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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	HARP TRACER (5.0% Hydrogen in Nitrogen)
REACH registration number	Not available
CAS No.	Not available
EC No.	Not available
1.2 Relevant identified uses of	the substance or mixture and uses advised against
Product use	Industrial and professional. Leak testing, pressure testing.
Description	Gas
1.3 Details of the supplier of the	ne safety data sheet
Company	Harp International Limited
Address	Gellihirion Industrial Estate
	Pontypridd
	Rhondda Cynon Taff
	CF37 5SX
	UK
Web	www.harpintl.com
Telephone	+44 (0) 1443 842 255
Fax	+44 (0) 1443 841 805
Email	harp@harpintl.com
Email of competent person	<u>safety@harpintl.com</u>
1.4 Emergency telephone num	ber
Emergency telephone number	+44 (0) 1270 502 891
	24 hours

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification – EC 1272/2008	Compressed gas: H280	
2.2 Label elements		
Hazard pictograms		
Signal word	Warning	
Hazard statement	H280 – Contains gas under pressure; may explode if heated	
Precautionary statement	P410+P403 – Protect from sunlight. Store in a well-ventilated place.	
2.3 Other hazards		
Other hazards	Asphyxiant in high concentrations. Risk of explosion if heated under confinement.	

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SECTION 3: Composition/information on ingredients

3.1 Substances

EC 1272/2008

Chemical name	CAS No.	EC No.	REACH registration number	Concentration (%w/w)	Classification
Nitrogen	7727-37-9	231-783-9	Exempt (Listed in Annex IV/V of (EC) No. 1907/2006)	>90%	Compressed gas: H280
Hydrogen	1333-74-0	215-605-7	Exempt (Listed in Annex IV/V of (EC) No. 1907/2006)	1-10%	Flam. Gas 1: H220 Compressed gas: H280

The purity of the substance in this section is used for classification only and does not represent the actual purity of the substance as supplied.

SECTION 4: First aid measures

4.1 Description of first aid meas	ures
Inhalation	Move the exposed person to fresh air
Eye contact	Adverse effects not expected
Skin contact	Adverse effects not expected
Ingestion	Ingestion is not considered a potential route of exposure
4.2 Most important symptoms a	nd effects, both acute and delayed
Inhalation	In high concentrations, may cause asphyxiation. Symptoms may include loss
	of mobility/consciousness. Victim may not be aware of asphyxiation.
Eye contact	Adverse effects not expected
Skin contact	Adverse effects not expected
Ingestion	Ingestion is not considered a potential route of exposure
4.3 Indication of any immediate	medical attention and special treatment needed
Inhalation	Apply artificial respiration if breathing stopped
Eye contact	Adverse effects not expected
Skin contact	Adverse effects not expected
Ingestion	Ingestion is not considered a potential route of exposure

SECTION 5: Firefighting measures

5.1 Extinguishing media

Sir Extinguishing inculu	
	Material will not burn. Use extinguishing media appropriate to the surrounding fire conditions.
5.2 Special hazards arising from	the substance or mixture
	Exposure to fire may cause containers to rupture/explode
5.3 Advice for firefighters	
	Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Move containers away from the fire area if safe to do so. Use self-contained breathing apparatus.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

	Try to stop release. Evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation.
6.2 Environmental precautions	
	Try to stop release
6.3 Methods and material for co	ntainment and clean up
	Ventilate area
6.4 Reference to other sections	
	See section 8 Exposure controls / personal protection
	See section 13 Disposal considerations

SECTION 7: Handling and storage

7.1 Precautions for safe handling

	Do not breathe gas. Avoid release of product into atmosphere. The substance must be handled in accordance with good hygiene and safety procedures. Only experienced and properly instructed persons should handle gases under pressure. Consider pressure relief devices in gas installations. Check regularly for leaks. Do not smoke while handling product. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.
	Refer to supplier's container instructions. Do not allow backfeed into the container. Protect cylinders from physical damage. Do not drag, roll, slide or drop. When moving cylinders, even for short distances, use a cart designed to transport cylinders. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand ready for use. If user experiences any difficulty operating cylinder valve, discontinue use and contact supplier. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Keep container valve outlets clean and free from container caps where supplied as soon as container is disconnected from equipment. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one cylinder/container to another. Never use direct flame or electrical heating devices to raise the pressure of a container. Do not remove or deface labels provided by the supplier for the identification of the cylinder contents. Suck back of water into the container must be prevented.
7.2 Conditions for safe storage, i	
	Observe all regulations and local requirements regarding storage of
	containers. Containers should not be stored in conditions likely to cause
	corrosion. Container valve guards or caps should be in place. Containers
	should be stored in the vertical position and properly secured to prevent
	from falling over. Stored containers should be periodically checked for
	general condition and leakage. Keep container below 50°C in a well ventilated place. Store containers in a location free from fire risk and away
	from sources of heat and ignition. Keep away from combustible materials.

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None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters – exposure limit values

Component	CAS No.	Value type	Exposure limit values	Source
		(form of exposure)		
Nitrogen	7727-37-9		Not listed in EH40	
Hydrogen	1333-74-0		Not listed in EH40	
8.2 Exposure controls				
Appropriate engineering contr	Ensure adequate ventilation of the working area. Oxygen detectors should be used when asphyxiating gases may be released. Systems under pressure should be regularly checked for leaks. Consider work permit system for maintenance activities.		Systems under	
Individual protection measure	res Wear protective clothing			
Eye/face protection	Approved safety goggles			
Skin & body protection	Wear suitable gloves. Wear safety shoes when handling containers.		tainers.	
Respiratory protection	Wear suitable respiratory protection equipment when necessary		ssary	
Occupational exposure contro	bls Keep away from food, drink and animal feedstuffs.			
Hygiene protection	Good industrial hygiene and safety procedures. Do not eat, drink or smo when using the product.		drink or smoke	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance - Physical state	Gas
Colour	Colourless
Odour	Odourless
Odour threshold	Odour threshold is subjective and inadequate to warn of overexposure
рН	Not applicable
Melting point	No data available
Boiling point / range	No data available
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	This product is not flammable
Upper explosion limit / Lower	Not applicable
flammability limit	
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility(ies)	
Water solubility	No data available
Partition coefficient:	
n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	
Viscosity, kinematic	No data available
Explosive properties	Not applicable
Oxidising properties	Not applicable

Revision: 1 Revision date: December 2020 **9.2 Other information**

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

	No reactivity hazard other than the effects described in sub-sections below	
10.2 Chemical stability		
	Stable under normal conditions	
10.3 Possibility of hazardous react	ions	
	None	
10.4 Conditions to avoid		
	None under recommended storage and handling conditions	
10.5 Incompatible materials		
	No reaction with any common materials in dry or wet conditions	
10.6 Hazardous decomposition products		
	Under normal conditions of storage and use, hazardous decomposition products should not be produced	

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT single exposure	Based on available data, the classification criteria are not met
STOT repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Not applicable for gases and gas mixtures

SECTION 12: Ecological information

12.1 Toxicity

	No ecological damage caused by this product	
12.2 Persistence and degradability		
	No ecological damage caused by this product	
12.3 Bioaccumulative potential		
	No ecological damage caused by this product	
12.4 Mobility in soil		
	No ecological damage caused by this product	
12.5 Results of PBT and vPvB assessment		
	Not classified as PBT or vPvB	
12.6 Other adverse effects		
	Global Warming Potential: 0	

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Consult supplier for specific recommendations. May be vented to
atmosphere in well-ventilated place. Do not discharge into any place
where its accumulation could be dangerous. Dispose of container via
supplier only. EWC code: 16 05 05

SECTION 14: Transport information

Hazard pictograms



14.1 UN number

14.1 ON Humber		
	UN 1956	
14.2 UN proper shipping name		
	COMPRESSED GAS, N.O.S	
14.3 Transport hazard class(es)		
ADR/RID		
Class	2	
Labels	2.2	
Hazard No. (ADR)	20	
Tunnel category	(E)	
Packing instruction	-	
IMDG		
Class	2.2	
EmS No.	F-C, S-V	
Packing instruction	-	
ΙΑΤΑ		
Class	2.2	
Packing instruction	-	
14.4 Packing group		
	Not applicable	
14.5 Environmental hazards		
Environmental hazards	Not applicable	
Marine pollutant	Not classified as a marine pollutant	
14.6 Special precautions for user		
	Avoid transport on vehicles where the load space is not separated from	
	the driver's compartment. Ensure container valves are closed, not leaking	
	and caps in place. Ensure containers are firmly secured. Ensure adequate	
	air ventilation.	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		
	Not applicable	
14.6 Special precautions for user	Not classified as a marine pollutant Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure container valves are closed, not leaking and caps in place. Ensure containers are firmly secured. Ensure adequate air ventilation. D Annex II of MARPOL 73/78 and the IBC Code	

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SECTION 15: Regulatory information

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

Regulations	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF
	THE COUNCIL of 18 December 2006 concerning the Registration,
	Evaluation, Authorisation and Restriction of Chemicals (REACH),
	establishing a European Chemicals Agency, amending Directive
	1999/45/EC and repealing Council Regulation (EEC) No 793/93 and
	Commission Regulation (EC) No 1488/94 as well as Council Directive
	76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC,
	93/105/EC and 2000/21/EC.
15.2 Chemical safety assessment	
	A CSA has not been carried out for this product

SECTION 16: Other information

Other information

Text of Hazard Statements in	H280: Contains gas under pressure; may explode if heated.
Section 3	H220: Extremely flammable gas
Reference materials	HSE publication EH40/2005 Workplace exposure limits (latest edition)
Changes from previous versions	-
Further information	
	The information supplied in this safety data sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made of its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the material in the user's end product, if applicable.