

Harwell BrothersTM

Conquering the War on Rust!TM



2955

**Rusty Metal Primer/Finish
Aluminum 0 VOC**

Safety Data Sheets

Safety Data Sheet

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1 Identifier

Product identifier

Trade name: Moisture Cure Urethane silver 0 VOC primer/finish

Article number: Harwell Brothers 2955 0 VOC

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Harwell Brothers Distribution LLC.

770 E. Main St.

Lehi Utah, 84034

Phone 310 744 3325

Information department: Product safety department

Emergency telephone number:

EMERGENCY PHONE NUMBERS:

USA 1-800 400-2361

2 Hazards Identification

Classification of the substance or mixture



Flame

GHS02

Flammable Liquid 2 H225 Highly flammable liquid and vapor.



Harmful

GHS07

Respiratory Sensitivity 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carcinogen 2 H351 Suspected of causing cancer.

Reproduction 1B H360 May damage fertility or the unborn child.

*STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Health Hazard

GHS08

Skin Irritant 2 H315 Causes skin irritation.

Eye Irritant.2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

*STOT SE 3 H335 May cause respiratory irritation

*Specific target organ toxicity

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Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard Pictograms GHS02 GHS07 GHS08

Hazard-determining components of labeling:

Solvent naphtha (petroleum), light aroma.

Hazard statements

- H225 Highly flammable liquid and vapor.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H360 May damage fertility or the unborn child.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Keep out of reach from children.

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P284 Wear respiratory protection.
- P280 Wear protective gloves / eye protection / face protection.
- P280 Wear protective gloves.
- P280 Wear eye protection / face protection.
- P240 Ground/bond container and receiving equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P201 Obtain special instructions before use.
- P202 Do not start until all safety precautions have been read and understood.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 Specific treatment (see on this label).
- P342+P311 If experiencing respiratory symptoms: Call a poison center/doctor.
- P304+P340IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a poison center/doctor if you feel unwell.
- P363 Wash contaminated clothing before reuse.

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P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use for extinction: CO2, powder, or water spray.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations

Classification system:

NFPA ratings (scale 0 -4)

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2
Fire = 3
Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2
Fire = 3
Reactivity = 0

Other hazards

Results of PBT and

vPvB assessment

· PBT: Not applicable

vPvB: Not applicable

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

98-56-6	Chlorobenzotrifluoride	10-30%%
101-68-8	4,4'-methylenediphenyl diisocyanate	10-30%%
7429-90-5	Aluminum powder (stabilized)	10-30%%
9016-87-9	Diphenylmethanediisocyanate, isomeres and homologues	10-30%%
540-88-5	Tert-butyl acetate	5-10%%
5873-54-1	o-(p-isocyanato benzyl)phenyl Isocyanate	1-5%%
872-50-4	N-methyl-2-pyrrolidone	0.1-1%%

4 First Aid

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident

After inhalation:

Supply fresh air and to be sure call for a doctor.

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After skin contact:

Immediately wash with water, soap, and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water.

After swallowing:

If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire Fighting

Extinguishing media

Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: Mouth respiratory protective device

6 Accidental Release

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system does not allow to enter sewers/ surface or ground water

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and Storage

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care Prevent formation of aerosols.

Information about protection against explosions and fires:

Keep ignition sources away from product. Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required

Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well-sealed receptacles. **Specific end use(s)** No further relevant information available

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8 Exposure Controls/Personal Protection

· **Additional information about design of technical systems:** No further data; see item 7. ·

Control parameters

· Components with limit values that require monitoring at the workplace:	
540-88-5 tert-butyl acetate	
PEL	Long-term value: 950 mg/m ³ , 200 ppm
REL	Long-term value: 950 mg/m ³ , 200 ppm
TLV	Long-term value: 950 mg/m ³ , 200 ppm
101-68-8 4,4'-methylenediphenyl diisocyanate	
PEL	Ceiling limit value: 0.2 mg/m ³ , 0.02 ppm
REL	Long-term value: 0.05 mg/m ³ , 0.005 ppm Ceiling limit value: 0.2* mg/m ³ , 0.02* ppm *10-min
TLV	Long-term value: 0.051 mg/m ³ , 0.005 ppm
872-50-4 N-methyl-2-pyrrolidone	
WEEL	Long-term value: 10 ppm Skin
· Ingredients with biological limit values:	
872-50-4 N-methyl-2-pyrrolidone	
BEI	100 mg/L Medium: urine Time: end of shift Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages, and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

During mixing, handling, and application: Splash goggles. Full protective clothing. Gloves (impervious). Wear suitable respiratory equipment. When air concentrations are not known (or above the TLV), an air supplied respirator is required. Refer to OSHA Respiratory Protection Standard (29 CFR 1910.134). In presence of air movement, air-purifying (cartridge type) respirators are not the best protection but can be used, if you replaced them frequently. Change cartridges after 8h max or less due to their low warning properties. When in a confined space wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

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Protection of Hands:

Protective Gloves: The Glove material must be resistant product. Due to not having test data, no recommendation to the type of glove can be given for the product. Selection of the glove material should be done on bases of the chemical make-up of the product. Material of the glove by selection of the glove dose not only depend on material, on the quality varies from manufacture to manufacture. This should be done by glove manufacture.

Eye Protection:

Tightly sealed Googles

9 Physical and Chemical Properties

· Information on basic physical and chemical properties	
· General Information · Appearance:	
Form:	Fluid
Color:	Silver-colored
· Odor:	Aromatic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range: Undetermined. Boiling point/Boiling range: 97 °C (207 °F)	
· Flash point:	37°C (100 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	400 °C (752 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
· Explosion limits:	
Lower:	0.4 Vol %
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	41 hPa (31 mm Hg)
· Density at 20 °C (68 °F):	1.09-1.12 g/cm ³ (9.096-9.346 lbs./gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water): Not determined.	

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· Viscosity: Dynamic: Not determined. Kinematic: Not determined.
· Solvent content:
Solids content: 69-73 %
· Other information No further relevant information available.

10 Stability and Reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

11 Toxicity

Information on toxicological effects

Acute toxicity:

· LD/LC50 values that are relevant for classification:		
101-68-8 4,4'-methylenediphenyl diisocyanate		
Oral	LD50	2200 mg/kg (mouse)
540-88-5 Tertiary butyl acetate		
Oral	LD50	>4500 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rab)
Inhalative	LC50/4 h	>12.52 mg/l (rat)
98-56-6 Chlorobenzotrifluoride		
Oral	LD50	> 5546 mg/kg (rat)
Dermal	LD50	> 3300 mg/kg (rabbit)
Inhalative	LC50/4 h	> 32.03 mg/l (rat)

Primary irritant effect:

On the skin: No irritant effect.

On the eye: No irritating effect.

Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

Additional toxicological information:

This product may cause cancer.

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
101-68-8	4,4'-methylenediphenyl diisocyanate	3

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9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	3
· NTP (National Toxicology Program)		
None of the ingredients is listed.		
· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

12 Ecological

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bio accumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxic effects:

Remark: Harmful to fish

Additional ecological information:

General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Harmful to aquatic organisms

13 Disposal recommendations

Waste treatment methods

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system

Uncleaned packaging's:

Recommendation: Disposal must be made according to official regulations

14 Transportation

UN-Number DOT, ADR, IMDG, IATA	UN1263
UN proper shipping name DOT ADR IMDG, IATA	Paint 1263 Paint PAINT
Packing group DOT, ADR, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user Danger code (Kemler): EMS Number:	Warning: Flammable liquids 33 F-E, S-E
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.



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Transport hazard class(es) DOT	
	
Class Label	3 Flammable liquids
ADR, IMDG, IATA	
	
Class Label	3 Flammable liquids 3
Transport/Additional information:	
DOT	
Quantity limitations	on passenger aircraft/rail: 5 L on cargo aircraft only: 60 L
ADR	
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
IMDG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN1263, Paint, 3, II

15 Regulatory

Safety, health, and environmental regulations/legislation specific for the substance or mixture ·
Sara

· Section 355 (extremely hazardous substances):	
4098-71-9	Isophorone diisocyanate
· Section 313 (Specific toxic chemical listings):	
117-81-7	bis(2-ethylhexyl) phthalate
4098-71-9	Isophorone di-isocyanate
95-63-6	1,2,4-trimethylbenzene
1330-20-7	xylene
872-50-4	N-methyl-2-pyrrolidone

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822-06-0	hexamethylene-di-isocyanate
111-76-2	2-butoxyethanol
100-41-4	ethylbenzene
· TSCA (Toxic Substances Control Act):	
tert-butyl acetate	
titanium dioxide	
Hexane, 1,6-diisocyanato-, homopolymer	
Stoddard solvent	
Homopolymer of IPDI	
methyl amyl ketone	
Solvent naphtha (petroleum), light aroma.	
silicon dioxide, chemically prepared	
· TSCA new (21st Century Act) (Substances not listed)	
7429-90-5	aluminum powder (stabilized)
53880-05-0	Homopolymer of IPDI

Proposition 65

· Chemicals known to cause cancer:	
13463-67-7	titanium dioxide
117-81-7	bis(2-ethylhexyl) phthalate
1333-86-4	Carbon black
14808-60-7	Quartz (SiO ₂)
100-41-4	ethylbenzene
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males:	
117-81-7	bis(2-ethylhexyl) phthalate
· Chemicals known to cause developmental toxicity:	
117-81-7	bis(2-ethylhexyl) phthalate
872-50-4	N-methyl-2-pyrrolidone

Carcinogenic categories

· EPA (Environmental Protection Agency)		
117-81-7	bis(2-ethylhexyl) phthalate	B2
1330-20-7	xylene	I
111-76-2	2-butoxyethanol	NL
100-41-4	ethylbenzene	D

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· TLV (Threshold Limit Value established by ACGIH)	
titanium dioxide	A4
bis(2-ethylhexyl) phthalate	A3
Carbon black	A4
xylene	A4
zirconium dioxide	A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)	
13463-67-7	titanium dioxide
117-81-7	bis(2-ethylhexyl) phthalate
1333-86-4	Carbon black
14808-60-7	Quartz (SiO ₂)

GHS label element: The product is classified and labeled according to the Globally Harmonized System (GHS)
Hazard pictogram



GHS02



GHS07



GHS08

· **Signal word** *Danger*

Hazard-determining components of labeling:

4,4'-methylenediphenyl diisocyanate, diphenylmethanediisocyanate, isomeres and homologues (p-isocyanatobenzyl) phenyl isocyanate light aroma

Hazard Statements

- H225 Highly flammable liquid and vapor.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H350 May cause cancer.

Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P284 Wear respiratory protection.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves / eye protection / face protection.
P280 Wear protective gloves.
P280 Wear eye protection / face protection

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P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing remain at workplace.
P201	Obtain special instructions before use.
P202	Do not start until all safety precautions (personal) have analyzed, read, and understood.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately al contaminated clothing
P321	Specific treatment (see on this label).
P304+P340	If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for Breathing
P363	Wash contaminated clothing before reuse.
P308+P313	If exposed or concerned: Get medical advice
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: CO2, powder, or water spray.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international

National regulations:

Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be accommodated by the authorities in certain cases.

Chemical safety assessment:

A Chemical Safety Assessment has not been conducted, work my not proceed

16 Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship

Department issuing SDS: Product safety department

Contact: HS.REG.DEPART.REG.SS

Date of preparation / last revision ·

Abbreviations and acronyms:

ADR: Accord Europeen sur le transport des marchandises danger uses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Resp. Sens. 1: Sensitization - Respiratory., Hazard Category 1

Skin Sens. 1: Sensitization - Skin, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 1B: Reproductive toxicity, Hazard Category 1B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2