to humans.

Silica (CAS 7631-86-9)

3 Not classifiable as to carcinogenicity to humans.
Silicon dioxide (CAS 112945-52-5)

3 Not classifiable as to carcinogenicity to humans.

3 Not classifiable as to carcinogenicity to humans.

Titanium Dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

Xylene (CAS 1330-20-7) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Crystalline Quartz (CAS 14808-60-7) Known To Be Human Carcinogen.

Components in this product have been shown to cause birth defects and reproductive disorders in Reproductive toxicity

laboratory animals.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

Not an aspiration hazard.

Chronic effects

Causes damage to organs through prolonged or repeated exposure. May be harmful if absorbed

through skin. Prolonged inhalation may be harmful.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

| Components | | Species | Test Results |
|------------------------|-------------------|---|------------------------------|
| Acetone (CAS 67-64-1 |) | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 10294 - 17704 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours |
| Butyl Cellosolve/Glyco | l Ether EB (CAS 1 | 11-76-2) | |
| Aquatic | | | |
| Fish | LC50 | Inland silverside (Menidia beryllina) | 1250 mg/l, 96 hours |
| Titanium Dioxide (CAS | 3 13463-67-7) | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | > 1000 mg/l, 48 hours |
| Fish | LC50 | Mummichog (Fundulus heteroclitus) | > 1000 mg/l, 96 hours |
| Xylene (CAS 1330-20- | -7) | | |
| Aquatic | • | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 7.711 - 9.591 mg/l, 96 hours |

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Acetone -0.24Butyl Cellosolve/Glycol Ether EB 0.83 **Xylene** 3.12 - 3.2

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

The following transportation information is provided based on the manufacturer's interpretation of shipping regulations. Each shipper is responsible for identifying, naming, marking, and labeling prior to offering for transport.

DOT

UN1263 **UN** number

UN proper shipping name

Transport hazard class(es)

Paint related material including paint thinning, drying, removing, or reducing compound

Class 3 Subsidiary risk 3 Label(s) Ш Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions 149, B52, IB2, T4, TP1, TP8, TP28

Packaging exceptions Packaging non bulk 173 Packaging bulk 242

IATA

UN number UN1263

Paint related material (including paint thinning or reducing compounds) **UN proper shipping name**

Transport hazard class(es)

3 Class Subsidiary risk Ш Packing group **Environmental hazards** No. **ERG Code** 3L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft

Allowed.

Cargo aircraft only Allowed.

IMDG

UN1263 **UN** number

PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid **UN** proper shipping name

lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)

Transport hazard class(es)

3 Class Subsidiary risk Ш Packing group **Environmental hazards**

Marine pollutant No. **EmS** F-E, <u>S-E</u>

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Not established.

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

DOT





15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1)

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)

Xylene (CAS 1330-20-7)

Listed.

Listed.

Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. | |
|----------------------------------|------------|----------|---|
| Xylene | 1330-20-7 | 5 - < 15 | _ |
| Butyl Cellosolve/Glycol Ether EB | 111-76-2 | 0 - < 5 | |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Xylene (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1) 6532

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Acetone (CAS 67-64-1)

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)

Carbon Black (CAS 1333-86-4) Crystalline Quartz (CAS 14808-60-7)

Talc (CAS 14807-96-6)

Titanium Dioxide (CAS 13463-67-7)

Xylene (CAS 1330-20-7)

US. Massachusetts RTK - Substance List

Acetone (CAS 67-64-1)

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)

Carbon Black (CAS 1333-86-4) Crystalline Quartz (CAS 14808-60-7)

Silica (CAS 7631-86-9)

Silicon dioxide (CAS 112945-52-5)

Talc (CAS 14807-96-6)

Titanium Dioxide (CAS 13463-67-7)

Xylene (CAS 1330-20-7)

US. New Jersey Worker and Community Right-to-Know Act

Acetone (CAS 67-64-1)

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)

Carbon Black (CAS 1333-86-4) Crystalline Quartz (CAS 14808-60-7)

Silica (CAS 7631-86-9) Talc (CAS 14807-96-6)

Titanium Dioxide (CAS 13463-67-7)

Xylene (CAS 1330-20-7)

US. Pennsylvania Worker and Community Right-to-Know Law

Acetone (CAS 67-64-1)

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)

Carbon Black (CAS 1333-86-4) Crystalline Quartz (CAS 14808-60-7)

Silica (CAS 7631-86-9)

Silicon dioxide (CAS 112945-52-5)

Talc (CAS 14807-96-6)

Titanium Dioxide (CAS 13463-67-7)

Xylene (CAS 1330-20-7)

US. Rhode Island RTK

Acetone (CAS 67-64-1)

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)

Xylene (CAS 1330-20-7)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon Black (CAS 1333-86-4)

Crystalline Quartz (CAS 14808-60-7)

Listed: February 21, 2003

Listed: October 1, 1988

Titanium Dioxide (CAS 13463-67-7)

Listed: September 2, 2011

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |

Country(s) or region Inventory name On inventory (yes/no)*

Philippines Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 06-21-2016

Version # 01

Disclaimer MFI Systems cannot anticipate all conditions under which this information and its product, or the

products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the

sheet was written based on the best knowledge and experience currently available.

Material name: 2.1 VOC Industrial Epoxy Sealer Gray
MFI-590 (all sizes) Version #: 01 Issue date: 06-21-2016