

SAFETY DATA SHEET

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	Revision: 2.2	Date: 04/08

01 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

PRODUCT NAME	HARP® ISOPENTANE
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02 - HAZARDS IDENTIFICATION

HAZARDS DESIGNATION	Xn – Harmful F+ - Extremely flammable N - Dangerous R12 - Extremely flammable. R51/R53 - Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. R65 – Harmful: May cause lung damage if swallowed. R66 – Repeated exposure may cause skin dryness and cracking. R67 – Vapours may cause drowsiness and dizziness.
GENERAL	Has a narcotising effect. Long and/or repeated exposure to skin may cause dermatitis due to the degreasing effect of the solvent.

03 - COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT TRIVIAL NAME	HARP® ISOPENTANE
CAS NUMBER	78-78-4 methylbutane
EINECS NUMBER	201-142-8
EC Number:	601-006-00-1

04 - FIRST AID MEASURES

INHALATION	Remove victim to well ventilated area. Keep victim warm and rested. If breathing stops or shows signs of failing, apply artificial respiration. Obtain medical attention.
SKIN CONTACT	Product is not skin irritating..
EYE CONTACT	Flush eye immediately with large amounts of water. If irritation persists, seek medical advice.
INGESTION	Obtain medical attention.

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05 - FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA	-
SMALL FIRES	CO ₂ , extinguishing powder or water spray.
LARGE FIRES	Water spray or alcohol resistant foam.
UNSUITABLE EXTINGUISHING MEDIA	Do not use water jet.
PROTECTIVE EQUIPMENT FOR FIREFIGHTERS	Fire fighters should wear self-contained breathing apparatus, chemical goggles, loose gloves and safety suit including hood.

06 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Wear protective foot ware, clothing and hand and eye protection. Keep unprotected persons away.
ENVIRONMENTAL PRECAUTIONS	Do not allow product to reach sewage systems or water bodies. Prevent product from reaching sewage system, holes and cellars. Inform respective authorities in case of product reaching water or sewage system.
SPILLAGES	Absorb or contain liquid with sand, earth or spill control material (e.g. diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

07 - HANDLING AND STORAGE

HANDLING	Keep containers tightly sealed. Store in a cool dry place. Keep away from direct sunlight. Open and handle container with care.
PROTECTION AGAINST FIRE/IGNITION/EXPLOSION	Keep away from sources of ignition – Do Not Smoke. Protect against electrostatic discharge.
STORAGE	Keep container tightly closed in a cool, well ventilated space. Keep away from direct sunlight and other sources of heat and ignition. Do not smoke in storage areas. Open slowly in order to control possible pressure release. Do not pressurise, cut, heat or weld containers. Empty product containers may contain product residue, do not reuse empty containers without commercial cleaning. Do not seal container gas tight.

08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL	Wash hands during breaks and whenever finished working with the material. Keep away from foodstuffs and beverages.
RESPIRATORY PROTECTION	Exposure to this material may be controlled in a number of ways: Use only in a well ventilated area. Mechanical ventilation is recommended in product is used in a confined space. Use explosion proof ventilation equipment.
HAND PROTECTION	If risk of vapour inhalation is present, use breathing apparatus.
EYE PROTECTION	Use glove material that is impermeable and resistant to the product.
BODY PROTECTION	Safety glasses. Safety shoes or boots, chemical resistant standard issue work clothing.

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09 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid.
COLOUR	Colourless.
ODOUR	Characteristic.
MELTING RANGE/POINT	-158.5°C
BOILING RANGE/POINT	27°C
FLASH POINT	-56.0°C
IGNITION TEMPERATURE	420°C
DANGER OF EXPLOSION	Product not explosive. However, formation of explosive air/stream mixture is possible.
FLAMMABILITY LIMITS	1.3 to 7.6 vol. % in air
LIQUID DENSITY	(15°C): 0.62 g/cm ³
SOLUBILITY/MISCIBILITY	-
Water	Not miscible or difficult to mix.
Organic solvents	100%

10 - STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions. No unusual reactivity.
CONDITIONS TO AVOID	High temperatures. Static discharges. Flames and sparks.
HAZARDOUS DECOMPOSITION PRODUCTS	None.

11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	-
PRIMARY IRRITANT EFFECT	Skin: No irritant effect Eye: No irritant effect Sensitization: No sensitising effect known

12 - ECOLOGICAL INFORMATION

GENERAL	Water hazard Class 1 (Assessment by list). Slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Also poisonous for fish and plankton in water bodies.
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13 - DISPOSAL CONSIDERATIONS

DISPOSAL OF PRODUCT	Must not be disposed of along with household waste. Do not allow product to reach water courses or sewage system.
DISPOSAL OF CONTAINERS	Disposal of un-cleaned packaging must be made in accordance with official local Regulations.

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14 - TRANSPORTATION

UN NUMBER	1265
LAND TRANSPORTATION	-
UN Number	1265
ADR/RID -GGVS/E CLASS	3 Flammable liquids
Kemler Number	33
Packaging group	I
Label	3
Designation of goods	1265 PENTANES, LIQUID
MARITIME TRANSPORT	-
IMDG/GGV Sea Class:	3
UN Number	1265
Label	3
Packaging group	I
EMS Number	F-E, S-D
Marine pollutant	No
Correct technical name	PENTANES, LIQUID
AIR TRANSPORTATION	-
ICAO/IATA Class	3
UN/ID Number	1265
Label	3
Packaging group	I
Correct technical name	PENTANES, LIQUID

15 - REGULATORY INFORMATION

DESIGNATION ACCORDING TO EC GUIDELINES	-
CODE LETTER AND HAZRAD	Xn - Harmful F+ - Extremely flammable N - Dangerous
RISK PHRASES	R12 - Extremely flammable R51/R53 – Toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment. R65 -Harmful: may cause lung damage if swallowed. R66 – Repeated exposure may cause skin dryness and cracking. R67 – Vapours may cause drowsiness and dizziness.
SAFETY PHRASES	S2 - Keep Out of reach of children. S9 - Keep container in a well ventilated place. S16 - Keep away from sources of ignition. – No smoking. S29 - Do not empty into drains. S33 - Take precautions to avoid static discharge. S61 - Avoid release to the environment. Refer to special instruction/safety data sheets. S62 – If swallowed, do not induce vomiting. Seek medical advice immediately and show the container or label.
WATER HAZARD CLASS	Water hazard Class 1 (Assessment by list): slightly hazardous to water.

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16 - OTHER INFORMATION

RECOMMENDED USES

Aerosol propellant.
Foam blowing agent.

Note:

This information contained within this safety data sheet applies only to the Harp International Limited product to which it relates. The information provided is based upon our best knowledge at the time that this safety data sheet was published.

The information is believed to be accurate and is given in all good faith.

When used in other preparations, in formulations or in mixtures, it is necessary to ascertain if the classification of the hazards have changed. The attention of users is drawn to the possibility of creating other hazards when the product is used for purposes other than that for which it is recommended. In such cases a complete reassessment should be made by user.

This safety data sheet should only be used and reproduced in order that the necessary measures may be taken relating to the protection of health and safety at work and relating to the protection of environment.

The reference to the legislative, regulatory and codes of practice documents must not be considered as exhaustive.

It is the responsibility of handlers of the product to pass on the totality of the information contained within this document to any subsequent persons who will come into contact with, handle or use the product in any way.

They should check the adequacy of the information contained in the safety data sheet received before passing it onto their customers.

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