



Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name/Identifier	Magic Rust Converter
Product Code	PC8019
Product Use	Converts rust into a protective black polymeric coating that adheres firmly to metal surfaces, preventing further corrosion.
Company Information	Vance Chemicals Pte Ltd No.24 Gul Lane Singapore 629418 +65 6863 0863 msds@mr-mckenic.com
Emergency Contact	+65 9299 8024

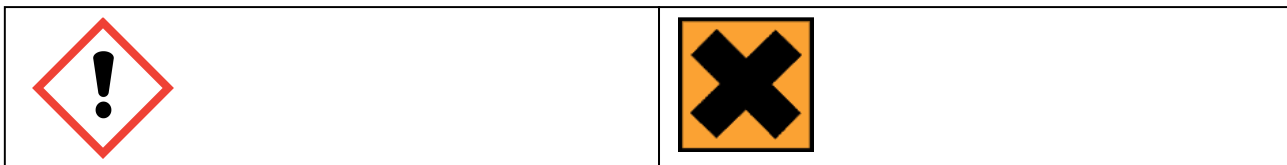
SECTION 2 HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Health		Environmental	Physical
Eye irritant	Category 2	Not Classified	Not Classified
Skin irritant	Category 2		

GHS LABEL:

EU LABEL:





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Hazard Statements:

Code	Health hazard statements	Hazard class	Hazard category
H315	Causes skin irritation	Skin corrosion/irritation (chapter 3.2)	2
H319	Causes serious eye irritation	Eye damage/irritation (chapter 3.3)	2

Precautionary Statements

Prevention:

Code	Prevention precautionary statements	Hazard class	Hazard category
P264	Wash thoroughly after handling	Skin corrosion/irritation (chapter 3.2)	1
		Eye damage/irritation (chapter 3.3)	2
P280	Wear protective gloves/ protective clothing/ eye protection/ face protective	Skin corrosion/irritation (chapter 3.2)	2
		Eye damage/irritation (chapter 3.3)	2

Response:

Code	Response precautionary statements	Hazard class	Hazard category
P302+P352	IF ON SKIN: Wash with plenty of soap and water.	Skin corrosion/irritation (chapter 3.2)	2
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	Eye damage/irritation (chapter 3.3)	2
P321	Specific treatment (see ... on this label)	Skin corrosion/irritation (chapter 3.2)	2
P332+P313	If skin irritation occurs: Get medical advice/attention.	Skin corrosion/irritation (chapter 3.2)	2
P337+ P313	If eye irritation persists. Get medical/advice.	Eye damage/irritation (chapter 3.3)	2
P362	Take off contaminated clothing and wash before reuse.	Skin corrosion/irritation (chapter 3.2)	2

SECTION 3 COMPOSITIONS / INFORMATION ON INGREDIENTS

Chemical Identity	CAS #	EINECS #	R Phrase	S Phrase	Weight %
Tannic acid	1401-55-4	215-753-2	R33	S22, S24/25	<5
Butyl glycol ether	111-76-2	203-905-0	R20/21/22, R36/38,	S2, S36/37, S46	<5
Formic acid 94%	64-18-6	200-579-1	R35	S23, S26, S45	<5



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Non-hazardous materials	Mixture	-	-	-	>90
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SECTION 4 FIRST AID MEASURES

Eye contact	Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open. If redness, swelling, pain and blister occur, transport to the nearest medical facility for additional treatment.
Skin contact	Remove contaminated clothing. Flush exposed area with large amount of water for at least 15 minutes followed by washing with soap. If redness, swelling, pain and blister occur, transport to the nearest medical facility for additional treatment.
Inhalation	Remove to open area for fresh air. If rapid recovery does not occur, transport to the nearest medical facility for additional treatment.
Ingestion	For ingestion in large amount, immediately give person large quantities of water to drink. Do not induce vomiting. Obtain medical assistance immediately.

SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Non-flammable. Use water spray, fog or foam to cool fire exposed surfaces and to protect personnel.
Unsuitable Extinguishing Media	No restrictions
Specific Hazards Arising from the Chemical	Hazardous decomposition products. Carbon dioxide and carbon monoxide may form when heated to decomposition.
Protection for Fire-fighters	Evacuate personnel to safe areas. Intervention only by capable personnel who are trained and aware of the hazards of the product. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Clean contaminated surface thoroughly.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment	Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Keep away from open flames, hot surfaces and sources of ignition. Keep away from incompatible products. Isolate the area. Cover the spreading liquid with foam in order to slow down the evaporation. Ventilate the area.
Environmental Precautions	Prevent discharges into the environment (sewers, rivers, soils). Immediately notify the appropriate authorities in case of discharge.
Method for Cleaning Up & Containment	If possible, dam large quantities of liquid with sand or earth. Collect the product with suitable means. Place everything into a closed, labeled container compatible with the product. Flush with plenty of water. Prevent product from entering drains. Treat



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	recovered material as described in the section "Disposal considerations".
Emergency Procedures	Shut off leaks, if possible without personal risks. Prevent from spreading or entering drains, ditches or rivers by using sand, earth or other appropriate barriers. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas indicator.

SECTION 7 HANDLING AND STORAGE

<p>Precautions for Safe Handling: Do not eat, drink or smoke in work area. Avoid contact with eye, skin and clothing. After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation. Avoid breathing vapors or spray mists. Avoid large quantities of material into live electrical motors and other such equipments.</p> <p>Conditions for Safe Storage: Keep container dry. Keep in a cool place. Store below 30°C. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place.</p> <p>Storage temperature: 5°C – 30°C Storage/Transport Pressure: Atmospheric</p>

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
Tannic acid	Not Established	Not Established	Not Established	Not Established
Butyl glycol ether	20ppm	Not Established	50ppm	Not Established
Formic acid 94%	5ppm	10ppm	5ppm	Not Established

Engineering Controls	Ensure adequate ventilation. Provide appropriate exhaust ventilation at machinery. Refer to protective measures listed in sections 7 and 8. Apply technical measures to comply with the occupational exposure limits.
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Personal Protective Equipment (PPE):

Eye Protection	Eye protection is not required under normal conditions of use. If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles.
Skin Protection	No skin protection is required for single, short duration exposures. For prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, etc) over parts of the body subjected to exposure. Launder soiled clothes. Proper dispose of contaminated leather articles including shoes, which cannot be decontaminated. Use rubber gloves if necessary.
Respiratory Protection	In the case of hazardous fumes, wear self contained breathing apparatus. Self-contained breathing apparatus in medium confinement/insufficient oxygen/in case of large uncontrolled emissions/in all circumstances when the mask and cartridge do not give adequate protection.



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Thermal hazards	NA
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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White
Odour	Odourless
Odour Threshold	NA
pH	1 - 2
Melting Point/ Freezing Point (°C)	Not determined
Initial boiling point and range (°C)	Not determined
Flash Point (°C) [According to ISO 3679, Closed Cup Testing]	No flash point detected (From ambient temperature to 93°C)
Evaporation Rate	Not determined
Flammability (solid, gas)	Not applicable
Upper/lower Flammability (Explosive) Limits:	Not determined
Vapour Pressure	Not determined
Vapour Density	Not determined
Relative Density	1.20 ± 0.03
Solubility in water	Soluble
Partition coefficient (N-Octanol/water)	Not determined
Auto-ignition Temperature (°C)	Not determined
Decomposition Temperature:	Not determined
Viscosity (mPa s)	Not determined

SECTION 10 STABILITY AND REACTIVITY

Reactivity/Incompatible materials	Strong oxidizers, strong acids and bases. May attack metallic aluminium or other light metals at high temperatures
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Chemical Stability	Stable at normal conditions of use.
Possibility of hazardous reactions	Not determined
Hazardous decomposition products	Carbon dioxide, carbon monoxide and ammonia may form when heated to decomposition.
Conditions to avoid	Heat, flame, ignition sources and incompatibles. Avoid contact with humidity and Carbon dioxide. Do not apply to hot surfaces.
Materials to avoid	Light and/or alkaline metals, strong bases, ferric chloride, some molecular sieves, Alkaline earth metals and powdered metals.

SECTION 11 TOXICOLOGICAL INFORMATION

Ingredient Name: Tannic acid
Effects on humans: <u>Eye contact</u> - May cause eye irritation; may result in corneal injury. <u>Skin contact</u> - May cause skin irritation. May be adsorbed through the skin in harmful amounts. <u>Ingestion</u> - May cause gastrointestinal irritation with nausea, vomiting and diarrhea. <u>Inhalation</u> - Dust is irritating to the respiratory tract.
Acute toxicity: Acute oral toxicity (LD50): 2260 mg/kg [Rat]. Acute dermal toxicity (LD50): Not established. Acute inhalation (LC50): Not established.
Skin corrosion/irritation: rabbit, irritating;
Serious eye damage/irritation: Rabbit, irritating;
Carcinogenicity: Not carcinogenic under IARC

Ingredient Name: Butyl glycol ether
Effects on humans: <u>Eye contact</u> - May cause eye irritation. Direct contact with the liquid or exposure to its vapours or mists may cause burning, tearing and redness. <u>Skin contact</u> - May cause skin irritation. Prolonged or repeated exposure to this material may cause redness, burning, drying and cracking of skin. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.



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<p><u>Inhalation</u> - Breathing high concentrations of vapors or mists may cause: irritation to nose and throat. Signs of nervous system depression (e.g., drowsiness, dizziness, loss of coordination and fatigue.) Respiratory symptoms associated with pre-existing lung disorders (e.g., asthma-like conditions) may be aggravated by exposure to this material.</p> <p><u>Ingestion</u> - Low order of toxicity. Irritating to mouth, throat and stomach. May cause gastric tract disorder and/or damage.</p>
<p>Acute toxicity: Acute oral toxicity (LD50): 470 mg/kg [Rat]. Acute dermal toxicity (LD50): 220mg/kg [Rabbit]. Acute inhalation (LC50): 450mg/l/4H [Rat].</p>
<p>Skin corrosion/irritation: rabbit, slightly irritating; Draize Test</p>
<p>Serious eye damage/irritation: Rabbit, slightly irritating; Draize Test</p>
<p>Carcinogenicity: Listed under IARC group 3.</p>
<p>Chronic effects/Other toxicological information: Overexposure by inhalation and/or dermal contact may result in damage to the blood and kidneys.</p>

<p>Ingredient Name: Formic acid 94%</p>
<p>Effects on humans: <u>Eye contact</u> - Corrosive. Vapours are irritating and may cause damage to the eyes. Contact may cause severe burns and permanent eye damage. <u>Skin contact</u> - Corrosive. Symptoms of redness, pain, and severe burn can occur. <u>Ingestion</u> - Causes serious burns and corrosion of the mouth, throat, and esophagus, with immediate pain and difficult swallowing. Other symptoms of abdominal pain, nausea, diarrhea and vomiting can occur, leading to shortness of breath and death. Severe poisonings may cause shock, kidney damage. <u>Inhalation</u> - Inhalation of vapours can cause severe irritation of nose, throat, and upper respiratory tract. Inhalation of higher concentrations may cause central nervous system effects and lung damage.</p>
<p>Acute toxicity : Acute oral toxicity (LD50): 730 mg/kg [Rat]. Acute dermal toxicity (LD50): Not established. Acute inhalation (LC50): 7.4mg/l/4H [Rat].</p>
<p>Skin corrosion/irritation: rabbit, irritating.</p>
<p>Serious eye damage/irritation: Rabbit, irritating.</p>
<p>Carcinogenicity: Not carcinogenic under IARC</p>



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Chronic effects/Other toxicological information: Prolonged or repeated exposure to low concentrations may cause skin irritation and burns. Prolonged or repeated exposure may cause liver and kidney damage.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity	<u>Acute ecotoxicity</u> Fishes, LC 50, 96 h, >100mg/l
Persistence/Degradability	Not expected to be inherently biodegradable
Bio accumulative Potential	Result: not expected to significantly bio-accumulate
Mobility in soil	When released into the soil, this material may leach into groundwater.

SECTION 13 DISPOSAL CONSIDERATIONS

Local legislation

Dispose in compliance with local/federal and national regulations. It is recommended to contact the producer for recycling/recovery. Or send the product to an authorized hazardous waste incinerator.

Container Disposal

To avoid treatments, as far as possible, use dedicated containers. If not, rinse the empty containers with a low volatility hydrocarbon and treat the effluent in the same way as waste. Containers that cannot be cleaned must be treated as waste.

SECTION 14 TRANSPORT INFORMATION

Land (ADR)

UN number	Not regulated
UN Class	NA
Subsidiary risk	NA
Packing Group	NA
Proper shipping name	NA
HIN	NA

Sea (IMDG)

UN number	Not regulated
UN Class	NA



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Subsidiary risk	NA
Packing Group	NA
Proper shipping name	NA
Marine pollutant	NA

Sea (Annex II of MARPOL 73/78 and the IBC Code)

Pollution category	NA
Ship type	NA
Product name	NA

Air (IATA)

UN number	Not regulated
UN Class	NA
Subsidiary risk	NA
Packing Group	NA
Proper shipping name	NA

Special precautions:

Before transportation, make sure the containers are tightly sealed and that there are no liquid or gas leaks.
When transporting containers, be sure that they are tightly fastened. An appropriate buffer material should be placed between them to prevent them from bumping each other and being damaged during transport.

SECTION 15 REGULATORY INFORMATION

EU Information

Risk Phrase:

R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R33	Danger of cumulative effects.
R35	Causes severe burns.
R36/R38	Irritating to eyes and skin.



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Safety Phrase:

S2	Keep out of the reach of children.
S22	Do not breathe dust.
S23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S46	If swallowed, seek medical advice immediately and show the container or label.

USA Information

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA)

<u>Ingredient</u>	<u>CAS #</u>	<u>CERCLA RQ</u>	<u>RCRA Code</u>
Formic acid 94%	64-18-6	5000	U123

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 (40 CFR 370) Hazard Categories:

<u>Ingredient</u>	<u>Acute Hazard</u>	<u>Chronic Hazard</u>	<u>Fire Hazard</u>	<u>Pressure Hazard</u>	<u>Reactivity Hazard</u>
Tannic acid	Yes	No	No	No	No
Butyl glycol ether	Yes	Yes	Yes	No	No
Formic acid 94%	Yes	Yes	Yes	No	No

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372): Formic acid 94%

Canada Information

WHMIS classification:

Butyl glycol ether

- B3 Combustible liquid
- D1A Very toxic material causing immediate and serious toxic effects
- D2B Toxic material causing other toxic effects



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Formic acid 94%

- B3 Combustible liquid
- E Corrosive material

SECTION 16 OTHER INFORMATION

Department issuing date sheet: Vance Chemicals Quality Control and Laboratory

Original Issue date: 1st January 2010

Issue date: N.A

Revision date: 18th May 2011

This product is intended for use by skilled individuals at their own risk. The information, data and recommendations set forth herein are presented in good faith and are believed to be correct as of the date hereof. The company / manufacturer makes no representations as to the completeness or accuracy of the Information and disclaims responsibility for any reliance thereon. The information is provided upon the condition that the persons receiving will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company / manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

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