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MATERIAL SAFETY DATA SHEET

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1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION

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Tradename:  
3M (TM) WELD-THRU COATING / AEROSOL, P/N 05913

3M Product ID:  
GS-2000-3156-4 GS-2000-3157-2 60-9800-2866-0  
GS-2000-3431-1 GS-2000-3435-2 GS-2000-3436-0 GS-2000-3433-7  
GS-2000-3432-9

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2 COMPOSITION/INFORMATION ON INGREDIENTS

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Ingredient name and classification	CAS number	Percentage
METHYL ETHYL KETONE EU Hazard Symbols and Risk Phrases: EU - Adaptation 25 (F,Xi; R:11-36-66-67)	78-93-3	20.0 - 30.0
TOLUENE EU Hazard Symbols and Risk Phrases: EU - Adaptation 21 (F,Xn; R:11-20)	108-88-3	15.0 - 25.0
ZINC POWDER EU Hazard Symbols and Risk Phrases: EU - Adaptation 21 (F; R:15-17)	7440-66-6	5.0 - 15.0
1-METHOXY-2-PROPYL ACETATE EU Hazard Symbols and Risk Phrases: EU - Adaptation 21 (Xi; R:10-36)	108-65-6	5.0 - 15.0
ISOBUTANE (CONTAINING <0.1% BUTADIENE) EU Hazard Symbols and Risk Phrases: EU - Adaptation 21 (F+; R:12)	75-28-5	1.0 - 10.0
PROPANE EU Hazard Symbols and Risk Phrases: EU - Adaptation 21 (F+; R:12)	74-98-6	1.0 - 10.0
TRIMANGANESE TETROXIDE MANGANESE	1317-35-7 7439-96-5	1.0 - 10.0 1.0 - 5.0
BISPHENOL A-EPICHLOROHYDRIN COPOLYMER EU Hazard Symbols and Risk Phrases: EU - Adaptation 25 (Xi,N; R:36-38-43-51-53)	25068-38-6	1.0 - 5.0
MICA ACETONE EU Hazard Symbols and Risk Phrases: EU - Adaptation 25 (F,Xi; R:11-36-66-67)	12001-26-2 67-64-1	1.0 - 5.0 Less Than 1.0

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### 3 HAZARDS IDENTIFICATION

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Critical hazards:

(R12) Extremely flammable. Harmful. (R20) Harmful by inhalation. (R36) Irritating to eyes. (R43) May cause sensitisation by skin contact. Repeated exposure may cause skin dryness or cracking. (R52/53) Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

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### 4 FIRST-AID MEASURES

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Eye Contact:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

Skin Contact:

Flush skin with large amounts of water. If irritation persists, get immediate medical attention.

Inhalation:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion:

Do not induce vomiting. Drink two glasses of water. Call a medical doctor.

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### 5 FIRE-FIGHTING MEASURES

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Suitable Extinguishing Media:

Carbon dioxide, Dry chemical, Foam.

Exposure Hazards:

Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

Hazardous Decomposition:

Carbon Monoxide and Carbon Dioxide. Hydrocarbons, Oxides of Zinc. Toxic vapours, Gases or particulates,

Fire-Fighting Procedures:

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, tunic and trousers (leggings), bands around arms, waist and legs, face mask, and protective covering for exposed

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areas of the head.

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**6 ACCIDENTAL RELEASE MEASURES**  
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**Personal Precautions:**

Refer to other sections of this Material Safety Data Sheet for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**Methods for Cleaning up:**

Ventilate the area with fresh air. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Contain spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Cover with absorbent material. 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. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue. Place in a suitable metal container. Seal the container.

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**7 HANDLING AND STORAGE**  
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**Precautions for Safe Storage:**

Store at temperatures below 49 C.

**Incompatible Materials/Conditions:**

Store away from heat.

**Fire Prevention:**

Aerosol container contains flammable gas under pressure.  
Extremely flammable liquid and vapour.

**Explosion Prevention:**

Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.

**Static Prevention:**

Avoid static discharge.

**Precautions for Safe Handling:**

Do not pierce or burn container, even after use.

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8 EXPOSURE CONTROLS/PERSONAL PROTECTION  
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Eye Protection:

Avoid eye contact with vapours, mists, or spray. Indirect vented goggles. Safety glasses with side shields.

Hand Protection:

Wear appropriate gloves when handling this material. The following glove material(s) are recommended: Butyl rubber.

Skin Protection:

Avoid skin contact.

Respiratory Protection:

Avoid inhalation of vapours, mists or spray. Avoid inhalation of thermal decomposition products. Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Full-face organic vapour respirator. When welding through this coating, use appropriate respiratory protection against the hazardous decomposition products listed in Section 5 of this Material Safety Data Sheet.

Ingestion:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest. Keep out of the reach of children.

Recommended Ventilation:

Do not use in a confined area or areas with little or no air movement. Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

Exposure Limits:

METHYL ETHYL KETONE (78-93-3)

UK HSE TWA: 200 ppm; 600 mg/m<sup>3</sup> OES skin

METHYL ETHYL KETONE (78-93-3)

UK HSE STEL: 300 ppm; 899 mg/m<sup>3</sup> OES skin

TOLUENE (108-88-3)

UK HSE TWA: 50 ppm; 191 mg/m<sup>3</sup> skin OES

TOLUENE (108-88-3)

UK HSE STEL: 150 ppm; 574 mg/m<sup>3</sup> skin OES

1-METHOXY-2-PROPYL ACETATE (108-65-6)

UK HSE TWA: 50 ppm; 274 mg/m<sup>3</sup>

1-METHOXY-2-PROPYL ACETATE (108-65-6)

UK HSE STEL: 100 ppm; 548 mg/m<sup>3</sup>

1-METHOXY-2-PROPYL ACETATE (108-65-6)

CMRG TWA Exposure Limit: 100 ppm

1-METHOXY-2-PROPYL ACETATE (108-65-6)

EEC Exposure Limit: 50ppm; 275mg/m<sup>3</sup> 8 hours; 100ppm; 550mg/m<sup>3</sup> short term

PROPANE (74-98-6)

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UK HSE TWA: Asphyxiant OES  
TRIMANGANESE TETROXIDE (1317-35-7)  
UK HSE TWA: 1 mg/m3 OES  
MANGANESE (7439-96-5)  
UK HSE TWA: 5 mg/m3 fume;  
MANGANESE (7439-96-5)  
UK HSE STEL: 3 mg/m3 fume as Mn OES  
MICA (12001-26-2)  
UK HSE TWA: 10 mg/m3 Total inhalable dust; 0.8 mg/m3  
Respirable dust OES  
ACETONE (67-64-1)  
UK HSE TWA: 500 ppm; 1210 mg/m3 OES  
ACETONE (67-64-1)  
UK HSE STEL: 1500 ppm; 3620 mg/m3 OES

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9 PHYSICAL AND CHEMICAL PROPERTIES  
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Appearance and Odour: Grey brown liquid in a aerosol  
container with grey metallic  
mirror and a ketone like  
odour.

pH: Not applicable

Boiling point/boiling range: Aerosol

Melting point/melting range: Not determined

Flash point: Less than -7C closed cup

Autoflammability: Not determined

Vapour pressure: Compressed gas

Water Solubility: Insoluble

Specific gravity: 0.902 Water=1

Vapour density: Greater than 1.00 Air=1

Volatile organic compounds: 74.4 % by wt

Evaporation rate: 2.70 Ether=1

Viscosity: 27 centipoise

Percent Volatile:

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## 10 STABILITY AND REACTIVITY

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Conditions to Avoid:

Heat.

Materials to Avoid:

Heat.

Hazardous Decomposition:

Stable. Hazardous polymerisation will not occur.

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## 11 TOXICOLOGICAL INFORMATION

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Effects from Eye Contact:

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

Effects from Skin Contact:

Moderate Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness. May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion. Prolonged or repeated exposure may cause: Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Effects from Inhalation:

Intentional concentration and inhalation may be harmful or fatal. Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Prolonged or repeated overexposure, above recommended guidelines, may cause: Central Neuropathy: signs/symptoms can include dizziness, incoordination, visual changes, emotional changes, tremors and convulsions.

Effects from Ingestion:

Ingestion is not a likely route of exposure to this product.

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## 12 ECOLOGICAL INFORMATION

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Special statements for 2001/58/EC:

One or more components of this product have significant known or predicted environmental hazards, but a conservative assessment indicates a low environmental risk. Intended use and proper disposal are unlikely to cause the environmentally hazardous component(s) to enter the environment in quantities or by routes that could cause the adverse environmental

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impacts.

Other Effects and Information:

Not determined. Take precautions to prevent direct release of this substance to the environment.

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13 DISPOSAL CONSIDERATIONS  
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Product after Use:

Do not puncture or burn cans in a household incinerator.

Special Instructions:

Incinerate in a permitted hazardous waste incinerator.  
Facility must be capable of handling aerosol cans. Disposal alternative: Dispose of empty product containers in a sanitary landfill. Since regulations vary, consult applicable regulations or authorities before disposal.

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14 TRANSPORT INFORMATION  
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UN NUMBER:

UN number: UN1950

UK ROAD/SEA FREIGHT (IMO) CLASSIFICATION:

Substance Identification Number: UN1950

Class: 2.0

Packing Group: Not applicable

Proper Shipping Name: Aerosols

CDG-ROAD (if applicable) Not applicable

ADR/RID CLASSIFICATION:

Class: 2.1

Item Number: 5 f

ICAO/IATA CLASSIFICATION:

Class: 2.0

Sub-Risk: Not applicable

Packing Group: Not applicable

Proper Shipping Name: Aerosols Flammable

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15 REGULATORY INFORMATION  
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Symbol(s):

(F+) Flame (Extremely Flammable). (Xn) St. Andrew's Cross  
(Harmful).

Risk Phrases:

(R12) Extremely flammable. (R20) Harmful by inhalation. (R36)  
Irritating to eyes. (R43) May cause sensitisation by skin  
contact. (R66) Repeated exposure may cause skin dryness or  
cracking. (R52/53) Harmful to aquatic organisms. May cause  
long-term adverse effects in the aquatic environment.

Safety Phrases:

Keep away from heat. Keep away from sources of ignition  
including pilot lights and sparks. No smoking. Do not breathe  
vapour or spray. Use only in well ventilated areas. Avoid  
contact with the skin and eyes. Wear suitable gloves. In case  
of contact with eyes, rinse immediately with plenty of water  
and seek medical advice. After contact with skin, wash  
immediately with plenty of soap and water. Contains Epoxy  
Resins. See information supplied by manufacturer. WARNING!  
Pressurised container. Protect from sunlight and do not  
expose to temperatures exceeding 50 degrees C. Do not pierce  
or burn, even after use. Do not spray on a naked flame or  
incandescent material. Keep out of the reach of children.

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16 OTHER INFORMATION  
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Regulatory Information:

The following UK Regulations  
as amended may affect the  
product as supplied: The  
Chemicals (Hazard Information  
and Packaging for supply)  
Regulations, as amended. The  
Carriage of Dangerous Goods  
(Classification, Packaging and  
Labelling) and use of  
Transportable Pressure  
Receptacles Regulations 1996,  
as amended. Carriage of  
Dangerous Goods by Road  
regulations, 1996, as amended.  
The Petroleum (Consolidation)  
Act 1928.  
The Control of  
Substances Hazardous to Health  
Regulations 1999 as amended.

The Special Waste Regulations  
1996, as amended. The  
Environmental Protection Act,  
1990 The Health and Safety at

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Work Act, 1974.

Reissue date/Reason for reissue.  
Removed 3M ID stock number.

Intended Use of Product:  
An anti-corrosion coating designed to pre-treat joints and seams prior to either mig or spot welding.

The information on this Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.