Revision Date: 10/01/2013
Supercedes: 08/05/2011

SAFETY DATA SHEET

1.0 IDENTIFICATION

1.1 GHS product identifier: P-17 SMCR

1.2 Other means of identification: Unsaturated Polyester Resin Blend

1.3 Recommended use of the chemical and restrictions on use: N/A

1.4 Supplier's details: Axson US, Inc

Headquarters
31200 Stephenson Hwy
Madison Heights MI 48071
Phone No: 248-588-2270

1.5 Manufacturing site information:

Axson US, Inc	Axson US, Inc	Axson US, Inc
1611 Hults Drive	2300 Gainsboro Avenue	31200 Stephenson Hwy
Eaton Rapids, MI 48827	Ferndale, MI 48220	Madison Heights, MI 48071
Phone: 517-663-8191	Phone: 248-345-6880	Phone: 248-588-2270

1.6 Emergency phone number: CHEMTREC 1-800-424-9300 or 703 527-3887(Call Collect)

1.0 HAZARDS IDENTIFICATION

1.1 Classification of the substance or mixture:

Flammable Liquid 3; Skin Corrosion/Irritation 2, Eye Damage/Irritation 2B, Acute Toxicity-Inhalation 4

1.2 GHS label elements:



Signal Word: Warning
Hazard Statement: Flammable liquid and vapor
Prevention: 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. Wear protective gloves/eye protection/face protection.
Response: If on skin (or hair): remove/take off immediately all contaminated clothing. Rinse skin with water/shower. In case of fire: use carbon dioxide, foam, dry chemical or water fog to extinguish fire.
Storage: Store in a well-ventilated place. Keep cool.
Disposal: Dispose of contents/container by incineration under controlled conditions in accordance with all local and national laws and regulations.



Signal Word: Warning
Hazard Statement: Causes skin irritation
Prevention: Wash hands thoroughly after handling. Wear protective gloves.
Response: If on skin: wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before reuse.

Signal Word: Warning
Hazard Statement: Causes eye irritation
Prevention: Flush eyes thoroughly after eye contact.
Response: If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.



Signal Word: Warning
Hazard Statement: Harmful if inhaled
Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.
Response: If inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

1.3 Other hazards which do not result in classification: N/A

1.4 Hazards Material Information System (United States):

Health	2*
Flammability	2
Physical Hazard	1

Hazard Codes: *=Chronic Hazard 0=Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard

2.0 COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Mixtures

Chemical Identity	CAS No.	Concentration
Polyester Resin	28472-89-1	30% - 40%
Vinyl Toluene	25013-15-4	15% - 20%
Magnesium Silicate	14807-96-6	40% - 50%
Titanium Dioxide	13463-67-7	5% - 10%
m-Tolyl Diethanolamine	91-99-6	0.5% - 1%
Methyl Alcohol	67-56-1	0.5% - 1%

3.0 FIRST-AID MEASURES

3.1 Description of necessary first-aid measures:

Eye Contact: Immediately flush eyes with large quantities of clean water for at least 15 minutes. Get immediate medical attention.

Skin Contact: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Ingestion: DO NOT INDUCE VOMITING. ASPIRATION HAZARD: this material may enter the lungs during vomiting. Immediately give the victim one or two glasses of water or milk to drink. Never give anything by mouth to an unconscious person. GET IMMEDIATE MEDICAL ATTENTION.

Inhalation: Remove victim to fresh air. Keep warm and quiet. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. GET IMMEDIATE MEDICAL ATTENTION.

3.2 Most Important symptoms/effects, acute and delayed:

Acute Exposure:

Inhalation: Harmful if inhaled. Effects from exposure may include headaches, fatigue, nausea, sensation of drunkenness, central nervous system depression and pulmonary edema.

Skin: Harmful if absorbed through skin. Contact causes skin irritation. Prolonged or repeated skin contact can result in defatting and drying of the skin.

Eyes: Harmful to eyes. Direct contact with this material causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

Ingestion: Harmful if swallowed. Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful. Effects from exposure through ingestion may include gastrointestinal disturbances, pain and discomfort. Effects of exposure by ingestion may also include those indicated by the inhalation route. Material is harmful or fatal if liquid is aspirated into the lungs.

Chronic Exposure:

Prolonged or repeated exposure may cause damage to the central nervous system and may result in permanent brain damage. Symptoms include: loss of memory, loss of judgment, loss of coordination, effects on hearing and respiratory tract damage. Prolonged or repeated exposure may cause liver and kidney damage.

Carcinogenicity:

This material does not contain 0.1% or more of any chemical listed by the International Agency for Research (IARC) on Cancer (IARC), the National Toxicology Program (NTP), or regulated by the Occupational Safety and Health Administration (OSHA) as a carcinogen.

3.3 Indication of immediate medical attention and special treatment needed, if necessary: N/A

4.0 FIRE-FIGHTING MEASURES

4.1 Suitable extinguishing media:

Use carbon dioxide, foam, dry chemical or water fog to extinguish fire.

4.2 Specific hazards arising from the chemical:

FLAMMABLE LIQUID. Vapors can form an explosive mixture with air. Vapor can travel to a source of ignition (spark or flame) and flash back. This material may polymerize (react) when its container is exposed to heat (as during a fire). This polymerization increases pressure inside a closed container and may result in the violent rupture of the container. Flash Point: 127° F (53 ° C)

4.3 Special protective actions for fire-fighters:

Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use.

Evacuate all persons from the fire area to an explosion-protected location. Move non-burning material, as feasible, to a safe location as soon as possible. Fire fighters should be protected from potential explosion hazard while extinguishing the blaze. Containers of this material may build up pressure if exposed to heat (fire). Use water spray to cool fire-exposed containers. DO NOT extinguish a fire resulting from a large flow of this flammable liquid until the flow of liquid is effectively shut off. This precaution will help prevent the accumulation of an explosive vapor-air mixture after the initial fire is extinguished. Use water spray to disperse vapors if a spill or leak has not ignited. See Section 13 for disposal considerations.

5.0 ACCIDENTAL RELEASE MEASURES

5.1 Personal precautions, protective equipment and emergency procedures:

Use non-sparking (non-metallic) tools to clean up spill. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). NO SMOKING. Persons not wearing protective equipment (see Section 8) should be excluded from the area of the spill until clean-up has been completed.

5.2 Methods and materials for containment and clean up:

For Small Spills: Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. For Large Spills (drums or larger): Stop spill at source. Prevent spilled material from contaminating soil or entering drains, sewers, streams or other bodies of water. Prevent spilled material from spreading. Immediately notify authorities of any reportable spill as may be required pursuant to regulations. See Section 15 for applicable CERCLA reportable quantities. Scrape or pump spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other waste materials to waste containers for disposal.

6.0 HANDLING AND STORAGE

6.1 Precautions for safe handling:

Avoid inhalation and contact with eyes, skin, and clothing. Wash hands thoroughly after handling and before eating or drinking. Remove and wash contaminated clothing before reuse. Use with adequate ventilation. Ground and bond containers when transferring the material to prevent static electricity sparks which could ignite the vapor. Use spark-proof tools and explosion-proof equipment. Consult your supplier of promoters and catalysts for additional instructions on proper mixing and usage. Empty containers may retain product residue (liquid and/or vapor). Do not pressurize, cut, weld, braze, solder, drill, grind, or expose these containers to heat, flame, sparks, static electricity, or other sources of ignition as the container may explode and may cause injury or death. Empty drums should be completely drained and properly bunged. Empty drums should be promptly returned to a drum reconditioner or properly disposed.

6.2 Conditions for safe storage, including any incompatibilities:

Keep away from ignition sources: flames, pilot lights, electrical sparks, and sparking tools. NO SMOKING. Do not store in direct sunlight. Store separate from oxidizing materials, peroxides, and metal salts. Keep container closed when not in use. To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 75°F (25°C). Copper or copper containing alloys should be avoided as containers.

7.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

7.1 Control parameters

Component	CAS No.	EINECS	Percent	Exposure Limits	Source
Vinyl Toluene	25013-15-4	246-562-2	15% - 20%	242 mg/m3 TWA 100 ppm STEL 100 ppm or 480 mg/m3 8 hr TWA	ACGIH ACGIH OSHA PEL

7.2 Appropriate engineering controls:

Local ventilation may be required during certain operations to maintain concentrations below recommended exposure limits. Use explosion-proof ventilation equipment.

7.3 Individual protection measures, such as personal protective equipment:

Eye Protection: Wear 1) safety glasses with side shields and a faceshield or 2) goggles and a faceshield. Facilities storing or utilizing this material should be equipped with an eyewash station and safety shower.
Skin Protection: Wear chemical resistant gloves such as polyvinyl alcohol or Viton®. If splashing is likely, wear impervious clothing and boots to prevent repeated or prolonged skin contact. Consult your supplier of personal protective equipment for additional instructions on proper usage. The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all requisite workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), as well as the instructions/specifications provided by the glove supplier.
Respiratory Protection: A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if 1) there is any potential for an uncontrolled release, 2) exposure levels are not known, or 3) during other circumstances where air purifying respirators may not provide adequate protection.

8.0 PHYSICAL AND CHEMICAL PROPERTIES

- **8.1 Appearance (physical state, color, etc.):** Thixotropic Paste-White, Black or Grey
- **8.2 Odor:** Pungent Odor
- **8.3 Odor threshold:** N/A
- **8.4 pH:** Not Determined
- **8.5 Melting point/freezing point:** Not Determined
- **8.6 Initial boiling point and boiling range:** Not Determined
- **8.7 Flash Point:** 127° F (53 ° C)
- **8.8 Evaporation rate:** N/A
- **8.9 Flammability (solid, gas):** N/A
- **8.10 Upper/lower flammability or explosive limits:** LFL-1.1 % in air Vinyl Toluene; UFL-5.2 % in air Vinyl Toluene
- **8.11 Vapor pressure:** 1.1 (mm Hg) at 68°F (20 °C) Vinyl Toluene
- **8.12 Vapor density:** N/A
- **8.13 Relative density (Specific gravity):** 1.57-1.59
- **8.14 Solubility(ies):** Components are Not Readily Soluble in Water
- **8.15 Partition coefficient; n-octanol/water:** N/A
- **8.16 Auto-ignition temperature:** 914° F (490° C)
- **8.17 Decomposition temperature:** N/A
- **8.18 Viscosity:** N/A
- **8.19 %Volatile (VOC):** 16% by mass (252 g/liter)0 Vinyl Toluene

9.0 STABILITY AND REACTIVITY

- **9.1 Reactivity:** N/A
- **9.2 Chemical stability:** Stable at normal temperatures and storage conditions.
- **9.3 Possibility of hazardous reactions:** Product will undergo hazardous polymerization at temperatures above 150 F (65 C). Hazardous polymerization will occur if contaminated with peroxides, metal salts and polymerization catalysts.
- **9.4 Conditions to avoid:** N/A
- **9.5 Incompatible materials:** Avoid contact with strong acids, oxidizing agents (peroxides), metal salts and polymerization catalysts.
- **9.6 Hazardous decomposition products:** Thermal decomposition may produce various hydrocarbons and irritating, acrid vapors.

10.0 TOXICOLOGICAL INFORMATION

- **10.1 Likely routes of exposure:** Inhalation, skin and eye contact.
- **10.2 Symptoms related to the physical, chemical and toxicological characteristics:**

Acute Eye Toxicity: Vinyl toluene: (rabbit), undiluted, slight conjunctival irritation, no corneal injury.
Acute Skin Toxicity: Vinyl toluene monomer: dermal LD50 (rabbit), 4,500 mg / kg.
Acute Inhalation Toxicity: Vinyl toluene monomer: inhalation LC50 (mouse), 3,000 mg / cu m. Human subjects noted ocular and upper respiratory tract irritation at a 400 ppm vinyl toluene concentration; strong objectionable odor

at 300 ppm; and strong, tolerable odor at 200 ppm. At 50 ppm, the odor was detectable, but there was no irritation of the mucous membranes. The odor was reported to be undetectable at less than 10 ppm.
Acute Oral Toxicity: Vinyl toluene: oral LD50 (rat), 4,000 mg / kg; (mouse), 3.16 g / kg.

10.3 Delayed and immediate effects and also chronic effects from short and long term exposure:

Subchronic: Vinyl toluene exhibited a central nervous system (CNS) depressant effect during exposure of mice, rats, guinea pigs and rabbits by various routes (oral, inhalation and skin). During repeated exposure for 1 month, vinyl toluene had some effect on the CNS of mice, and during chronic inhalation at 0.03 mg/L it caused a reduction in weight of mice and symptoms of intoxication in the offspring of guinea pigs. Vinyl toluene inhalation (1250 ppm, 7-8 hr/day for 92 - 100 days) increases kidney and liver weights and causes fatty degeneration of these organs in rats, guinea pigs, rabbits and monkeys. Exposure to 600 ppm did not cause any microscopic or macroscopic organ changes. A 12 week inhalation administration of 300 ppm vinyl toluene causes slight increases in secondary lysosomes in the rat liver.
Chronic/Carcinogenicity: This material does not contain 0.1% or more of any chemical listed by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or regulated by the United States Occupational Safety and Health Administration (OSHA) as a carcinogen. The International Agency for Research on Cancer (IARC) has classified vinyl toluene in Group 3, not classifiable as to its carcinogenicity to humans. The American Conference of Governmental Industrial Hygienists (ACGIH) has adopted the listing of Vinyl Toluene as "A4-Not Classifiable as a Human Carcinogen." There is inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.
Sensitization: No information is available.
Teratology: Subchronic inhalation of 6 ppm (29 mg/cu m) vinyl toluene by guinea pigs for 4 months produced teratogenic effects.
Reproduction: No information is available.
Mutagenicity: Vinyl toluene was tested for potential to induce chromosome aberrations and sister chromatid exchange in phytohemagglutinin-stimulated human lymphocytes cultured for 48 hours (aberration analysis) or 72 hour (sister chromatid exchange analysis). The treatments were carried out 24 hour (aberrations) or 48 hour (sister chromatid exchange) before harvest. The toxicity of vinyl toluene was similar to that of styrene. Chromosome aberrations were observed in cells treated with 0.33 to 4.00 mmolar vinyl toluene. Like styrene, vinyl toluene is converted in vitro to reactive metabolites, presumably epoxides.

10.4 Numerical measures of toxicity:

Ingredient Name	CAS No.	%	Test	Result	Route	Species
m-Tolyldiethanolamine	91-99-6	0.5% - 1%	LD50	0.8 – 3.1 g/kg	Oral	Rat
Vinyl Toluene	25013-15-4	15% - 20%	LD50 LD50 LD50	3,000 mg/m3 4000 g/kg 4500 mg/kg	Inhalation Oral Dermal	Mouse Rat Rabbit

11.0 ECOLOGICAL INFORMATION

11.1 Ecotoxicity:

-No data available-

11.2 Persistence and degradability:

This material contains components that show little or no evidence of biodegradability. Great Caution should be taken to prevent release to the environment. See Section 13 for further information.

11.3 Bioaccumulative potential: N/A

11.4 Mobility in soil: N/A

11.5 Other adverse effects: N/A

12.0 DISPOSAL CONSIDERATIONS

12.1 Disposal methods:

Preferred method of disposal includes incineration under controlled conditions in accordance with all local and national laws and regulations. The generation of waste should be avoided or minimized wherever possible. Untreated material is not suitable for disposal. Waste, even small quantities, should never be poured down drains, sewers or water courses. Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Contaminated packaging
Empty containers can only be disposed of when the remaining product adhering to the container walls has been removed. Hazard warning labels should be removed from the container walls.

13.0 TRANSPORT INFORMATION

Land proper shipping name: Liquid Plastic, NOI (Not Regulated)

13.1 UN number: UN-1866

13.2 UN proper shipping name: Resin Solution

13.3 Transport hazard class(es): 3

13.4 Packing group, if applicable: III

13.5 Environmental hazards: N/A

13.6 Transport in bulk: N/A

13.7 Special precautions for user: N/A

14.0 REGULATORY INFORMATION

14.1 Safety, health and environmental regulations:

Occupational Safety and Health Act (OSHA):
This material is classified as a hazardous chemical under the criteria of the US Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III: Section 304 - CERCLA:
Reportable Quantities have NOT been established for any of this material's components.

SARA Title III: Section 311/312 - Hazard Communication Standard (HCS):
This material is classified as an IMMEDIATE HEALTH HAZARD, DELAYED HEALTH HAZARD, and FLAMMABILITY HAZARD under the US Superfund Amendment and Reauthorization Act (Section 311/312).

SARA Title III: Section 313 Toxic Chemical List (TCL):
This product does not contain Section 313 Reportable Ingredients.

TSCA Section 8(b) - Inventory Status:
All components of this material are listed on the US Toxic Substances Control Act (TSCA) inventory.

TSCA Section 12(b) - Export Notification:
This material does not contain any components that are subject to the US Toxic Substances Control Act (TSCA) Section 12(b) Export Notification requirements.

California Proposition 65 Substances (component(s): known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986")
Titanium Dioxide (CAS# 13463-67-7) (airborne, unbound particles of respirable size)

CANADA REGULATIONS

Canadian Inventory Status:
This material contains components that are listed on the Canadian Domestic Substances List (DSL) and on the Canadian Non-Domestic Substances List (NDSL).

Canadian WHMIS:
This material is classified by the Canadian Workplace Hazardous Material Information System as: B3 (combustible liquid), D2A (materials causing other toxic effects, very toxic material), and D2B (materials causing other toxic effects, toxic material)



Additional Canadian Regulatory Information:
The following chemicals are listed on the WHMIS Ingredient Disclosure List: Vinyl Toluene (CAS# 25013-15-4)

15.0 OTHER INFORMATION

15.1 Date of Preparation: 10/08/2013

To the best of our knowledge, the information contained herein is accurate. Final determination of the suitability of any material is the sole responsibility of the users. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.