

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name RUST SEAL
Synonyms RUST SEAL GLOSS • RUST SEAL SATIN

1.2 Uses and uses advised against

Uses COATING • CORROSION PROTECTION • RUST PREVENTATIVE

1.3 Details of the supplier of the product

Supplier name FORMULA MARKETING LTD
Address 23 Ross Reid Pl, East Tamaki, Auckland, 2013, NEW ZEALAND
Telephone 09 273 3600
Fax 09 271 2304
Email sales@formula.co.nz
Website <http://www.formula.co.nz>

1.4 Emergency telephone numbers

Emergency 0800 764 766

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO HAZARDOUS SUBSTANCES [CLASSIFICATION] REGULATIONS 2001

HSNO classifications

3.1C	Flammable liquids: medium hazard.
6.1D (inhalation)	Substances that are acutely toxic - Harmful.
6.1Ee (aspiration)	Substances that are acutely toxic - Aspiration hazard.
6.3A	Substances that are irritating to the skin.
6.4A	Substances that are irritating to the eye.
6.5A	Substances that are respiratory sensitisers.
6.5B	Substances that are contact sensitisers.
6.7B	Substances that are suspected human carcinogens.
6.8B	Substances that are suspected human or reproductive developmental toxicants.
6.9B (Repeated)	Substances that are harmful to human target organs or systems.

2.2 GHS Label elements

Signal word DANGER

Pictograms



PRODUCT NAME RUST SEAL**Hazard statements**

H226	Flammable liquid and vapour.
H305	May be harmful if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Prevention statements

P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.

Response statements

P101	If medical advice is needed, have product container or label at hand.
P321	Specific treatment is advised - see first aid instructions.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before re-use.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P370 + P378	In case of fire: Use appropriate media for extinction.

Storage statements

P405	Store locked up.
P403 + P235	Store in a well-ventilated place. Keep cool.

Disposal statements

P501	In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.
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2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content (v/v)
ADDITIVE(S)	-	-	Remainder
ISOCYANATE PREPOLYMER	89096-17-3	500-275-1	<30%
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC (<0.1% W/W BENZENE)	64742-95-6	265-199-0	<30%
DIPHENYLMETHANE DIISOCYANATE (MDI)	101-68-8	202-966-0	<10%
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (<0.1% W/W BENZENE)	64742-48-9	265-150-3	<10%

PRODUCT NAME RUST SEAL

PIGMENT(S)	-	-	<10%
XYLENE	1330-20-7	215-535-7	<10%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact the National Poisons Centre on 0800 764 766 (0800 POISON) or +643 479 7248 or a doctor (at once). If swallowed, do not induce vomiting.
First aid facilities	Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

May cause sensitisation by inhalation and skin contact. Individuals with pre-existing respiratory impairment (eg asthmatics) or known sensitivities to isocyanates should avoid exposure.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture

Flammable. May evolve toxic gases (carbon/ nitrogen oxides, isocyanates, cyanides, hydrocarbons) when heated to decomposition. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, pilot lights, heaters, naked lights, etc when handling. Earth containers when dispensing fluids.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

- 3Y
- 3 Alcohol Resistant Foam is the preferred firefighting medium but, if it is not available, normal foam can be used.
- Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all sources of ignition.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

PRODUCT NAME RUST SEAL

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation and fire protection systems.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Isocyanates, all, (as -NCO) (sen)	WES (NZ)	--	0.02	--	0.07
Mineral Oil Mist	WES (NZ)	--	5	--	--
Shellsol A	WES (NZ)	100	525	--	--
Xylene	WES (NZ)	50	217	--	--

Biological limits

Ingredient	Determinant	Sampling Time	BEI
XYLENE	Methylhippuric acids in urine	End of shift	1.5 g/g creatinine

Reference: ACGIH Biological Exposure Indices

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

PPE

Eye / Face	Wear splash-proof goggles.
Hands	Wear PVA or viton (R) gloves.
Body	Wear coveralls. If spraying, wear impervious coveralls.
Respiratory	Wear a Type A (Organic vapour) respirator. If spraying, wear an Air-line respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	COLOURED LIQUID
Odour	SWEET ODOUR
Flammability	FLAMMABLE
Flash point	< 60°C
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Specific gravity	NOT AVAILABLE

9.1 Information on basic physical and chemical properties

Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), alcohols, amines, heat and ignition sources. Reacts with water or moisture, generating carbon dioxide, which may cause container rupture.

10.6 Hazardous decomposition products

May evolve toxic gases (carbon/ nitrogen oxides, isocyanates, cyanides, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Harmful if inhaled.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC (<0.1% W/W BENZENE)	> 5000 mg/kg (OECD TG 401)	> 2000 mg/kg (OECD TG 402)	> 5610 mg/m ³ (OECD TG 403)
DIPHENYLMETHANE DIISOCYANATE (MDI)	2200 mg/kg (mouse)	--	178 mg/m ³ (rat)
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (<0.1% W/W BENZENE)	> 5000 mg/kg (OECD TG 401)	> 2000 mg/kg (OECD TG 402)	> 5610 mg/m ³ (OECD TG 403)
XYLENE	4300 mg/kg (rat)	> 1700 mg/kg (rabbit)	4330–5984 ppm/6 hours (rat)

Skin	Causes skin irritation. Contact may result in irritation, redness, pain and rash.
Eye	Causes serious eye irritation. Contact may result in irritation, lacrimation, pain and redness.
Sensitisation	May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Exposure to low concentrations of isocyanates may cause asthma-like symptoms, including tightness of the chest, coughing, wheezing and shortness of breath.
Mutagenicity	Insufficient data available to classify as a mutagen.
Carcinogenicity	Suspected of causing cancer.
Reproductive	Suspected of damaging fertility or the unborn child.
STOT - single exposure	Over exposure may result in irritation of the nose and throat, coughing, nausea, dizziness and headache. High level exposure may result in breathing difficulties and unconsciousness.
STOT - repeated	Repeated exposure may damage the respiratory system resulting in irritation of the respiratory tract and lung tissue damage. Repeated exposure to some solvents have been reported to cause adverse effects to the

PRODUCT NAME RUST SEAL**exposure** central nervous system (CNS), liver and kidney.**Aspiration** Aspiration into the lungs may result in chemical pneumonitis and pulmonary oedema.**12. ECOLOGICAL INFORMATION****12.1 Toxicity**

No information provided.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

SOIL: If aromatic hydrocarbons are released to soil, they will evaporate from near-surface soil & leach to groundwater. WATER: Biodegradation of aromatics occurs both in soil & groundwater but may be slow. Isocyanates will react with water producing carbon dioxide. ATMOSPHERE: Aromatic hydrocarbons will exist largely as vapour. Half life in atmosphere varies, (eg 1-2 days (xylene); 3 hrs-1 day (toluene)).

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Waste disposal For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information if disposing of large quantities (if required). Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005; NZS 5433:2012, UN, IMDG OR IATA



	LAND TRANSPORT (NZS 5433)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	1263	1263	1263
14.2 Proper Shipping Name	PAINT or PAINT RELATED MATERIAL	PAINT or PAINT RELATED MATERIAL	PAINT or PAINT RELATED MATERIAL
14.3 Transport hazard class	3	3	3
14.4 Packing Group	III	III	III

14.5 Environmental hazards

No information provided.

14.6 Special precautions for user**Hazchem code** ●3Y**EMS** F-E, S-E**15. REGULATORY INFORMATION**

PRODUCT NAME RUST SEAL

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

Approval code	HSR002669
Group standard	Surface Coatings and Colourants (Flammable, Toxic [6.7]) Group Standard 2006
Inventory listings	NEW ZEALAND: NZIoC (New Zealand Inventory of Chemicals) All components are listed on the NZIoC inventory, or are exempt.

16. OTHER INFORMATION

Additional information RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

Spillage decontaminants for isocyanates: For TDI or HMDI, use a mixture of sawdust (20%), silica sand (or china clay or Fuller's Earth) (40%) and a breakdown solution (40%). The breakdown solution is made up of water (90%), non-ionic surfactant (2%) and concentrated ammonia (8% v/v). For spillage of any other isocyanate a solid absorbent of silica sand or sawdust may be used.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations	ACGIH	American Conference of Governmental Industrial Hygienists
	CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
	CCID	Chemical Classification and Information Database (HSNO)
	CNS	Central Nervous System
	EC No.	EC No - European Community Number
	EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
	EPA	Environmental Protection Authority [New Zealand]
	GHS	Globally Harmonized System
	HSNO	Hazardous Substances and New Organisms
	IARC	International Agency for Research on Cancer
	LC50	Lethal Concentration, 50% / Median Lethal Concentration
	LD50	Lethal Dose, 50% / Median Lethal Dose
	mg/m ³	Milligrams per Cubic Metre
	OEL	Occupational Exposure Limit
	pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
	ppm	Parts Per Million
	STEL	Short-Term Exposure Limit
	STOT-RE	Specific target organ toxicity (repeated exposure)
	STOT-SE	Specific target organ toxicity (single exposure)
	TLV	Threshold Limit Value
	TWA	Time Weighted Average

PRODUCT NAME RUST SEAL

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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