

Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M[™] Weld-Thru II Coating, PN 05917

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Weldable corrosion-resistant coating.

| 1.3. Supplier's details | |
|-------------------------|------------------------|
| MANUFACTURER: | 3M |
| DIVISION: | Automotive Aftermarket |

SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Flammable Aerosol: Category 2. Serious Eye Damage/Irritation: Category 2A. Carcinogenicity: Category 2. Simple Asphyxiant. Specific Target Organ Toxicity (single exposure): Category 1. Specific Target Organ Toxicity (central nervous system): Category 3. Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements Signal word Danger

Symbols Flame | Exclamation mark | Health Hazard | **Pictograms**



Hazard Statements Flammable aerosol.

Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May displace oxygen and cause rapid suffocation.

Causes damage to organs: cardiovascular system sensory organs

Causes damage to organs through prolonged or repeated exposure: nervous system

May cause damage to organs through prolonged or repeated exposure: sensory organs

Precautionary Statements General:

Keep out of reach of children.

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. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Response:

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. If eye irritation persists: Get medical advice/attention. Specific treatment (see Notes to Physician on this label). Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

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

Notes to Physician:

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

2.3. Hazards not otherwise classified

None.

34% of the mixture consists of ingredients of unknown acute oral toxicity.35% of the mixture consists of ingredients of unknown acute dermal toxicity.51% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|-----------------------------------------------------|---------------|--------------------------|
| Acetone | 67-64-1 | 30 - 60 Trade Secret * |
| Liquefied Petroleum Gases | 68476-86-8 | 10 - 30 Trade Secret * |
| Zinc | 7440-66-6 | 7 - 13 Trade Secret * |
| Xylene | 1330-20-7 | 3 - 7 Trade Secret * |
| Ethylbenzene | 100-41-4 | 1 - 5 Trade Secret * |
| Resin Blend | Trade Secret* | 1 - 5 Trade Secret * |
| Aluminum | 7429-90-5 | 1 - 5 Trade Secret * |
| Zeolites | 1318-02-1 | 0.1 - 1.5 Trade Secret * |
| Organophilic Clay | Trade Secret* | 0.1 - 1.5 Trade Secret * |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | 112945-52-5 | 0.1 - 1.5 Trade Secret * |
| Stoddard Solvent | 8052-41-3 | 0.5 - 1.5 Trade Secret * |
| Potassium Oxide | 12136-45-7 | 0.1 - 1.5 Trade Secret * |

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. Get medical attention.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance Carbon monoxide Carbon dioxide <u>Condition</u> During Combustion During Combustion

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with detergent and water. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|-------------------------------|------------|--------|------------------------------|----------------------------|
| Ethylbenzene | 100-41-4 | ACGIH | TWA:20 ppm | A3: Confirmed animal |
| | | | | carcin. |
| Ethylbenzene | 100-41-4 | CMRG | TWA:25 ppm;STEL:75 ppm | |
| Ethylbenzene | 100-41-4 | OSHA | TWA:435 mg/m3(100 ppm) | |
| SILICA, AMORPHOUS | 112945-52- | OSHA | TWA concentration:0.8 | |
| | 5 | | mg/m3;TWA:20 millions of | |
| | | | particles/cu. ft. | |
| Aluminum, insoluble compounds | 1318-02-1 | ACGIH | TWA(respirable fraction):1 | A4: Not class. as human |
| | | | mg/m3 | carcin |
| Xylene | 1330-20-7 | ACGIH | TWA:100 ppm;STEL:150 ppm | A4: Not class. as human |
| | | | | carcin |
| Xylene | 1330-20-7 | CMRG | TWA:50 ppm;STEL:75 ppm | |
| Xylene | 1330-20-7 | OSHA | TWA:435 mg/m3(100 ppm) | |
| Acetone | 67-64-1 | ACGIH | TWA:500 ppm;STEL:750 ppm | A4: Not class. as human |
| | | | | carcin |
| Acetone | 67-64-1 | OSHA | TWA:2400 mg/m3(1000 ppm) | |
| Aluminum | 7429-90-5 | ACGIH | TWA(respirable fraction):1 | A4: Not class. as human |
| | | | mg/m3 | carcin |
| Aluminum | 7429-90-5 | OSHA | TWA(as Al respirable dust):5 | |
| | | | mg/m3;TWA(as Al total | |
| | | | dust):15 mg/m3 | |
| Stoddard Solvent | 8052-41-3 | ACGIH | TWA:100 ppm | |
| Stoddard Solvent | 8052-41-3 | OSHA | TWA:2900 mg/m3(500 ppm) | |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the

substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA) Polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| General Physical Form: | Liquid |
|-----------------------------------------|-------------------------------------------------------------------|
| Specific Physical Form: | Aerosol |
| Odor, Color, Grade: | Gray/Metallic appearance with solvent odor. |
| Odor threshold | No Data Available |
| рН | Not Applicable |
| Melting point | Not Applicable |
| Boiling Point | Not Applicable |
| Flash Point | -156 °F [Test Method: Pensky-Martens Closed Cup] |
| Evaporation rate | No Data Available |
| Flammability (solid, gas) | Not Applicable |
| Flammable Limits(LEL) | 0.7 % |
| Flammable Limits(UEL) | 12.8 % |
| Vapor Pressure | 80 - 90 mmHg |
| Vapor Density | [Details: Heavier than air] |
| Specific Gravity | 0.796 [<i>Ref Std:</i> WATER=1] |
| Solubility in Water | Appreciable |
| Solubility- non-water | No Data Available |
| Partition coefficient: n-octanol/ water | No Data Available |
| Autoignition temperature | No Data Available |
| Decomposition temperature | No Data Available |
| Viscosity | No Data Available |
| Hazardous Air Pollutants | 0.43 lb HAPS/lb solids [Test Method: Calculated] |
| Volatile Organic Compounds | 33.97 % weight [<i>Test Method:</i> calculated per CARB title 2] |
| Volatile Organic Compounds | 270 g/l [Test Method: calculated SCAQMD rule 443.1] |
| Percent volatile | 35.64 % weight |
| VOC Less H2O & Exempt Solvents | 530 g/l [Test Method: calculated SCAQMD rule 443.1] |

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

Hazardous polymerization will not occur.

10.4. Conditions to avoid Heat

10.5. Incompatible materials Strong acids Strong bases Strong oxidizing agents Amines

10.6. Hazardous decomposition products <u>Substance</u>

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Simple Asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause: Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Prolonged or repeated exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| Ingredient | CAS No. | Class Description | Regulation |
|--------------|----------|-------------------------------|---------------------------------------------|
| Ethylbenzene | 100-41-4 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

| Name | Route | Species | Value |
|---------------------------|-------------|---------|-------------------------------------------------------|
| Overall product | Dermal | | No data available; calculated ATE > 5,000 mg/kg |
| Overall product | Inhalation- | | No data available; calculated ATE $> 50 \text{ mg/l}$ |
| | Vapor(4 hr) | | |
| Overall product | Ingestion | | No data available; calculated ATE > 5,000 mg/kg |
| Acetone | Dermal | Rabbit | LD50 > 15,688 mg/kg |
| Acetone | Inhalation- | Rat | LC50 76 mg/l |
| | Vapor (4 | | |
| | hours) | | |
| Acetone | Ingestion | Rat | LD50 5,800 mg/kg |
| Liquefied Petroleum Gases | Inhalation- | Rat | LC50 277,000 ppm |
| | Gas (4 | | |
| | hours) | | |
| Zinc | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Zinc | Inhalation- | Rat | LC50 > 5.4 mg/l |
| | Dust/Mist | | |
| Zinc | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Xylene | Dermal | Rabbit | LD50 > 4,200 mg/kg |
| Xylene | Inhalation- | Rat | LC50 29 mg/l |
| | Vapor (4 | | |
| | hours) | | |
| Xylene | Ingestion | Rat | LD50 3,523 mg/kg |
| Aluminum | Dermal | | LD50 estimated to be $> 5,000 \text{ mg/kg}$ |
| Aluminum | Ingestion | | LD50 estimated to be $> 5,000 \text{ mg/kg}$ |
| Aluminum | Inhalation- | Rat | LC50 > .888 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| Ethylbenzene | Dermal | Rabbit | LD50 15,433 mg/kg |
| Ethylbenzene | Inhalation- | Rat | LC50 17.4 mg/l |
| | Vapor (4 | | |
| | hours) | | |
| Ethylbenzene | Ingestion | Rat | LD50 4,769 mg/kg |
| Stoddard Solvent | Inhalation- | | LC50 estimated to be 20 - 50 mg/l |
| | Vapor | | |
| Stoddard Solvent | Dermal | Rabbit | LD50 > 3,000 mg/kg |
| Stoddard Solvent | Ingestion | Rat | LD50 > 5,000 mg/kg |

| Organophilic Clay | Inhalation- | Not | LC50 > 5 mg/l |
|-----------------------------------------------------|-------------|-----------|--------------------|
| | Dust/Mist | available | |
| | (4 hours) | | |
| Zeolites | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Organophilic Clay | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Zeolites | Inhalation- | Rat | LC50 > 4.57 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| Zeolites | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | Inhalation- | Rat | LC50 > 0.691 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | Ingestion | Rat | LD50 > 5,110 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|-----------------------------------------------------|-----------|---------------------------|
| | | |
| Acetone | Mouse | Minimal irritation |
| Liquefied Petroleum Gases | Professio | No significant irritation |
| | nal | |
| | judgeme | |
| | nt | |
| Xylene | Rabbit | Mild irritant |
| Aluminum | Rabbit | No significant irritation |
| Ethylbenzene | Rabbit | Mild irritant |
| Stoddard Solvent | Rabbit | Irritant |
| Zeolites | Rabbit | No significant irritation |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-----------------------------------------------------|-----------|---------------------------|
| | | |
| Acetone | Rabbit | Severe irritant |
| Liquefied Petroleum Gases | Professio | No significant irritation |
| | nal | |
| | judgeme | |
| | nt | |
| Xylene | Rabbit | Mild irritant |
| Aluminum | Rabbit | No significant irritation |
| Ethylbenzene | Rabbit | Moderate irritant |
| Stoddard Solvent | Rabbit | No significant irritation |
| Zeolites | Rabbit | Mild irritant |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|-----------------------------------------------------|---------|-----------------|
| Aluminum | Guinea | Not sensitizing |
| | pig | |
| Ethylbenzene | Human | Not sensitizing |
| Stoddard Solvent | Guinea | Not sensitizing |
| | pig | |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | Human | Not sensitizing |
| | and | |
| | animal | |

Respiratory Sensitization

| Name | Species | Value |
|----------|---------|------------------------------------------------------------------------------|
| Aluminum | Human | Some positive data exist, but the data are not sufficient for classification |

Germ Cell Mutagenicity

| | Name | Route | Value |
|--|------|-------|-------|
|--|------|-------|-------|

| Acetone | In vivo | Not mutagenic |
|-----------------------------------------------------|----------|------------------------------------------------|
| Acetone | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |
| Liquefied Petroleum Gases | In Vitro | Not mutagenic |
| Xylene | In Vitro | Not mutagenic |
| Xylene | In vivo | Not mutagenic |
| Aluminum | In Vitro | Not mutagenic |
| Ethylbenzene | In vivo | Not mutagenic |
| Ethylbenzene | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |
| Stoddard Solvent | In vivo | Not mutagenic |
| Stoddard Solvent | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | In Vitro | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|-----------------------------------------------------|------------|----------|------------------------------------------------|
| Acetone | Not | Multiple | Not carcinogenic |
| | Specified | animal | |
| | | species | |
| Xylene | Dermal | Rat | Not carcinogenic |
| Xylene | Ingestion | Multiple | Not carcinogenic |
| | | animal | |
| | | species | |
| Xylene | Inhalation | Human | Some positive data exist, but the data are not |
| | | | sufficient for classification |
| Ethylbenzene | Inhalation | Multiple | Carcinogenic |
| | | animal | - |
| | | species | |
| Stoddard Solvent | Dermal | Mouse | Some positive data exist, but the data are not |
| | | | sufficient for classification |
| Stoddard Solvent | Inhalation | Human | Some positive data exist, but the data are not |
| | | and | sufficient for classification |
| | | animal | |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | Not | Mouse | Some positive data exist, but the data are not |
| | Specified | | sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|---------|------------|--------------------------------------------------------------------------------------------------------|--------------------|------------------------------|-----------------------------|
| Acetone | Ingestion | Not toxic to female reproduction | Mouse | NOAEL 11,298 mg/kg/day | 13 weeks |
| Acetone | Ingestion | Some positive male reproductive data exist, but the data are not sufficient for classification | Rat | NOAEL 1,700 mg/kg/day | 13 weeks |
| Acetone | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 5.2 mg/l | during organogenesi s |
| Xylene | Ingestion | Not toxic to female reproduction | Mouse | NOAEL 1,000 mg/kg/day | 103 weeks |
| Xylene | Ingestion | Not toxic to male reproduction | Mouse | NOAEL 1,000 mg/kg/day | 103 weeks |
| Xylene | Inhalation | Some positive female reproductive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| Xylene | Ingestion | Some positive developmental data exist, but the data are not sufficient for classification | Mouse | NOAEL Not available | during organogenesi s |
| Xylene | Inhalation | Some positive developmental data exist, but the data are not sufficient for | Multiple animal | NOAEL Not available | during gestation |

| | | classification | species | | |
|------------------------------------|------------|-----------------------------------------|---------|-----------|--------------|
| Ethylbenzene | Inhalation | Some positive developmental data exist, | Rat | NOAEL 4.3 | premating & |
| | | but the data are not sufficient for | | mg/l | during |
| | | classification | | | gestation |
| Stoddard Solvent | Inhalation | Not toxic to development | Rat | NOAEL 2.4 | during |
| | | | | mg/l | organogenesi |
| | | | | | s |
| Synthetic Amorphous Silica, Fumed, | Ingestion | Not toxic to female reproduction | Rat | NOAEL 509 | 1 generation |
| Crystalline Free | | | | mg/kg/day | |
| Synthetic Amorphous Silica, Fumed, | Ingestion | Not toxic to male reproduction | Rat | NOAEL 497 | 1 generation |
| Crystalline Free | | | | mg/kg/day | |
| Synthetic Amorphous Silica, Fumed, | Ingestion | Not toxic to development | Rat | NOAEL | during |
| Crystalline Free | | | | 1,350 | organogenesi |
| | | | | mg/kg/day | s |

Lactation

| Name | Route | Species | Value |
|--------|-----------|---------|--------------------------------------------|
| Xylene | Ingestion | Mouse | Does not cause effects on or via lactation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---------------------------|------------|--------------------------------------|------------------------------------------------------------------------------|-------------------------------|------------------------|---------------------------|
| Acetone | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | Durwion |
| Acetone | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Acetone | Inhalation | immune system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL 1.19 mg/l | 6 hours |
| Acetone | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Guinea pig | NOAEL Not available | |
| Acetone | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| Liquefied Petroleum Gases | Inhalation | cardiac sensitization | Causes damage to organs | similar compoun ds | NOAEL Not available | |
| Liquefied Petroleum Gases | Inhalation | central nervous system depression | May cause drowsiness or dizziness | | NOAEL Not available | |
| Liquefied Petroleum Gases | Inhalation | respiratory irritation | All data are negative | | NOAEL Not available | |
| Xylene | Inhalation | auditory system | Causes damage to organs | Rat | LOAEL 6.3 mg/l | 8 hours |
| Xylene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| Xylene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Xylene | Inhalation | eyes | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 3.5 mg/l | not available |
| Xylene | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL Not available | |
| Xylene | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Multiple animal species | NOAEL Not available | |
| Xylene | Ingestion | eyes | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 250 mg/kg | not applicable |
| Ethylbenzene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |

| Ethylbenzene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human and animal | NOAEL Not available | |
|------------------|------------|--------------------------------------|------------------------------------------------------------------------------|------------------------|------------------------|---------|
| Stoddard Solvent | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | NOAEL Not available | |
| Stoddard Solvent | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | NOAEL Not available | |
| Stoddard Solvent | Inhalation | nervous system | Some positive data exist, but the data are not sufficient for classification | Dog | NOAEL 6.5 mg/l | 4 hours |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---------------------------|------------|------------------------------------------------|------------------------------------------------------------------------------|-------------------------------|------------------------------|----------------------|
| Acetone | Dermal | eyes | Some positive data exist, but the data are not sufficient for classification | Guinea pig | NOAEL Not available | 3 weeks |
| Acetone | Inhalation | hematopoietic system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL 3 mg/l | 6 weeks |
| Acetone | Inhalation | immune system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL 1.19 mg/l | 6 days |
| Acetone | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Guinea pig | NOAEL 119 mg/l | not available |
| Acetone | Inhalation | heart liver | All data are negative | Rat | NOAEL 45 mg/l | 8 weeks |
| Acetone | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 900 mg/kg/day | 13 weeks |
| Acetone | Ingestion | heart | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| Acetone | Ingestion | hematopoietic system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 200 mg/kg/day | 13 weeks |
| Acetone | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Mouse | NOAEL 3,896 mg/kg/day | 14 days |
| Acetone | Ingestion | eyes | All data are negative | Rat | NOAEL 3,400 mg/kg/day | 13 weeks |
| Acetone | Ingestion | respiratory system | All data are negative | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| Acetone | Ingestion | muscles | All data are negative | Rat | NOAEL 2,500 mg/kg | 13 weeks |
| Acetone | Ingestion | skin bone, teeth, nails, and/or hair | All data are negative | Mouse | NOAEL 11,298 mg/kg/day | 13 weeks |
| Liquefied Petroleum Gases | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | |
| Xylene | Inhalation | nervous system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.4 mg/l | 4 weeks |
| Xylene | Inhalation | auditory system | May cause damage to organs though prolonged or repeated exposure | Rat | LOAEL 7.8 mg/l | 5 days |
| Xylene | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL Not available | |
| Xylene | Inhalation | heart endocrine system hematopoietic | All data are negative | Multiple animal species | NOAEL 3.5 mg/l | 13 weeks |

| | | system muscles kidney and/or bladder respiratory system | | | | |
|-----------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------|-----------------------------|--------------------------|
| Xylene | Ingestion | auditory system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 900 mg/kg/day | 2 weeks |
| Xylene | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1,500 mg/kg/day | 90 days |
| Xylene | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL Not available | |
| Xylene | Ingestion | heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system | All data are negative | Mouse | NOAEL 1,000 mg/kg/day | 103 weeks |
| Aluminum | Inhalation | nervous system respiratory system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| Ethylbenzene | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1.1 mg/l | 2 years |
| Ethylbenzene | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Mouse | NOAEL 1.1 mg/l | 103 weeks |
| Ethylbenzene | Inhalation | hematopoietic system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 3.4 mg/l | 28 days |
| Ethylbenzene | Inhalation | auditory system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 2.4 mg/l | 5 days |
| Ethylbenzene | Inhalation | endocrine system | Some positive data exist, but the data are not sufficient for classification | Mouse | NOAEL 3.3 mg/l | 103 weeks |
| Ethylbenzene | Inhalation | bone, teeth, nails, and/or hair muscles | All data are negative | Multiple animal species | NOAEL 4.2 mg/l | 90 days |
| Ethylbenzene | Inhalation | heart immune system respiratory system | All data are negative | Multiple animal species | NOAEL 3.3 mg/l | 2 years |
| Ethylbenzene | Ingestion | liver kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 680 mg/kg/day | 6 months |
| Stoddard Solvent | Inhalation | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 4.6 mg/l | 6 months |
| Stoddard Solvent | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 1.9 mg/l | 13 weeks |
| Stoddard Solvent | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL 0.6 mg/l | 90 days |
| Stoddard Solvent | Inhalation | bone, teeth, nails, and/or hair blood liver muscles | All data are negative | Rat | NOAEL 5.6 mg/l | 12 weeks |
| Stoddard Solvent | Inhalation | heart | All data are negative | Multiple animal species | NOAEL 1.3 mg/l | 90 days |
| Synthetic Amorphous Silica, Fumed, Crystalline Free | Inhalation | respiratory system silicosis | All data are negative | Human | NOAEL Not available | occupational exposure |

Aspiration Hazard

| Name | Value |
|------------------|-------------------|
| Xylene | Aspiration hazard |
| Ethylbenzene | Aspiration hazard |
| Stoddard Solvent | Aspiration hazard |

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

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

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

| Ingredient | C.A.S. No | <u>% by Wt</u> |
|---------------------------------|------------------|----------------|
| Xylene | 1330-20-7 | 3 - 7 |
| Xylene (Benzene, 1,2-dimethyl-) | 1330-20-7 | 3 - 7 |
| Xylene (Benzene, 1,3-dimethyl-) | 1330-20-7 | 3 - 7 |
| Xylene (Benzene, 1,4-dimethyl-) | 1330-20-7 | 3 - 7 |
| Xylene (Benzene, dimethyl-) | 1330-20-7 | 3 - 7 |
| Aluminum | 7429-90-5 | 1 - 5 |

| Aluminum (Aluminum) | 7429-90-5 | 1 - 5 |
|---------------------|-----------|--------|
| Ethylbenzene | 100-41-4 | 1 - 5 |
| Zinc | 7440-66-6 | 7 - 13 |
| Zinc (Zinc) | 7440-66-6 | 7 - 13 |

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

| <u>Ingredient</u> | C.A.S. No. | Classification |
|-------------------|------------|-----------------------|
| Ethylbenzene | 100-41-4 | Carcinogen |

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

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 4 Instability: 0 Special Hazards: None Aerosol Storage Code: 2

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

| Document Group: | 18-7877-6 | Version Number: | 6.00 |
|-----------------|-----------|------------------|----------|
| Issue Date: | 03/03/15 | Supercedes Date: | 03/27/12 |

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Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:3M(TM) Weld-Thru II Coating, PN 05917**MANUFACTURER:**3M**DIVISION:**Automotive Aftermarket

| Issue Date: | 05/09/2007 |
|--------------------|------------|
| Supercedes Date: | 11/22/2005 |

Document Group: 18-7877-6

Product Use:

Intended Use:AutomotiveSpecific Use:Weldable Corrosion Resistant Coating

SECTION 2: INGREDIENTS

| Ingredient | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|---------------------------|-------------------|----------------|
| ACETONE | 67-64-1 | 30 - 60 |
| LIQUEFIED PETROLEUM GASES | 68476-86-8 | 10 - 30 |
| ZINC | 7440-66-6 | 7 - 13 |
| XYLENE | 1330-20-7 | 3 - 7 |
| ZINC RICH PRIMER | Mixture | 1 - 5 |
| ETHYLBENZENE | 100-41-4 | 1 - 5 |
| ALUMINUM | 7429-90-5 | 1 - 5 |
| STODDARD SOLVENT | 8052-41-3 | < 2 |
| TOLUENE | 108-88-3 | < 0.1 |

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Aerosol
Odor, Color, Grade: Gray/Metallic appearance with solvent odor.
General Physical Form: Liquid
Immediate health, physical, and environmental hazards: Aerosol container contains flammable gas under pressure. Closed

3M MATERIAL SAFETY DATA SHEET 3M(TM) Weld-Thru II Coating, PN 05917 05/09/2007

containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Aerosol container contains flammable material under pressure. May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

Delayed Dermal Irritation: Signs/symptoms may include localized redness, swelling, itching, and pain. These effects may not appear immediately following exposure.

Inhalation:

Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Intentional concentration and inhalation may be harmful or fatal.

May be absorbed following inhalation and cause target organ effects.

Ingestion:

May be harmful if swallowed.

Ingestion may cause:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.

Target Organ Effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure, above recommended guidelines, may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Kidney Effects: Signs/symptoms may include reduced or absent urine production, increased serum creatinine, lower back pain, increased protein in urine, and increased blood urea nitrogen (BUN).

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| <u>Ingredient</u> | C.A.S. No. | Class Description | Regulation |
|--------------------|------------|-------------------|-------------------|
| <u>ingi culont</u> | | Chubb Debeription | Regulation |

3M MATERIAL SAFETY DATA SHEET 3M(TM) Weld-Thru II Coating, PN 05917 05/09/2007

ETHYLBENZENE

100-41-4 Group 2B

International Agency for Research on Cancer

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature Flash Point Flammable Limits - LEL Flammable Limits - UEL No Data Available -156 °F [Test Method: Pensky-Martens Closed Cup] 0.7 % 12.8 %

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Flammable liquefied gas. Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Aerosol container contains flammable material under pressure.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. 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. If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in an approved metal container. Seal the container. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Vapors may ignite explosively. May cause flash fire. Prevent build-up of vapors - open all windows and doors. Maintain vapor concentrations below recommended exposure limits. Use only with cross-ventilation. Without adequate ventilation, vapors may settle in low-lying areas. Keep away from heat, sparks, and open flame. Do not smoke or ignite matches, lighters, etc. For industrial or professional use only. Extinguish pilot lights and turn off stoves, ovens and other gas and electric appliances (space and water heaters, furnaces, etc.), electric motors, and other sources of ignition during adhesive use and until all vapors are gone; i.e., until the odor of vapors at the floor level has disappeared. Do not use electric light switches. Do not generate static sparks (such as by walking on carpet, etc.). Use the same precautions in the work area and all connected areas. Aerosol container contains flammable gas under pressure. Do not pierce or burn container, even after use. Keep out of the reach of children. Avoid eye contact with vapors, mists, or spray. Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid contact with oxidizing agents. Keep away from strong bases and amines. (When welding on 3M Weldable Primer, adhere to the standard precautions normally taken for welding. Avoid breathing fumes during welding operations. The use of local exhaust ventilation is recommended to control welding fumes. When local exhaust ventilation is not used, a NIOSH/MSHA-approved respirator is recommended.)

7.2 STORAGE

Store away from areas where product may come into contact with food or pharmaceuticals. Do not store containers on their sides. Keep container tightly closed. Keep container in well-ventilated area. Store away from heat. Store out of direct sunlight. Store away from acids. Store away from oxidizing agents. Store at temperatures below 120 degrees Fahrenheit (49 degrees C).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Do not use in a confined area or areas with little or no air movement. Use with functioning spray booth or local exhaust. Use with appropriate local exhaust ventilation. Provide appropriate local exhaust for cutting, grinding, sanding or machining.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray. The following eye protection(s) are recommended: Safety Glasses with side shields, Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material(s) are recommended: Polyethylene/Ethylene Vinyl Alcohol.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and N95 particulate prefilters. When welding through this coating, use appropriate respiratory protection against hazardous decomposition products.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

| Ingredient | <u>Authority</u> | Type | <u>Limit</u> | Additional Information |
|-----------------------|------------------|--------------------|--------------|-------------------------------|
| ACETONE | ACGIH | TWA | 500 ppm | Table A4 |
| ACETONE | ACGIH | STEL | 750 ppm | Table A4 |
| ACETONE | OSHA | TWA, Vacated | 750 ppm | |
| ACETONE | OSHA | TWA | 1000 ppm | Table Z-1 |
| ACETONE | OSHA | STEL, Vacated | 1000 ppm | |
| ALUMINUM | ACGIH | TWA | 10 mg/m3 | |
| ALUMINUM | OSHA | TWA, respirable | 5 mg/m3 | Table Z-1 |
| ALUMINUM | OSHA | TWA, as total dust | 15 mg/m3 | Table Z-1 |
| ALUMINUM PYRO POWDERS | ACGIH | TWA, as Al | 5 mg/m3 | |
| ALUMINUM PYRO POWDERS | OSHA | TWA, as Al | 5 mg/m3 | Table Z-1A |
| ETHYLBENZENE | ACGIH | TWA | 100 ppm | Table A3 |
| ETHYLBENZENE | ACGIH | STEL | 125 ppm | Table A3 |
| ETHYLBENZENE | OSHA | TWA | 100 ppm | Table Z-1A |
| ETHYLBENZENE | OSHA | STEL | 125 ppm | Table Z-1A |
| STODDARD SOLVENT | ACGIH | TWA | 100 ppm | |
| STODDARD SOLVENT | OSHA | TWA, Vacated | 100 ppm | Table Z-1A |
| STODDARD SOLVENT | OSHA | TWA | 500 ppm | Table Z-1 |
| TOLUENE | ACGIH | TWA | 50 ppm | Skin Notation*; Table A4 |
| TOLUENE | CMRG | STEL | 75 ppm | Skin Notation* |
| TOLUENE | OSHA | TWA, Vacated | 100 ppm | |
| TOLUENE | OSHA | STEL, Vacated | 150 ppm | |
| TOLUENE | OSHA | TWA | 200 ppm | Table Z-2 |
| TOLUENE | OSHA | CEIL | 300 ppm | Table Z-2 |
| XYLENE | ACGIH | TWA | 100 ppm | Table A4 |
| XYLENE | ACGIH | STEL | 150 ppm | Table A4 |
| XYLENE | OSHA | TWA | 100 ppm | Table Z-1A |
| XYLENE | OSHA | STEL | 150 ppm | Table Z-1A |

* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

VAC Vacated PEL:Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Odor, Color, Grade: General Physical Form: Autoignition temperature Flash Point Flammable Limits - LEL Flammable Limits - UEL Boiling point

Vapor Density Vapor Pressure

Specific Gravity pH Melting point

Solubility in Water Hazardous Air Pollutants Volatile Organic Compounds

Percent volatile VOC Less H2O & Exempt Solvents VOC Less H2O & Exempt Solvents Aerosol Gray/Metallic appearance with solvent odor. Liquid *No Data Available* -156 °F [*Test Method:* Pensky-Martens Closed Cup] 0.7 % 12.8 % [*Details:* Aerosol]

[*Details:* Heavier than air] 80 - 90 mmHg

0.796 Not Applicable Not Applicable

Appreciable 0.53 lb HAPS/gal 2.37 lb/gal [*Test Method:* calculated SCAQMD rule 443.1] [*Details:* excluding exempt compounds] 35.64 % 557.58 g/l [*Test Method:* calculated SCAQMD rule 443.1] 4.4 lb/gal

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong acids; Strong bases; Strong oxidizing agents; Amines; Heat Additional Information: All sources of ignition, welding arcs, and open flame.

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

| Substance | Condition |
|-------------------------------|------------------|
| Hydrocarbons | Not Specified |
| Chlorine | Not Specified |
| Carbon monoxide | Not Specified |
| Carbon dioxide | Not Specified |
| Hydrogen Chloride | Not Specified |
| Oxides of Nitrogen | Not Specified |
| Phosgene | Not Specified |
| Toxic Vapor, Gas, Particulate | Not Specified |
| Oxides of Zinc | Not Specified |
| | |

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Do not puncture or burn cans in a household incinerator. Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility. Facility must be capable of handling aerosol cans. Combustion products will include HCl. Facility must be capable of handling halogenated materials.

Dispose of empty product containers in a sanitary landfill.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

ID Number(s): LB-K100-0341-3, 60-9801-0777-9

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

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

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

| Ingredient | C.A.S. No | % by Wt |
|-----------------------|------------------|---------|
| XYLENE | 1330-20-7 | 3 - 7 |
| ETHYLBENZENE | 100-41-4 | 1 - 5 |
| ALUMINUM | 7429-90-5 | 1 - 5 |
| ZINC | 7440-66-6 | 7 - 13 |
| ZINC (ZINC COMPOUNDS) | 7440-66-6 | 7 - 13 |

This material contains a chemical which requires export notification under TSCA Section 12[b]:

| <u>Ingredient (Category if applicable)</u> | C.A.S. No | Regulation | Status |
|--------------------------------------------|------------------|--------------------------------------------|------------|
| ACETONE | 67-64-1 | Toxic Substances Control Act (TSCA) 4 Test | Applicable |
| | | Rule Chemicals | |

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

| <u>Ingredient</u> | <u>C.A.S. No.</u> | Classification |
|-------------------|-------------------|-----------------------|
| TOLUENE | 108-88-3 | *Developmental Toxin |

* WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

WHMIS: Hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 4 Reactivity: 0 Special Hazards: None

3M MATERIAL SAFETY DATA SHEET 3M(TM) Weld-Thru II Coating, PN 05917 05/09/2007

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes: Section 1: Product use information was modified. Copyright was modified. Section 14: ID Number(s) was modified. Section 9: Property description for optional properties was modified.

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