SAFETY DATA SHEET

Section 1 - Product and Company Identification

Product Name: Hydroflex Plus Waterborne Acrylic Primer Product Code: 1215, 1219

Manufacturer/Supplier: TRANSTAR AUTOBODY TECHNOLOGIES 2040 Heiserman Dr. Brighton, MI, 48114, USA

24 Hour Emergency Phone(s):

USA 800-424-9300 (CHEMTREC)

International 001-703-527-3887 (CHEMTREC Int'I)

Business Phone: 810-360-1600

SDS Prepared By: Transtar Autobody Technologies

Product Use: For Professional and Industrial Use Only Not recommended for: Not for sale to the general public

Section 2 - Hazards Identification

Classification of the substance or mixture

GHS Ratings:

| Carcinogen | 2 1D | Limited evidence of human or animal carcinogenicity |
|-------------------------------|---------|---|
| Reproductive toxin | 1B | Known or presumed to cause effects on human reproduction or on development |
| Organ toxin single exposure | 1 | Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies, Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidan |
| Organ toxin repeated exposure | 1 | Significant toxicity in humans; Reliable, good quality human case studies or epidemiological studies Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure |

| GHS Hazards | | GHS Precautions | |
|--------------|---|-----------------|--|
| H351 H360 | Suspected of causing cancer May damage fertility or the | P101 | If medical advice is needed, have product container or label at hand |
| | unborn child | P102 | Keep out of reach of children |
| H370 | Causes damage to organs | P103 | Read label before use |
| H372 | Causes damage to organs | P201 | Obtain special instructions before use |
| | through prolonged or repeated exposure | P202 | Do not handle until all safety precautions have been read and understood |
| | | P260 | Do not breathe dust, mist, vapors or spray |
| | | P264 | Wash contacted skin thoroughly after handling |
| | | P270 | Do not eat, drink or smoke when using this product |

SDS for: 1215, 1219 Page 1 of 10

| P280 | Wear protective gloves, protective |
|-----------|---|
| | clothing, eye protection, face protection |
| | and respiratory protection. |
| P321 | Specific treatment (see first aid |
| | instructions on SDS) |
| P307+P311 | IF exposed: Call a POISON CENTER or |
| | doctor |
| P405 | Store locked up |
| P501 | Dispose of contents and container in |
| | accordance with local, regional, national |
| | and international regulations. |

Danger



Hazards not otherwise classified (HNOC) or not covered by GHS:

None known

The following % of the mixture consists of ingredient(s) of unknown acute toxicity. 5.7%

Section 3 -Composition

| Chemical Name / CAS No. | OSHA Exposure Limits | ACGIH Exposure Limits | Other Exposure Limits |
|--|--|---|--|
| Calcium Carbonate 1317-65-3 10 to 20% | 5-3 5 mg/m3 TWA (respirable 10 mg/m3 (for dus | | NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) |
| Acrylic/styrene copolymer 10 to 20% | | | |
| Talc 14807-96-6 5 to 10% | PEL-TWA is 20 mppcf (million particles per cubic foot of air). | 2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction) | NIOSH: 2 mg/m3 TWA (containing no Asbestos and <1% Quartz, respirable dust) |
| Hydrous Aluminum Silicate 1332-58-7 5 to 10% | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) | 2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction) | NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) |
| Polyurethane Polymer, Proprietary 5 to 10% | | | |
| Titanium Dioxide (Dust) 13463-67-7 1 to 5% | 15 mg/m3 TWA (total dust) | 10 mg/m3 TWA | |
| n-Butoxyethanol 111-76-2 1 to 5% | 50 ppm TWA; 240 mg/m3 TWA | 20 ppm TWA | NIOSH: 5 ppm TWA; 24 mg/m3 TWA |

SDS for: 1215, 1219 Page 2 of 10

Printed: 3/12/2015 at 5:10:20PM

| N-Methyl-2-pyrrolidone 872-50-4 1 to 5% | NE | NE | |
|---|--------------------------|----------------------------------|---|
| Carbon Black 1333-86-4 0.1 to 1.0% | 3.5 mg/m3 TWA | 3 mg/m3 TWA (inhalable fraction) | NIOSH: 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH) |
| Dimethylaminoethanol 108-01-0 0.1 to 1.0% | | | |
| Amorphous silica 112926-00-8 0.1 to 1.0% | OSHA PEL 6 mg/m3 as Dust | ACGIH TLV 10 mg/m3 as Dust | |

Section 4 - First Aid Measures

INHALATION: If Inhaled: Remove person to fresh air and keep comfortable for breathing. If breathing difficulty persists, seek medical attention.

EYE CONTACT: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for a minimum of 15 minutes while holding eye lids open. If eye irritation persist: seek medical attention.

SKIN CONTACT: Wash exposed area thoroughly with soap and water. Seek medical attention if irritation presists. Do NOT use solvents or thinners to wash off. Wash contaminated clothing before reuse.

INGESTION: If swallowed, seek medical attention immediately and have product container or label at hand. DO NOT INDUCE VOMITING unless directed to do so by a physician or poison control center. Drink 1 to 2 glasses of water to dilute. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation to digestive tract, irritation to respiratory tract, irritation to skin and eyes, breathing difficulty, headaches, coughing.

Indication of any immediate medical attention and special treatment needed.

Seek professional medical attention for all over-exposures and/or persistent problems.

Section 5 - Fire Fighting Measures

LEL: 1.0 % UEL: 22.7 %

Extinguishing Media: Dry Chemical, Foam, CO2 or water fog.

Unsuitable Extinguishing Media: High volumn water jets

Unusual Fire and Explosion Hazards: Closed containers may explode when exposed to extreme heat. May form peroxides of unknown stability. Non-Flammable.

Hazardous Combustion Products: oxides of carbon, oxides of nitrogen, peroxides, styrene, acrylic monomers & toxic fume.

Special Firefighting Procedures: Keep people away. Use water spray to cool fire exposed containers. Fight fire from protected location or safe distance. Highly toxic fumes may be generated by thermal decomposition. Water runoff from firefighting can cause environmental damage. Dike and collect water used to fight fire.

SDS for: 1215, 1219 Page 3 of 10

Fire Equipment: Full fire fighter equipment including SCBA should be worn to avoid skin contact and inhalation of concentrated vapors. Minimize skin exposure.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapors and mist. Ensure adequate ventilation. Eliminate all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulation to form explosive concentrations. Vapors can accumulate in low areas. Stop spill at source. Dike and contain. For personal protection see section 8.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent product from entering into drains, soil, ditches, low areas, sewers and waterways.

Methods and materials for containment and cleaning up:

Dike spill area and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth. Sweep up and dispose of in appropriate containers in accordance to Federal, State and/or Local regulations. Clean preferably with a detergent; avoid use of solvents.

Large Spills: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Eliminate all sources of ignition, provide adequate ventilation, dike spill area and add absorbment materail to spilled liquid. Sweep up and dispose of in a DOT approved container. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. The container must be labeled and disposed in accordance with State, Federal, or local waste regulations by a licensed waste contractor/hauler. For large spills or transportation accidents involving release of this product, contact the National Response Center: 800-424-9300.

Section 7 - Handling and Storage

Safe Handling Measures: Avoid contact with skin, eyes and clothing. Avoid inhalation of vapor or mist. Wash throughly after handling. Use in cool, well-ventilated areas. Keep containers closed when not in use. Follow all SDS and label precautions even after container is emptied because they may retain product residues. For precautions see section 2.

Storage Requirements: Keep container tightly closed. Store in a cool, dry and well-ventilated place. Do not reuse container when empty. Store away from incompatible materials.

PROTECT THE PRODUCT FROM TEMPERATURES BELOW 5°C (41°F):

The product may be stored for 1 year if kept in a tightly closed container between 5 C (41 F) and 30 C (86 F)

| Section 8 - Exposure Control and PPE | | | | |
|--------------------------------------|--|--|---|--|
| Chemical Name / CAS No. | OSHA Exposure Limits | ACGIH Exposure Limits | Other Exposure Limits | |
| Calcium Carbonate 1317-65-3 | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) | ACGIH has set a TWA of 10 mg/m3 (for dust containing no asbestos and <1% free silica). | NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) | |
| Acrylic/styrene copolymer | | | | |

SDS for: 1215, 1219 Page 4 of 10

| Talc 14807-96-6 | PEL-TWA is 20 mppcf (million particles per cubic foot of air). | 2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable | NIOSH: 2 mg/m3 TWA (containing no Asbestos and <1% Quartz, respirable dust) |
|--|--|--|---|
| Hydrous Aluminum Silicate 1332-58-7 | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) | fraction) 2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction) | NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) |
| Polyurethane Polymer, Proprietary | | | |
| Titanium Dioxide (Dust) 13463-67-7 | 15 mg/m3 TWA (total dust) | 10 mg/m3 TWA | |
| n-Butoxyethanol 111-76-2 | 50 ppm TWA; 240 mg/m3 TWA | 20 ppm TWA | NIOSH: 5 ppm TWA; 24 mg/m3 TWA |
| N-Methyl-2-pyrrolidone 872-50-4 | NE | NE | |
| Carbon Black 1333-86-4 | 3.5 mg/m3 TWA | 3 mg/m3 TWA (inhalable fraction) | NIOSH: 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH) |
| Dimethylaminoethanol 108-01-0 | | | , |
| Amorphous silica 112926-00-8 | OSHA PEL 6 mg/m3 as Dust | ACGIH TLV 10 mg/m3 as Dust | |

Engineering Controls: Use exhaust if general ventilation is not sufficient to keep the airborne contaminant levels low. Eye wash/shower stations should be in work area.

Ventilation: General mechanical ventilation or local exhaust should be utilized to keep vapor concentrations below exposure limits (PEL & TLV). Ventilation equipment must be explosion proof.

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 29CFR1200. Smoking in area where this material is used should be strictly prohibited. Always use protective clothing and equipment. Remove all contaminated clothing and wash thoroughly when finished working. Keep food and drink away from material and from area where material is being used. Use proper ventilation to remove vapors, mist and fumes combined with NIOSH approved respirator.

Respiratory Protection: When working with this material use a MSHA/NIOSH approved cartridge respirator or suitable respiratory protection to keep airborne mists and vapor concentrations below the PEL & TLV limits. When using in poorly ventilated and confined spaces, use a fresh-air supplying respirator or a self-contained breathing apparatus.

Eye/Face Protection: Use safety glasses with chemical splash goggles or faceshield.

Hand Protection: Use chemical resistant gloves.

Body Protection: Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. **Contaminated Gear:** Remove all contaminated clothing and wash thoroughly when finished working and before reuse. Keep food and drink away from materials and from area where material is being used or stored.

SDS for: 1215, 1219 Page 5 of 10

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance Gray

Odor Organic Solvent

pH: 8.5-9.0

Freezing point: No data available

Flash point: 212 F,100 C

Flammability: No data available

Vapor Pressure: 3.8 mm Hg

Density (Lb / Gal) 10.68

Partition coefficient (n- No data available

octanol/water):

Decomposition temperature: No data available

Regulatory Coating VOC g/L 139

Actual Coating VOC g/L 61

Weight Percent Volatile 48.33

% Weight VOC 4.80

% Wt Exempt VOC 0.00

Physical State Liquid

Odor threshold: No data available

Melting point: No data available

Boiling range: 100°C

Evaporation rate: No data available

Explosive Limits: 1% - 23%

Vapor Density: 4.6

Solubility: No data available

Autoignition temperature: 230°C

Viscosity: No data available

Regulatory Coating VOC 1.16

lb/gal

Actual Coating VOC lb/Gal 0.51

Specific Gravity (SG) 1.280

% Weight Water 43.5

% Vol Exempt VOC 0.00

Section 10 - Stability and Reactivity

Reactivity: No data available

Stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Vapors may form explosive mixture with air.

Hazardous Polymerization will not occur

Conditions to avoid: Heat, flame and sparks. Extreme temperature and direct sunlight.

Incompatible with: Strong acids, bases, oxidizers.

Hazardous products produced under decomposition:

Carbon Monoxide, Carbon Dioxide

Section 11 - Toxicological Information

Mixture Toxicity

Inhalation Toxicity: 30mg/L

Component Toxicity

111-76-2 n-Butoxyethanol

Oral: 1,300 mg/kg (Rat) Dermal: 2,000 mg/kg (Rat) Inhalation: 550 ppm (Rat)

872-50-4 N-Methyl-2-pyrrolidone

Oral: 3,598 mg/kg (Rat) Dermal: 8 g/kg (Rabbit) Inhalation: 3 mg/L (Rat)

108-01-0 Dimethylaminoethanol

Oral: 1,803 mg/kg (Rat) Dermal: 1,220 mg/kg (Rabbit) Inhalation: 1,641 ppm (Rat)

This mixture has not been tested for toxicological effects.

SDS for: 1215, 1219 Page 6 of 10

Acute Effects:

INHALATION - Irritation to respirator tract, coughing, breathing difficulty & headaches.

EYE CONTACT - Moderate irritation, tearing, redness, and blurred vision.

SKIN CONTACT - Moderate irritant. Can dry and defat skin causing cracks, irritation, and dermatitis.

Eye Contact

INGESTION - Can cause gastrointestinal irritation, vomiting & nausea.

Skin Contact

Chronic Effects:

May affect liver, kidney and central nervous system with repeated exposure. Prolonged or repeated exposure may cause lung injury.

Routes of Entry Inhalation

Target Organs

Blood Eyes Kidneys Liver Lungs Central Nervous System Reproductive
System Skin Cardiovascular System Respiratory System

Effects of Overexposure

Short Term Exposure

Inhalation may cause irritation to respiratory tract. Skin contact may cause irritation. Eye contact may cause irritation. Inhalation can cause irritation of the eyes and respiratory tract, causing cough and phlegm. Irritates the skin. This chemical irritates the eyes, skin, and respiratory tract. High exposure caused dizziness, lightheadedness, and unconsciousness. breath. Higher exposures can cause pulmonary edema, a medical emergency that can be delayed for several hours. This can cause death. Exposure could cause central nervous system depression and liver and kidney damage

Ingestion

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. 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. The liquid defats the skin. This chemical can break down red blood cells, and cause anemia; effects the haematopoietic system, resulting in blood disorders. It can also damage the liver and kidneys.

The following chemicals comprise of at least 0.1% 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).

CAS Number 1333-86-4 <u>Description</u> Carbon Black

% Weight 0.1 to 1.0%

Carcinogen Rating

Carbon Black: NIOSH: potential

occupational carcinogen

IARC: Possible human carcinogen

OSHA: listed

SDS for: 1215, 1219 Page 7 of 10

1 to 5%

Titanium Dioxide (Dust): NIOSH: potential occupational carcinogen IARC: Possible human carcinogen

OSHA: listed

Section 12 - Ecological Information

This material has not been tested for ecological effects.

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Other adverse effects: None known.

Component Ecotoxicity

Talc 96 Hr LC50 Brachydanio rerio: >100 g/L [semi-static]

n-Butoxyethanol 96 Hr LC50 Lepomis macrochirus: 1490 mg/L [static]; 96 Hr LC50 Lepomis

macrochirus: 2950 mg/L

48 Hr EC50 Daphnia magna: >1000 mg/L

N-Methyl-2-pyrrolidone 96 Hr LC50 Lepomis macrochirus: 832 mg/L [static]; 96 Hr LC50 Pimephales

promelas: 1072 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 1400 mg/L [static]

48 Hr EC50 Daphnia magna: 4897 mg/L

72 Hr EC50 Desmodesmus subspicatus: >500 mg/L

Dimethylaminoethanol 96 Hr LC50 Pimephales promelas: 81 mg/L [static]

48 Hr EC50 Daphnia magna: 98.77 mg/L

72 Hr EC50 Desmodesmus subspicatus: 35 mg/L

Section 13 - Disposal Considerations

Product should be disposed of in accordance with all Federal, State and local regulations. Contact a licensed professional waste disposal service to dispose of this material. Subject to hazardous waste generation, treatment, storage and disposal rules under RCRA, 40CFR261.

Section 14 - Transportation Information

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.

Agency Proper Shipping Name UN Number Packing Group Hazard Class

IATA NON-REGULATED IMDG NON-REGULATED USDOT NON-REGULATED

Section 15 - Regulatory Information

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

California Hazardous Substance List:

- None

SDS for: 1215, 1219 Page 8 of 10

HAPS: This formulation contains the following HAPS:

- None

NJ RTK: The following chemicals are listed under New Jersey RTK

112926-00-8 Amorphous silica 0.1 to 1.0 %

1333-86-4 Carbon Black 0.1 to 1.0 %

872-50-4 N-Methyl-2-pyrrolidone 1 to 5 %

111-76-2 n-Butoxyethanol 1 to 5 %

13463-67-7 Titanium Dioxide (Dust) 1 to 5 %

1332-58-7 Hydrous Aluminum Silicate 5 to 10 %

14807-96-6 Talc 5 to 10 %

1317-65-3 Calcium Carbonate 10 to 20 %

California Proposition 65

WARNING: This product contains the following chemical(s) known to the State of California to cause birth defects or other reproductive harm.

112926-00-8 Amorphous silica 0.1 to 1.0 %

872-50-4 N-Methyl-2-pyrrolidone 1 to 5 %

California Proposition 65

WARNING: This product contains the following chemical(s) known to the State of California to cause cancer .

1333-86-4 Carbon Black 0.1 to 1.0 %

13463-67-7 Titanium Dioxide (Dust) 1 to 5 %

PA RTK: The following chemicals are listed under Pennsylvania RTK:

112926-00-8 Amorphous silica 0.1 to 1.0 %

1333-86-4 Carbon Black 0.1 to 1.0 %

872-50-4 N-Methyl-2-pyrrolidone 1 to 5 %

111-76-2 n-Butoxyethanol 1 to 5 %

13463-67-7 Titanium Dioxide (Dust) 1 to 5 %

1332-58-7 Hydrous Aluminum Silicate 5 to 10 %

14807-96-6 Talc 5 to 10 %

1317-65-3 Calcium Carbonate 10 to 20 %

EU REACH SIN: The chemicals listed below are on the EU REACH SIN list

- None

SARA 312: This Product contains the following chemcials subject to the reporting requirements of SARA 312:

872-50-4 N-Methyl-2-pyrrolidone 1 to 5 %

SARA 313: This Product contains the following chemcials subject to the reporting requirements of SARA 313:

- None

WHMIS:

1333-86-4 Carbon Black 0.1 to 1.0 %

111-76-2 n-Butoxyethanol 1 to 5 %

TSCA: The following are not listed under TSCA:

None

SARA: The following are reportable under SARA

872-50-4 N-Methyl-2-pyrrolidone 1.0 - 5% 112926-00-8 Amorphous silica 0.1 - 1.0%

111-76-2 n-Butoxyethanol 1.0 - 5%

SDS for: 1215, 1219 Page 9 of 10

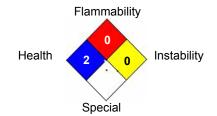
Section 16 - Other Information

Note: HMIS Ratings involve data and interpretings that can vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Hazardous Material Information System (HMIS)

HEALTH 2 Legend * = Chronic Health Hazard PHYSICAL HAZARD 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH

National Fire Protection Association (NFPA)



Date Prepared: 3/12/2015

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 AND INDUSTRIAL USE ONLY. The hazard information contained herein is offered solely for the consideration of the user, subject to his own investigation and verification of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

SDS for: 1215, 1219 Page 10 of 10