MATERIAL SAFETY DATA SHEET

TRANSTAR AUTOBODY TECHNOLOGIES, INC.

Revision 1
Prepared 2009-05-14

Section 1 - Chemical Product and Company Information

Product Name: Ultraflex Brushable Seam Sealer **Product Code:** 4162, 4164

Transtar Autobody Technologies
2040 Heiserman Drive
Brighton, MI 48114
Phone (810) 220-3000
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24 Hour Emergency Phone(s):

CHEMTREC 1-800-424-9300

CANUTEC (CANADA) 1-613-996-6666

MSDS Prepared By: Transtar Autobody Technologies

Product Use: Sealant

Section 2 - Composition / Information on Ingredients

See Section 15 for Regulatory Information

Chemical Name / CAS No	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Resin 20 to 30% Vapor Pressure: 0	None	None	None
Calcium Carbonate 1317-65-3 19.86 percent Vapor Pressure: 0	OSHA has set a TWA of 15 mg/m3 on a total dust basis and 5 mg/m3 on a respirable fraction basis.	ACGIH has set a TWA of 10 mg/m3 (for dust containing no asbestos and <1% free silica).	None
Toluene 108-88-3 10 to 20% Vapor Pressure: 22 mm Hg	The OSHA TWA is 200 ppm and a ceiling level of 300 ppm not to be exceeded at any time and a 500 ppm as a 10-minute maximum peak.	ACGIH and DFG recommend a TWA of 50 ppm.	NIOSH and HSE recommend a TWA of 100 ppm (375 mg/m3) and a STEL of 150 ppm (560 mg/m3) not to be exceeded during any 5 minute work period. The NIOSH IDLH level is 500 ppm.
Talc (No Asbestos and <1% Quartz) 14807-96-6 10 to 20% Vapor Pressure: 0	The OSHA TWA is 20 mppcf (million particles per cubic foot of air).	NIOSH and ACGIH recommend a TWA (respirable fraction) for talc containing no asbestos fibers of 2 mg/m3.	For talc containing asbestos fibers, the TWA for asbestos should be used. HSE has set an 8-hour TWA of 10 mg/m3 of total inhalable dust and 1.0 mg/m3 of respirable dust.
Copolymer, Non-hazardous 5 to 10% Vapor Pressure: 0	None	None	None
Methyl Ethyl Ketone 78-93-3	The OSHA TWA is 200 ppm (590 mg/m3).	The DFG MAK, the HSE TWA and the	NIOSH recommends the same level for a 10-hour

Vapor Pressure: 12.13 25C		mg/m3) and the STEL value is 300 ppm (885 mg/m3).	The NIOSH IDLH level is 3,000 ppm.
Xylene 1330-20-7 1 to 5% Vapor Pressure: 8 mm Hg	The OSHA PELTWA, NIOSH TWA, DFG MAK, HSE TWA, and the ACGIH TWA value is 100 ppm (435 mg/m3) for all isomers.	The OSHA PELTWA, NIOSH TWA, DFG MAK, HSE TWA, and the ACGIH TWA value is 100 ppm (435 mg/m3) for all isomers. The NIOSH, ACGIH, and HSE STEL value is 150 ppm (655 mg/m3).	The notation "skin" is added to indicate the possibility of cutaneous absorption. The NIOSH IDLH (all isomers) = 900 ppm.
Organoclay complex 1 to 5% Vapor Pressure: 0	None	None	None
Titanium Dioxide (Dust) 13463-67-7 0.1 to 1.0% Vapor Pressure: 3 1727C	The OSHA TWA is 15 mg/m3.	The ACGIH TLV is: 10 mg/m3 (total dust containing no asbestos).	NIOSH REL = potential occupational carcinogen. The NIOSH IDLH = (Ca) 5,000 mg/m3. The DFG MAK is 6.0 mg/m3. Several states have set guidelines or standards for titanium dioxide in ambient air ranging from 0.13 – 0.79 µg/m3 (Montana) to 17.86 µg/m3 (Kansas) to 80.0 µg/m3 (Virginia) to 300.0 µg/m3 (Connecticut).
Iron Oxide (Fume) 1309-37-1 0.207 percent Vapor Pressure: 1 mm Hg	OSHA has set a TWA of 10 mg/m3. For rouge, OSHA and HSE have set a TWA of 15 mg/m3 based on total dust and a value of 5 mg/m3 based on respirable dust.	For iron oxide fume ACGIH has set a TWA of 2 ppm (5 mg/m3) as has HSE.	None
Carbon Black 1333-86-4 0.1 to 1.0% Vapor Pressure: 1 mmHg	The OSHA legal limit and ACGIH value is 3.5 mg/m3 TWA.	The OSHA legal limit and ACGIH value is 3.5 mg/m3 TWA.	None
Silica, Crystalline 14808-60-7 0.1 to 1.0% Vapor Pressure: 10 @1732c mmHg	The OSHA PEL (8-hour TWA) for crystalline silica (as respirable quartz) is either 250 mppcf divided by the value "%SiO2 + 5" or 10 mg/m3 divided by the value "%SiO2 + 2." The OSHA PEL (8-hour TWA) for crystalline silica (as total quartz) is 30 mg/m3 divided by the value "%SiO2 + 2."		NIOSH REL: Ca TWA 0.05 mg/m3. Potential occupational carcinogen 25mg/m3 (cristobalite, tridymite): 50mg/m3 (quartz, tripoli)

Section 3 - Hazards Identification

CAUTION!
COMBUSTIBLE
IRRITANT.

WHMIS:

HMIS Rating: 2 - 3 0

Routes of Entry:

Inhalation Skin Contact Eye Contact Ingestion

Exposure to this material may affect the following organs:

Blood Eyes Kidneys Liver Nervous System Skin

Effects of Overexposure, Toluene:

Short Term Exposure	Irritates the eyes and respiratory tract. Causes central nervous system depression. High levels of exposure may cause fatigue, weakness, confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); nervousness, muscle fatigue, insomnia; paresthesia; cardiac dysrhythmia, unconsciousness and death may occur. Inhalation: 100 ppm exposure can cause dizziness, drowsiness and hallucinations. 100 — 200 ppm can cause depression, 200 — 500 ppm can cause headaches, nausea, loss of appetite, loss of energy, loss of coordination and coma. In addition to the above, death has resulted from exposure to 10,000 ppm for an unknown time. Skin: Can cause dryness and irritation. Absorption may cause or increase the severity of symptoms listed above. Eyes: Can cause irritation at 300 ppm. Ingestion: Can cause a burning sensation in the mouth and stomach, upper abdominal pain, cough, hoarseness, headache, nausea, loss of appetite, loss of energy, loss of coordination and coma.
Long Term Exposure	Repeated or prolonged contact with skin may cause dermatitis; drying, cracking, itching, and skin rash. May cause liver, kidney, and brain damage; decreased learning ability, psychological disorders. Levels below 200 ppm may produce headache, tiredness and nausea. From 200 — 750 ppm symptoms may include insomnia, irritability, dizziness, some loss of memory, cause heart palpitations and loss of coordination. Blood effects and anemia have been reported but are probably due to contamination by benzene.

Effects of Overexposure, Iron Oxide (Fume):

Short Term Exposure	Iron oxide fume can affect you when breathed in. Exposure can cause metal fume fever. This is a flu-like illness with symptoms of metallic taste, fever and chills, aches, chest tightness and cough.
Long Term Exposure	Prolonged or repeated contact can cause permanent iron staining of the eyes. Repeated exposure to iron oxide fume can cause changes on the chest x-ray. Benign pneumoconiosis with X-ray shadows indistinguishable from fibrotic pneumoconiosis (siderosis).

Effects of Overexposure, Calcium Carbonate:

Short Term Exposure	Inhalation can cause irritation to nose. Eyes contact can cause irritation. Ingestion: Large amounts can cause irritability, nausea, dehydration and constipation. Estimated lethal dose is over 2 lb.
Long Term Exposure	Ingestion of more than 8 grams (1/3 ounce) a day can cause blood and kidney disorders.

Effects of Overexposure, Xylene:

Short Term Exposure	Inhalation: Exposure to vapor can be irritation to the nose and throat. Inhalation of vapor at concentrations above 200 ppm or 3 — 5 minutes can lead to xylene

Effects of Overexposure, Xylene:

and weak pulse can occur. Levels of 230 ppm for 15 minutes may cause lightheadedness without loss of equilibrium. Reversible liver and kidney damage in man has followed exposure to sudden high concentrations of vapor. Such high levels may also give rise to lung congestion. Exposure to extremely high concentrations (10,000 ppm or more) of xylene vapors can lead to a strong narcotic effect with symptoms of slurred speech, stupor fatigue, confusion, unconsciousness, coma, and possible death.

Long Term Exposure: Inhalation of xylene vapor and skin contact with liquid are the two most probable routes of long term exposure. Symptoms of inhalation are dizziness, headache and nausea. Long term exposure has been associated with liver and kidney damage, intestinal tract disturbances and central nervous system depression. Prolonged contact with skin can lead to irritation, dryness and cracking. Repeated exposure can cause poor memory, difficulty in concentration, and other brain effects. It can also cause damage to the eye surface.

Effects of Overexposure, Carbon Black:

Short Term Exposure: Inhalation may cause irritation to respiratory tract. Skin contact may cause irritation. Eye contact may cause irritation.

Long Term Exposure: Exposure to levels well above 3.5 mg/m3 for several months may result in damage to the skin and nails, temporary or permanent damage to the lungs and breathing passages, and adversely affect the heart. Carbon Black containing PAH greater than 0.1% should be considered a suspect carcinogen. Lungs may be affected by repeated or prolonged exposure at very high concentrations: Some Carbon blacks may contain compounds which are carcinogenic and as organic extracts of these have been classified as possibly carcinogenic to humans, special care should be taken to avoid exposure to such extracts. Lung effects remain controversial and may be due to contaminants. It is probable that minor effects reported are non-specific effects associated with exposure to nuisance dusts in general. Polyaromatic hydrocarbons (PAH) are reportedly present in some carbon blacks. Depending on the process of manufacture, there are variations in their chemical compositions.

Effects of Overexposure, Titanium Dioxide (Dust):

Short Term Exposure: Inhalation can cause irritation of the eyes and respiratory tract, causing cough and phlegm. Irritates the skin.

Long Term Exposure: High exposures may cause lung irritation; bronchitis may develop. Continued exposure may result in emphysema, lung scarring, lung fibrosis, and tumors. A potential occupational carcinogen.

Effects of Overexposure, Talc (No Asbestos and <1% Quartz):

Short Term Exposure: Talc can affect you when breathed in. Can cause eye and lung irritation.

Long Term Exposure: May affects the lungs causing talc fibrotic pneumoconiosis. Repeated high exposure can cause scarring of the lungs. Symptoms of shortness of breath and cough can develop. This disease can be disabling and fatal. Talc can cause the chest x-ray to become abnormal. Contact can cause eye irritation, and may lead to a reaction causing serious eye damage.

Effects of Overexposure, Silica, Crystalline:

Short Term Exposure: Irritates the eyes. Inhalation can cause cough, dyspnea (breathing difficulty), wheezing.

Long Term Exposure: Can cause decreased pulmonary function, progressive respiratory symptoms; fibrosis (silicosis). A potential occupational carcinogen. Silicosis is a very serious lung disease and can cause with cough and shortness of breath. Silicosis can develop in a few weeks at very high exposures, or it may occur over many years with lower exposures.

Effects of Overexposure, Silica, Crystalline:

Silicosis can cause death. If silicosis develops, risk of developing tuberculosis is increased. The disease may progress with or without continued exposure. If it does, this can be crippling or even fatal. Very fine silica, or "silica flour" is even more hazardous.

Effects of Overexposure, Methyl Ethyl Ketone:

Short Term Exposure	Irritates the eyes and the respiratory tract. May affect the central nervous system.
Long Term Exposure	Repeated exposure can cause drying and cracking of the skin. Has been implicated in certain nervous system and brain disorders characterized by weakness, fatigue, sleep disturbances, reduced coordination, heaviness in chest and numbness of hand and feet. These symptoms may develop after 1 year of exposure to vapor concentrations of 50 — 200 ppm. Improvement is gradual and may take years after exposure is discontinued. Animal tests show that this chemical is a teratogen in animals and possibly causes toxic effects upon human reproduction.

The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by the NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing).

Iron Oxide (Fume): (Human Suspected) (IARC)
Carbon Black: (ACGIH)
Silica, Crystalline: (animal positive) (IARC)(NTP)
Titanium Dioxide (Dust): (RTECS)

Chronic Exposure: Repeat contact with skin may irritate moderately. Acetic acid may cause skin irritation.

Section 4 - Fist Aid Measures

INHALATION: Remove person from area to fresh air. If breathing difficulty persists, seek medical attention immediately.

EYE CONTACT: Flush eyes with clean water for 15 minutes. Seek medical attention.

SKIN CONTACT: Wash area thoroughly with soap and water. If rash or blistering develop, seek medical attention.

INGESTION: DO NOT INDUCE VOMITING

Seek professional medical attention for all over exposure or persistent problems (sensitization).

Section 5 - Fire Fighting Measures

Flash Point: 0 C (32 F)

LEL: 1.0 %

UEL: 22.7 %

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EXTINGUISHING MEDIA: Foam, Alcohol foam, CO2, Dry Chemical, Water Fog, other.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors can travel to a source of ignition and flashback. Closed containers may explodes when exposed to

Hazardous combustible Products: Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

Special Fire Fighting Procedures: Full fire fighter equipment including SCBA should be worn to avoid skin contact and inhalation of concentrated vapors. Minimize skin exposure. Highly toxic fumes may be generated by thermal decomposition. Water runoff from fire fighting can cause environmental damages. Dike and collect water used to fight fire. If large amount is involved, evacuate area

Section 6 - Spillage/Accidental Release Measures

For large spills or transportation accidents involving release of this product, contact the EMERGENCY Response Center 1-800-424-9300. Eliminate all sources of ignition, provide adequate ventilation, dike spill area and add absorbent material to spilled liquid. Sweep up and dispose of in a DOT approved container. The container must be labeled and disposed of by a licensed waste contractor/hauler in accordance with State, Federal, or local waste regulations.

Section 7 - Handling & Storage

Use in cool, well ventilated areas. Keep containers closed when not in use. Keep away from incompatibles. Keep away from excessive heat and open flames. Follow all MSDS label precautions even after container is emptied because they may retain product residues. Store in a cool area away from heat and flames. Do not reuse container when empty. Avoid skin and eye contact. Do not take internally and avoid breathing vapor.
Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

Section 8 - Exposure Controls/Personal Protection

Engineering Controls: Engineering controls should be utilized to control airborne contaminates below exposure limits (PEL & TLV). Ventilation equipment must be explosion proof. Use exhaust if general ventilation is not sufficient to keep the airborne contaminant levels low.
Ventilation Controls: Use in cool, well-ventilated areas. Keep away from incompatibles. Keep away from excessive heat and open flames. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Store in a cool area away from heat and flames. Do not reuse container when empty. When spraying this material utilize engineering controls such as vents and fans, to reduce emission levels below the time weighted exposure limits (ACGIH TLV & OSHA PEL) or use a fresh-air supplying respirator or a self-contained breathing apparatus (SCBA).
Admin Controls/Safe work practices: Eye washes and safety showers in the workplace are recommended. Avoid contact with skin and eyes. Avoid breathing vapors. Wash hands thoroughly after using and before eating, drinking or smoking, Employee education and training in the safe use and handling of this product is required under the OSHA Hazard Communication Standard 29 CFR 1200. Smoking in an area where this material is used should be strictly prohibited. Always use protective clothing and equipment.
Respiratory Protection: Utilize engineering controls to reduce emission levels below the time weighted exposure limits (ACGIH, TLV & OSHA PEL). Wear and approved ANSI respirator if exposure limits are above the exposure limits listed above. When spraying this material utilize engineering controls such as vents and fans, to reduce the emission levels below the time weighted exposure limits (ACGIH, TLV & OSHA PEL) or use a fresh-air supplying respirator or a self contained breathing apparatus.

Eye Protection: Use safety Glasses or Splash Goggles.

Skin Protection: Use Chemical resistant gloves (nitrile or butyl rubber)

Contaminated Gear/Hygiene Practices: Remove all contaminated clothing and wash thoroughly when finished working. Keep food and drink away from materials and from area where material is being used or stored.

Section 9 - Physical & Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance	Black
Odor	Vinegar/acetic acid
Physical State	Paste
Vapor Density	3.86
Vapor Pressure	19 mm Hg
Evaporation Rate	Slower than Butyl Acetate
Boiling Range	79 to 3000 C
Specific Gravity (SG)	1.310
Lbs VOC/Gal (- H2O & Ex Solv)	2.81
Lbs VOC/Gal	2.81

Section 10 - Stability and Reactivity

Stability: Stable

STABLE

Incompatibilities:

Strong oxidizers

Aluminum surfaces

Strong oxidizing agents

Alkalis

Acids

Strong bases

Hazardous Decomposition:

Carbon Monoxide, Carbon Dioxide

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Effects of Exposure:
Spraying of material can cause an oxygen deficient environment. Use proper ventilation to remove vapors, mists and fumes or use proper respiratory protection as SCBA or supplied air.

ACUTE:
INHALATION - Minimal odor present during normal material handling and use.
EYE CONTACT - Mild irritation, tearing, redness.
SKIN CONTACT - Mild irritation possible.
INGESTION - May cause mild gastrointestinal irritation, vomiting, nausea, &diarrhea.
CHRONIC:
Contains a possible human carcinogen.

Acute Toxicity Data: No Data

Carcinogenicity: NTP -No, IARC -No, OSHA - No
This product may be identified by NTP, IARC, and/or OSHA as carcinogenic, indicated above as Yes. No further information available.

Section 12 - Ecological

No data

Section 13 - Disposal Considerations

This product is subject to the hazardous waste generation, treatment, storage, and disposal regulations of 40 CFR 261, and must be disposed of in accordance with local, state and federal regulations. It is recommended this material be handled by a licensed waste disposal company and hauler.
Recycle

Section 14 - Transportation

The following transportation information is provided based on Transtar Autobody Technologies interpretation of shipping regulations. Each shipper is responsible for identifying, naming, marking and labeling prior to offering for transport.

USA (DOT) Status: Drums: UN1133, Adhesive, 3, PGII, Limited Quantities: Consumer Commodity ORM-D

Water (IMDG) Status: UN1133, Adhesive, 3, PGII

Air (ICAO, IATA) Status: UN1133, Adhesive, 3, PGII

Canada (TDG) Status: Drums: UN1133, Adhesive, 3, PGII, Limited Quantities: Consumer Commodity ORM-D

Section 15 - Regulatory

The information included in this section is not all inclusive of all regulations for this product or the chemical components of this product.

The chemicals are requiring to be reported for Prop 65: Warning this product contains chemicals know n to the State of California to cause cancer, birth defects and other reproductive harm.

108-88-3 Toluene 10 to 20 percent

1330-20-7 Xylene 1 to 5 percent

100-41-4 Xylene 0.1 to 1.0 percent

1333-86-4 Carbon Black 0.1 to 1.0 percent

DSL Status: The following chemicals are not listed on the DSL Inventory and or are not in compliance with the DSL

-None

EINECS

-All chemicals contained here in are listed in EINECS

The following chemicals are listed under Massachusetts RTK:

1317-65-3 Calcium Carbonate 19.86 percent

108-88-3 Toluene 10 to 20 percent

14807-96-6 Talc (No Asbestos and <1% Quartz) 10 to 20 percent

1330-20-7 Xylene 1 to 5 percent

1309-37-1 Iron Oxide (Fume) 0.21 percent
1333-86-4 Carbon Black 0.1 to 1.0 percent

14808-60-7 Silica, Crystalline 0.1 to 1.0 percent

New Jersey RTK

108-88-3 Toluene 10 to 20 percent
14807-96-6 Talc (No Asbestos and <1% Quartz) 10 to 20 percent
1330-20-7 Xylene 1 to 5 percent
13463-67-7 Titanium Dioxide (Dust) 0.1 to 1.0 percent
1309-37-1 Iron Oxide (Fume) 0.21 percent
1333-86-4 Carbon Black 0.1 to 1.0 percent
14808-60-7 Silica, Crystalline 0.1 to 1.0 percent

Pennsylvania RTK

1317-65-3 Calcium Carbonate 19.86 percent
108-88-3 Toluene 10 to 20 percent
14807-96-6 Talc (No Asbestos and <1% Quartz) 10 to 20 percent
1330-20-7 Xylene 1 to 5 percent
13463-67-7 Titanium Dioxide (Dust) 0.1 to 1.0 percent
1309-37-1 Iron Oxide (Fume) 0.21 percent
1333-86-4 Carbon Black 0.1 to 1.0 percent

14808-60-7 Silica, Crystalline 0.1 to 1.0 percent

Rhode Island RTK

108-88-3 Toluene 10 to 20 percent
14807-96-6 Talc (No Asbestos and <1% Quartz) 10 to 20 percent
1330-20-7 Xylene 1 to 5 percent
13463-67-7 Titanium Dioxide (Dust) 0.1 to 1.0 percent
1309-37-1 Iron Oxide (Fume) 0.21 percent
1333-86-4 Carbon Black 0.1 to 1.0 percent

SARA 312

108-88-3 Toluene 10 to 20 percent
78-93-3 Methyl Ethyl Ketone 4.94 percent

Section 313 of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This Product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40 of the Code of Federal Regulations part 372.

108-88-3 Toluene 10 to 20 percent
78-93-3 Methyl Ethyl Ketone 4.94 percent
1330-20-7 Xylene 1.0 - 5%

WHMIS: B2 D2A D2B

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

-None

Section 16 - Other Information

To the best of our knowledge, the information contained herein is accurate, obtained from sources believed by Transtar Autobody Technologies to be accurate. As with all chemicals: **KEEP AWAY FROM CHILDREN AND ANIMALS! FOR PROFESSIONAL USE ONLY!** The hazard information contained herein if offered solely for the consideration of the user and is subject to his/her investigation and verification of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. Transtar Autobody Technologies is not responsible for misuse or damages as a result of misuse of this product.