



## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

**Product name** STARTING FLUID  
**Synonyms** HANDIPAC STARTING FLUID

#### 1.2 Uses and uses advised against

**Uses** AEROSOL DISPENSED • ENGINE STARTER

#### 1.3 Details of the supplier of the product

**Supplier name** HANDIPAC  
**Address** U2/8 Glasson Drive, Bethania, QLD, 4205, AUSTRALIA  
**Telephone** (07) 3807 4080  
**Fax** (07) 3807 7144  
**Email** [admin@clampline.com.au](mailto:admin@clampline.com.au)  
**Website** <http://www.Handipac.com.au>

#### 1.4 Emergency telephone numbers

**Emergency** 13 11 26 (Poisons Information Centre)

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

##### Physical Hazards

Aerosols - Flammable: Category 1  
Aerosols - Pressurised: Category 1

##### Health Hazards

Acute Toxicity: Oral: Category 4  
Acute Toxicity: Skin: Category 4  
Serious Eye Damage / Eye Irritation: Category 2A  
Specific Target Organ Toxicity (Single Exposure): Category 3 (Narcotic Effects)  
Repeated exposure may cause skin dryness or cracking.

##### Environmental Hazards

Not classified as an Environmental Hazard

#### 2.2 GHS Label elements

**Signal word** DANGER

**Pictograms**



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### Hazard statements

AUH066	Repeated exposure may cause skin dryness or cracking.
H222	Extremely flammable aerosol.
H229	Pressurized container: may burst if heated.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

### Prevention statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

### Response statements

P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	IF INHALED: Remove person to fresh air and keep 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.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P321	Specific treatment is advised - see first aid instructions.
P330	Rinse mouth.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

### Storage statements

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C.

### Disposal statements

P501	Dispose of contents/container in accordance with relevant regulations.
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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
PETROLEUM GASES, LIQUEFIED (<0.1% W/W 1,3-BUTADIENE)	68476-85-7	270-704-2	35 to 40%
DIETHYL ETHER	60-29-7	200-467-2	30 to 35%
GASOLINE	8006-61-9	232-349-1	25 to 30%
(2-METHOXYMETHYLETHOXY)PROPANOL	34590-94-8	252-104-2	1 to 5%
CARBON DIOXIDE	124-38-9	204-696-9	<0.5%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	Remainder

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

<b>Eye</b>	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.
<b>Inhalation</b>	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.
<b>Skin</b>	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.
<b>Ingestion</b>	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If

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swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.

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

### **4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

### **4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

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## **5. FIRE FIGHTING MEASURES**

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### **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**

Extremely 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.

### **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**

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.

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## **6. ACCIDENTAL RELEASE MEASURES**

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### **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.

### **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.

### **6.4 Reference to other sections**

See Sections 8 and 13 for exposure controls and disposal.

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## **7. HANDLING AND STORAGE**

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### **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 (< 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.

### **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 <sup>3</sup>	ppm	mg/m <sup>3</sup>
2-(Methoxymethylethoxy) propanol	SWA [AUS]	50	308	--	--
Carbon dioxide	SWA [AUS]	5000	9000	30000	54000
Carbon dioxide in coal mines	SWA [AUS]	12500	22500	30000	54000
Carbon dioxide in coal mines	SWA [Proposed]	5000	9000	30000	54000
Ethyl ether	SWA [AUS]	400	1210	500	1520
GASOLINE (<0.1% W/W BENZENE)	SWA [AUS]	--	900	--	--
Liquefied petroleum gas (LPG)	SWA [AUS]	1000	1800	1000	1800

#### Biological limits

No biological limit values have been entered for this product.

### 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 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. Maintain vapour levels below the recommended exposure standard.

#### PPE

- Eye / Face** Wear splash-proof goggles.
- Hands** Wear nitrile or neoprene gloves.
- Body** When using large quantities or where heavy contamination is likely, wear coveralls.
- Respiratory** At high vapour levels, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	COLOURLESS LIQUID (AEROSOL DISPENSED)
<b>Odour</b>	ETHER-LIKE ODOUR
<b>Flammability</b>	EXTREMELY FLAMMABLE
<b>Flash point</b>	-40°C
<b>Boiling point</b>	35.5°C
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	> 1 (n-Butyl acetate = 1)
<b>pH</b>	NOT AVAILABLE
<b>Vapour density</b>	> 1 (Air = 1)
<b>Relative density</b>	0.713
<b>Solubility (water)</b>	INSOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	1.2 %
<b>Lower explosion limit</b>	6.7 %
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>Odour threshold</b>	NOT AVAILABLE

### 9.2 Other information

**9.2 Other information**

VOC 100 %

**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), heat and ignition sources.

**10.6 Hazardous decomposition products**

May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**Acute toxicity** Harmful if swallowed or in contact with skin. This product may have the potential to cause adverse health effects if intentionally misused (e.g. deliberately inhaling contents).

**Information available for the ingredients:**

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
DIETHYL ETHER	1215 mg/kg (rat)	> 20 mL/kg (rabbit)	31000 ppm/30 minutes (mouse)
(2-METHOXYMETHYLETHOXY)PROPANOL	5.4 mL/kg (rat)	10 mL/kg (mouse)	--

**Skin** Contact may result in drying and defatting of the skin, irritation, rash and dermatitis.

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

**Sensitisation** Not classified as causing skin or respiratory sensitisation.

**Mutagenicity** Not classified as a mutagen.

**Carcinogenicity** Not classified as a carcinogen.

**Reproductive** Not classified as a reproductive toxin.

**STOT - single exposure** Over exposure may result in central nervous system (CNS) effects with headache, drowsiness and dizziness.

**STOT - repeated exposure** Not classified as causing organ damage from repeated exposure.

**Aspiration** Ingestion is considered unlikely due to product form. However, if liquid component is ingested, aspiration into the lungs may cause 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.

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### 12.4 Mobility in soil

No information provided.

### 12.5 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

### 13.1 Waste treatment methods

**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

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



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	1950	1950	1950
14.2 Proper Shipping Name	AEROSOLS	AEROSOLS	AEROSOLS
14.3 Transport hazard class	2.1	2.1	2.1
14.4 Packing Group	None allocated.	None allocated.	None allocated.

### 14.5 Environmental hazards

No information provided.

### 14.6 Special precautions for user

Hazchem code	2YE
GTEPG	2D1
EmS	F-D, S-U

## 15. REGULATORY INFORMATION

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

**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).

**Classifications** Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

**Inventory listings** **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**  
All components are listed on AIIC, or are exempt.

## 16. OTHER INFORMATION

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

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### 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
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/m <sup>3</sup>	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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**[ End of SDS ]**