SAFETY DATA SHEET

PRODUCT NAME **FORTIS F1 INDUSTRIAL SPRAY ADHESIVE**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier name	**FORTIS ADHESIVES & COATINGS**
Address	177 – 179 Ordish Rd, Dandenong South, VIC, 3175, AUSTRALIA
Telephone	03 9706 5448
Emergency	13 11 26
Web site	www.fortisadhesives.com.au
Synonym(s)	F1 INDUSTRIAL SPRAY ADHESIVE
Use(s)	SPRAY ADHESIVE
SDS date	04 August 2015

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Risk Phrases

R12	Extremely Flammable.
R20	Harmful by inhalation.
R36/38	Irritating to eyes and skin.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53	Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
R65	Harmful: May cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Safety Phrases

S2	Keep out of reach of children.
S16	Keep away from sources of ignition - No smoking.
S23	Do not breathe vapour.
S24/25	Avoid contact with skin and eyes.
S29	Do not empty into drains.
S45	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).
S51	Use only in well ventilated areas.
S53	Avoid exposure - obtain special instructions before use.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN Number	1950	**Transport Hazard Class**	2.1
Packing Group	None Allocated	**Hazchem Code**	2YE

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	CAS Number	EC Number	Content
DIMETHYL ETHER	115-10-6	210-871-0	30 to 60%
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	265-151-9	30 to 60%
ACETONE	67-64-1	200-662-2	1 to 9%

N-HEXANE	110-54-3	203-777-6	1 to 9%
RESIN(S)	-	-	10 to 29%
ADDITIVE(S)	-	-	1 to 9%

4. 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 a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.

Advice to doctor Treat symptomatically.

First aid facilities Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES

Flammability Highly flammable aerosol. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition. Aerosol may explode at temperatures exceeding 50°C. Eliminate all ignition sources, including cigarettes, open flames, spark producing switches/tools, heaters, pilot lights, mobile phones, etc when handling. Aerosol cans may explode above 50°C. May evolve nitrogen oxides when heated to decomposition.

Fire and explosion 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.

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

Hazchem code 2YE

2 Fine Water Spray.

Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.

E Evacuation of people in and around the immediate vicinity of the incident should be considered.

6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions Prevent product from entering drains and waterways.

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.

References See Sections 8 and 13 for exposure controls and disposal.

7. STORAGE AND HANDLING

Storage Store in a cool (< 50°C), dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure aerosol containers/ cans are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for damaged/ leaking containers. Large storage areas should have appropriate fire protection systems.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Acetone	SWA (AUS)	500	1185	1000	2375
Dimethyl ether	SWA (AUS)	400	760	500	950
Mineral Oil Mist	SWA (AUS)	--	5	--	--
n-Hexane	SWA (AUS)	20	72	--	--

Biological limits

Ingredient	Determinant	Sampling Time	BEI
ACETONE	Acetone in urine	End of shift	-
	Aniline released from haemoglobin in blood	End of shift	-
	p-Aminophenol in urine	End of shift	50 mg/L
N-HEXANE	2,5-Hexanedione in urine (without hydrolysis)	End of shift at end of workweek	0.4 mg/L

Reference: ACGIH Biological Exposure Indices

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Flammable vapours may accumulate in poorly ventilated or confined areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back.

PPE

Eye / Face Wear splash-proof goggles.

Hands Wear nitrile or neoprene gloves.

Body Not required under normal conditions of use.

Respiratory At high vapour levels, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator. Where the boiling point is < 65°C, use an AX filter type.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	AMBER LIQUID (AEROSOL DISPENSED)
Odour	HYDROCARBON ODOUR
Flammability	HIGHLY FLAMMABLE
Flash point	-30°C
Boiling point	55°C to 62°C
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	> 1 (Air = 1)
Specific gravity	0.9
Solubility (water)	INSOLUBLE
Vapour pressure	26.8 kPa @ 20°C (Isohexane)
Upper explosion limit	13 % (Isohexane)
Lower explosion limit	1.1 % (Isohexane)
Partition coefficient	NOT AVAILABLE
Autoignition temperature	> 200°C
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

% Volatiles NOT AVAILABLE

10. STABILITY AND REACTIVITY

Chemical stability Stable under recommended conditions of storage.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources.

Material to avoid Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

Hazardous Decomposition Products May evolve carbon oxides and hydrocarbons when heated to decomposition.

Hazardous Reactions Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary Harmful - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. Over exposure may result in central nervous system (CNS) effects. Deliberate misuse by inhaling contents of this aerosol may be fatal. When used in small aerosol containers, the potential for an inhalation hazard is reduced.

Eye Irritant. Contact may result in irritation, lacrimation, pain and redness.

Inhalation Irritant. Over exposure may result in mucous membrane irritation of the respiratory tract, coughing, dizziness and headache. High level exposure may result in nausea, loss of appetite, weakness, and drowsiness.

Skin Irritant. Contact may result in irritation, redness, rash and dermatitis.

Ingestion Harmful. Ingestion may result in nausea, vomiting, abdominal pain and drowsiness with large quantities. Ingestion is considered unlikely due to product form.

Toxicity data

DIMETHYL ETHER (115-10-6)

LC50 (inhalation)	308 g/m³ (rat)

ACETONE (67-64-1)

LD50 (oral)	3000 mg/kg (mouse)
LD50 (dermal)	> 9400 uL/kg (guinea pig)
LC50 (inhalation)	44000 mg/m³/4 hours (mouse)

N-HEXANE (110-54-3)

LD50 (oral)	25 g/kg (rat)
LD50 (dermal)	3000 mg/kg (rabbit)
LC50 (inhalation)	48000 ppm/4 hours (rat)

12. ECOLOGICAL INFORMATION

Toxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability No information provided.

Bioaccumulative potential No information provided.

Mobility in soil No information provided.

Other adverse effects If aromatic hydrocarbons are released to soil, they will evaporate from near-surface soil & leach to groundwater. Biodegradation occurs in soil & groundwater but may be slow, especially at high concentrations, which can be toxic to microorganisms. Will exist largely as vapour in air. Half life in atmosphere depends on particular hydrocarbon (eg 1-2 days (xylene); 3 hrs-1 day (toluene)).

13. DISPOSAL CONSIDERATIONS

Waste disposal For small amounts, absorb contents with sand or similar and dispose of to an approved landfill site. Do not puncture or incinerate aerosol cans. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

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	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN Number	1950	1950	1950
Proper Shipping Name	AEROSOLS	AEROSOLS	AEROSOLS
Transport Hazard Class	2.1	2.1	2.1
Packing Group	None Allocated	None Allocated	None Allocated

Environmental hazards No information provided

Special precautions for user

Hazchem code 2YE

GTEPG 2D1

EMS F-D, S-U

15. REGULATORY INFORMATION

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Inventory Listing(s) **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**
All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information AEROSOL CANS may explode at temperatures approaching 50°C.

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.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as 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: 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 ChemAlert 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
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	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)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

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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