

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SDS_Ind.Mix_201

Hydroplus 525

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

1.1. Product identifier	
Product form	: Mixture
Trade name	: Hydroplus 525
SDS code	: SDS_Ind.Mix_201
Internal reference no.	: 000125
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against
Relevant identified uses	: Industrial and professional. Perform risk assessment prior to use. Shield gas for welding processes. Contact supplier for more information on uses.
Uses advised against	: Consumer use.
1.3. Details of the supplier of the safety	v data sheet
Company identification	: Sapio Produzione Idrogeno Ossigeno Srl Via S. Pellico, 48 20900 Monza - ITALIA +39 039 83981 +39 039 836068 http://www.sapio.it/ sds@sapio.it
1.4. Emergency telephone number	
Emergency telephone number	: +39 0295705444 (24/7)

SECTION 2: Hazards identification 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Physical hazards Flammable gases, Category 1 H220 Gases under pressure: Compressed gas H280

- Prevention	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Response	: P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
	P381 - In case of leakage, eliminate all ignition sources.
- Storage	: P403 - Store in a well-ventilated place.

2.3. Other hazards

Other hazards not contributing to the classification : None.

SECTION 3: Composition/information on ingredients						
3.1. Substances						
Not applicable						
3.2. Mixtures						
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]			



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SDS_Ind.Mix_201

Hydroplus 525

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Helium	CAS-No.: 7440-59-7 EC-No.: 231-168-5 EC Index-No.: Registration-No.: *1	25	Press. Gas (Comp.), H280
Hydrogen	CAS-No.: 1333-74-0 EC-No.: 215-605-7 EC Index-No.: 001-001-00-9 Registration-No.: *1	5	Flam. Gas 1, H220 Press. Gas (Comp.), H280

Full text of H-statements: see section 16

Contains no other components or impurities which will influence the classification of the product.

*1: Listed in Annex IV / V REACH, exempted from registration.

*2: Registration deadline not expired.

*3: Registration not required: Substance manufactured or imported < 1t/y.

SECTION 4: First aid measures

4.1. Description of first aid me	asures	
- Inhalation	: Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Perform cardiopulmonary resuscitation if breathing stopped.	
- Skin contact	: Adverse effects not expected from this product.	
- Eye contact	: Adverse effects not expected from this product.	
- Ingestion	: Ingestion is not considered a potential route of exposure.	
4.2. Most important symptoms and effects, both acute and delayed		

Refer to section 11.

4.3. Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measure	95
5.1. Extinguishing media	
 Suitable extinguishing media Unsuitable extinguishing media 	Water spray or fog.Carbon dioxide.Do not use water jet to extinguish.
5.2. Special hazards arising from the subs	stance or mixture
Specific hazards Hazardous combustion products	Exposure to fire may cause containers to rupture/explode.None.
5.3. Advice for firefighters	
Specific methods	 Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may causing gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems. If possible, stop flow of product. Use water spray or fog to knock down fire fumes if possible. Do not extinguish a leaking gas flame unless absolutely necessary. Spontaneous/explosive re-ignition may occur. Extinguish any other fire. Move containers away from the fire area if this can be done without risk.
Special protective equipment for fire fighters	 In confined space use self-contained breathing apparatus. Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters. Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask. Standard EN 469 - Protective clothing for firefighters. Standard - EN 659: Protective gloves for firefighters.

SECTION 6: Accidental release measures				
6.1. Personal precautions, protective	6.1. Personal precautions, protective equipment and emergency procedures			
	Try to stop release. Evacuate area. Monitor concentration of released product. Consider the risk of potentially explosive atmospheres. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Eliminate ignition sources. Ensure adequate air ventilation. Act in accordance with local emergency plan. Stay upwind.			
6.2. Environmental precautions				
	Try to stop release.			



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SDS_Ind.Mix_201

Hydroplus 525

See also sections 8 and 13. ESCTION 7: Handling and storage I Precautions for safe handing also use of the product I The product must be handed in accordance with good industrial hygiene and safey procedures. Consider pressure relief device(s) in gas installations. Ensure the complete gas system waters (or is regularily) checked for leaks before use. Do not sanke while handling product. And suck back of water, and and ankals. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before including gas statement with in suitable for this product, its supply pressure and temperat Contact your gas supplier in doubt. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before including gas. Take precautionary measures against static discharges. Consider the use of only non-sparking tools. Consider the use of the container. Protect receptables from hysical times day, for use. If user overline protection caps in flate on organing receptable value discontrage use and contact supplier. New restingent of the gas storage with the container and the too container to another. New use storage the one container tand the too container to another.	6.3. Methods and material for containr	nent and cleaning up
See also sections 8 and 13. ESCTION 7: Handling and storage I Precautions for safe handing also use of the product I The product must be handed in accordance with good industrial hygiene and safey procedures. Consider pressure relief device(s) in gas installations. Ensure the complete gas system waters (or is regularily) checked for leaks before use. Do not sanke while handling product. And suck back of water, and and ankals. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before including gas statement with in suitable for this product, its supply pressure and temperat Contact your gas supplier in doubt. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before including gas. Take precautionary measures against static discharges. Consider the use of only non-sparking tools. Consider the use of the container. Protect receptables from hysical times day, for use. If user overline protection caps in flate on organing receptable value discontrage use and contact supplier. New restingent of the gas storage with the container and the too container to another. New use storage the one container tand the too container to another.		Ventilate area.
Section 7: Handling and storage ale use of the product ale on the mode while handing product. Use only property specified equipment which is suitable for this product, its supply pressure and temperat Avoid tauck back of water, acid and alkalis. Assess the rink of potentially explaines static discharge. Consider the use of only non-spectrations. Do not since discharge of product into almosphere. Ensure equipment is adequately easthed. Do not allow backfeed into the container. Protect receptacles. Constainer taut and allo ready on the specified equipment is adequately easthed. Avoid relases of product into almosphere. Ensure equipment is adequately easthed. Do not allow backfeed into the container.	6.4. Reference to other sections	
A Precautions for safe handling ale use of the product The product must be handled in accordance with good industrial hygiene and safety procedures. Consider pressure relief device(s) in gas installations. Ensure the complete gas systems was (or is regularly) checked for leaks before use. Do not snoke while handling product. Use only properly specified equipment which is suitable for this product, its supply pressure and temperat Consider pressure relief device(s) in gas installations. Ensure the complete gas systems dore induction and akalis. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before induction and akalis. Assess the risk of potentially explosive atmospheres. Ensure equipment is adequately earthed. Do not tracke the gas. Avoid struct bardstee gas. Avoid release of product into atmosphere. Ensure equipment is adequated admange: do not frag, roll, slide or drap. When moving receptacles. Lon on talow backleed into the container. Protect receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench Prived transport receptacles. Urangor traceptacles. Urangor traceptacles. Urangor traceptacles. Representation of the form container has the protection receptacle valve discontinue use and container. Don talow backleed into the container thas been secured against either a wall or bench Protect recompaties. Danate walve volute caps orp		See also sections 8 and 13.
afe use of the product The product must be handled in accordance with good industrial hygiene and safety procedures. Only experienced and properly instructed persons should handle gases under pressure. Consider pressure relid device(s) in gas installations. Ensure the complete gas system was (r) is regularily checked for leaks before use. Do not smoke while handling product. Use only properly specified equipment which is suitable for this product, its supply pressure and temperat Contact yourg gas supplier if in doubt. Avoid suck back of water, acid and alkalls. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before introducing gas. Take precautionary measures against static discharges. Keep away from ignition sources (including static discharges). Consider the use of only non-sparking tools. Do not breathe gas. Novid release of product into atmosphere. Ensure equipment is adequately earthed. Do not altwood backfeed into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. Protect receptacles from physical damage; do not drag, roll, slide or drop. Protect receptacles in pake until the container has been secured against either a wall or bench of placed in a container stand and is ready for use: It user respiratores any difficulty operating receptace wall discontinue use and container. Never attempt to regarior modify container values or defate pressure of a container is disconneed protect modely provide diverses or backet with the destinal for the identification of the receptacle contenter. Never attempt to transfer gases fr	SECTION 7: Handling and stor	age
Only experienced and property instructed persons should handle gass under pressure. Consider pressure reliad evaluations. Ensure the complete gas system was (or is regularily) checked for leaks before use. Do not smoke while handling product. Use only properly specified equipment which is suitable for this product, its supply pressure and temperat Contact your gas suppler if in doub. Avaid suck back of water, acid and alkalis. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purges if monosphere introducing gas. Take precationary measures against static discharge. Keep away from ignition sources (including static discharge). Consider the use of only non-sparking tools. Do not branke protection cags in place until the container. Protect receptacles from physical damage; do not drag, roll slide or drop. When moving receptacles scene for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Lasse valve protection cags in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. It user experisor and waves should be container valves or adley relid devices. Damaged valves should be reported immediatily to the supplier. Never attempt to transfor gases from one container task per explicated a soon as container is disconneed from equipment.	7.1. Precautions for safe handling	
Consider pressure relief device(s) in gas installations. Ensure the complete gas system was (or is regularity) checked for leaks before use. Do not smoke while handling product. Use only properly specified equipment which is suitable for this product, its supply pressure and temperat Contact your gas supplier if in doubt. Avoid suck thack of valuer, acid and alkalis. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before introducing gas. Take precautionary measures against static discharge. Keep away from ignition sources (including static discharge). Consider the use of only non-sparking tools. Do not breathe gas. Avoid release of product into stmosphere. Ensure equipment is adequately earthed. Do not allow backfeed in the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (molley, hand truck, etc.) designed to transport receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (molley, hand truck, etc.) designed to transport receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (molley, hand truck, etc.) designed to transport receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench of placed in a container stand and is ready for use. Leave valves protection regas in place until the container walves or safety relief devices. Damaged valves should be reported immediately to the supplier. Never attempt to transfer gases from container saparding totak soon as container is disconneed from equipment. Close container valve use of reported immediately to the supplier of the identification of the receptacles contents. Suck back of valver inho the container must be prevented. Open valve slowly to avoid pressure shout.	Safe use of the product	
Do not smoke while handling product. Use only properly specified equipment which is suitable for this product, its supply pressure and temperat Contact your gas supplier if in doubt. Avid suits, back of water, and and atkalis. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before introducing gas. Take precenditionary messures against static discharge. Reep away from ignition sources (including static discharges). Consider the use of only non-sparking tools. Do not breathe gas. Avid release of product into atmosphere. Ensure equipment is adequately earthed. Ensure equipment is adequately earthed. Else valve protection caps in place until the container. Protect receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle 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. Never attempt to transport agaes from one container tab and sis ready for use. If user transport agaes from one contai		Consider pressure relief device(s) in gas installations.
Lise only properly specified equipment which is suitable for this product, its supply pressure and temperat Contact your gas supplier if in doub. Avoid suck back of water, acid and alkalis. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before introducing gas. Take precautionary measures against static discharge. Keep away from ignition sources (including gate: discharges). Consider the use of only non-sparking tools. Do not breathe gas: Avoid release of product into atmosphere. Ensure equipment is adequately earthed. Ensure equipment while be protect into atmosphere. Ensure equipment ad and is ready for use. If user experiences any difficulty operating receptacle valve discontinue use and contact supplier. Never attempt to respir or modity container valves or adely relief devices. Damaged valves should be reported immediately to the supplier. Never attempt to respir or progis and container caps where supplied as soon as container is disconneed from equipment. Coste container valve outlets clean and free from contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconneed from equipment. Do not remove or deface labels provided by the supplier for the identification of the receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2.2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should be stored in the vertical position and properly secured to prevent them from falling over Stored		
A void suck back of water, add and alkalis. Assess the fick of potentially explosive atmospheres and the need for explosion-proof equipment. Purge air from system before introducing gas. Take precautionary measures against static discharge. Keep away from ignition sources (including static discharges). Consider the use of only non-sparking tools. Do not breathe gas. Avoid release of product into atmosphere. Ensure equipment is dequately earthed. afe handling of the gas receptade i Do not allow backfeed into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle 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 active to the aday for use, Replace valve coulted to also or plags and container caps where supplied as soon as container is disconneed from equipment. Never use direct flame or electrical heating devices to raise the pressure of a container. Never use direct flame or electrical heating devices to raise the pressure of a container. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2.2. Conditions for safe storage, including any incompatibilities Suck back of valve including asses form one containers in bacca. Containers should be periodically checked for ge		Use only properly specified equipment which is suitable for this product, its supply pressure and temperatu
Purge air from system before introducing gas. Take precautionary measures against static discharge. Keep away from ignition sources (including static discharges). Consider the use of only non-sparking tools. Do not breathe gas. Avoid release of product into atmosphere. Ensure equipment is adequately earthed. afe handling of the gas receptacle : Do not allow backteed into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle valve discontinue use and contact supplier. Never attempt to reparting rocentainer valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Keep container valve after each use and when empty, even if still connected to equipment. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one container to another. Never use direct finue 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should be be tored in conditions filkely to encourage corresion. Containers should be in place. Containers should be prevented in the vertical position and properly secure to prevent them from falling over Store containers hould and to be stored in conditions filkely to encou		
Take presentionary measures against static discharges. Keep away from ignition sources (including static discharges). Consider the use of only non-sparking tools. Do not breather gas. Avoid feelase of product into atmosphere. Ensure equipment is adequately earthed. Protect receptacles from physical damage: do not drag, roll, slide or drop. When moving receptacles. Protect receptacles from physical damage: do not drag, roll, slide or drop. When moving receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench to placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle valve discontinue use and contaiter use and container valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Never attempt to repair or modify container valve and ready for use. If user experiences any difficulty operating receptacle valve discontinue use and container of advertes. Damaged valves should be reported immediately to the supplier. Never attempt to transfer gases from one container to another. Never attempt to valve after each use and when empty, even if still connected to equipment. Do not remove or deface labels provided by the supplier for the identification of the receptacle contents. Suck back of water into the container		Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment.
Keep away from ignition sources (including static discharges). Consider the use of only non-sparking tools. Do not breathe gas. Avoid release of product into atmosphere. Ensure equipment is adequately earthed. afe handling of the gas receptacle is Do not allow backfeed into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle 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. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconneed from equipment. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure should be corrage corrosin. Container valve guards or caps should be grored in conditions likely to encura		Purge air from system before introducing gas.
Consider the use of only non-sparking tools. Do not breathe gas. Avoid release of product into atmosphere. Ensure equipment is adequately earthed. Do not allow backfeed into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench of placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle 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. Never attempt to transfer gases from one container to another. Reep container valve outlets clean and free from contaminants particularly oil and water. Reep container valve outlets clean and free from contaminents particularly oil and water. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock.		
Do not breath gas. Avoid release of product into almosphere. Ensure equipment is adequately earthed. Ensure equipment is adequately earthed. afe handling of the gas receptacle Do not allow backfeed into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Leave valve protect receptacles any difficulty operating receptacle 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 outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately to the supplier at the identification of the receptacle contents. Never use direct flame or electrical heating devices to raise the pressure of a container. Deve valve protect into the container must be prevented. Open valve slowly to avoid pressure should be to repare of in conditions likely to encourage corrosion. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be properal inplace.		
Avoid release of product into atmosphere. Ensure equipment is adequately earthed. Ensure equipment is adequately earthed. Do not allow backfeed into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench of placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle 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 outlet caps or plugs and container caps where supplied as soon as container is disconneed from equipment. Close container valve outlet caps or plugs and container caps where supplied as soon as container is disconneed from equipment. Close container valve outlet caps or plugs and container to another. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. Containers should not be stored in conditions likely to encourage corrosion. Containers valve guards or caps should be in place. Containers should be periodically checked for general condition and leakage. Keep containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical		
Ensure equipment is adequately earthed. Do not allow backled into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Protect receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Protect receptacles any difficulty operating receptacle 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. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Never attempt to repair or modify container valves or safety relief devices. Damaged valve schuld frager gases from one contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container. 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 receptacle contents. Suck back of water into the container must be prevented. Open valve solwid to avoid pressure shock. Containers should not be stored in conditions likely to encourage corrosion. Containers should be stored in conditions likely to encourage corrosion. Containers should be stored in the vertical position and properly secured to prevent them from falling over Store containers should be stored in the vertical position and properly secured to prevent them from falling over Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from comb		-
 ale handling of the gas receptacle Do not allow backfeed into the container. Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. If user experiences any difficulty operating receptacles 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 contaminants particularly oil and water. Replace valve outlet caps or plugs and container to another. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one 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 of the identification of the receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 		
Protect receptacles from physical damage; do not drag, roll, slide or drop. When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. A provide the container has been secured against either a wall or bench or placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle 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 valves outlets clean and free from contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2.2 Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Containers should not be stored in the vertical position and properly secured to prevent them from falling over Store containers should be periodically checked for general condition and leakage. Keep container should be periodically checked for general condition and leakage. Keep containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage ar	Safe handling of the gas recented	
 When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport receptacles. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle 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 contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2.2 Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should be stored in conditions likely to encourage corrosion. Containers valve guards or caps should be in place. Containers should be stored in the verical position and properly secured to prevent them from falling over Stored containers in location free from fire risk and away from sources of heat and ignition. Keep container below 50°C in a well vertilated place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep container biolex 50°C in a well vertilated place. Store containers in location free from fire risk and	Sale handling of the gas receptacle	
placed in a container stand and is ready for use. If user experiences any difficulty operating receptacle 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 outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one container to another. Do not remove or deface labels provided by the supplier for the identification of the receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2.2 Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over Stored containers in location free from fire risk and away from sources of heat and ignition. Keep container is location free from miler risk and away from sources of heat and ignition.		When moving receptacles, even for short distances, use a cart (trolley, hand truck, etc.) designed to
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 contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Close container valve after each use and when empty, even if still connected to equipment. 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2.2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Container should not be stored in conditions likely to encourage corrosion. Containers should be periodically checked for general condition and leakage. Keep container below 50°C in a well ventilated place. Containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gazes and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		Leave valve protection caps in place until the container has been secured against either a wall or bench or
Damaged valves should be reported immediately to the supplier. Keep container valve outlets clean and free from contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one container to another. Never attempt to transfer gases from one container to another. Do not remove or deface labels provided by the supplier for the identification of the receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2.2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Containers should be tored in the vertical position and properly secured to prevent them from falling over Stored containers should be periodically checked for general condition and leakage. Keep containers should be periodically checked for general condition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		If user experiences any difficulty operating receptacle valve discontinue use and contact supplier.
Keep container valve outlets clean and free from contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should be to stored in conditions likely to encourage corrosion. Containers should be stored in the vertical position and properly secured to prevent them from falling over Stored containers in location free from fire risk and away from sources of heat and ignition. Keep containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnect from equipment. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Container valve guards or caps should be in place. Containers should not be stored in the vertical position and properly secured to prevent them from falling over Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
from equipment. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over Stored containers blow 50°C in a well ventilated place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over Store dontainers should be periodically checked for general condition and leakage. Keep container in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
Never attempt to transfer gases from one 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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over Stored containers should be periodically checked for general condition and leakage. Keep containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
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 receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be beriodically checked for general condition and leakage. Keep containers should be periodically checked for general condition and leakage. Keep containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
Do not remove or deface labels provided by the supplier for the identification of the receptacle contents. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over Stored containers should be periodically checked for general condition and leakage. Keep containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
Depen valve slowly to avoid pressure shock. 2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over Stored containers should be periodically checked for general condition and leakage. Keep containers below 50°C in a well ventilated place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		Do not remove or deface labels provided by the supplier for the identification of the receptacle contents.
.2. Conditions for safe storage, including any incompatibilities Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them 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 location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		Suck back of water into the container must be prevented.
Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them 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 location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		Open valve slowly to avoid pressure shock.
Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them 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 location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.	7.2. Conditions for safe storage, inclue	ding any incompatibilities
Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them 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 location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
Containers should be stored in the vertical position and properly secured to prevent them 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 location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		, ,
Stored containers should be periodically checked for general condition and leakage. Keep container below 50°C in a well ventilated place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		
Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials. Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		Stored containers should be periodically checked for general condition and leakage.
Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.		Store containers in location free from fire risk and away from sources of heat and ignition.
2. Specific and use(a)		Segregate from oxidant gases and other oxidants in store. All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive
A SOPCIO POD USEIST	7.3. Specific end use(s)	

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrogen (1333-74-0)					
OEL : Occupational Exposure Limit	S				
ACGIH	Remark (ACGIH)			Simple Asphyxiant	
ACGIH	Regulatory referen	nce		ACGIH 2017	
DNEL (Derived-No Effect Level)		:	None available.		
PNEC (Predicted No-Effect Concent	ration)	:	None available.		



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SDS_Ind.Mix_201

Hydroplus 525

8.2. Exposure controls	
8.2.1. Appropriate engineering controls	
8.2.2. Individual protection measures, e.g. per	Provide adequate general and local exhaust ventilation. Product to be handled in a closed system. Systems under pressure should be regularily checked for leakages. Ensure exposure is below occupational exposure limits (where available). Gas detectors should be used when flammable gases/vapours may be released. Consider the use of a work permit system e.g. for maintenance activities. sonal protective equipment
	A risk assessment should be conducted and documented in each work area to assess the risks related to the use of the product and to select the PPE that matches the relevant risk. The following recommendations should be considered:
	PPE compliant to the recommended EN/ISO standards should be selected.
Eye/face protection	: Wear safety glasses with side shields.
	Standard EN 166 - Personal eye-protection - specifications.
Skin protection	
- Hand protection	: Wear working gloves when handling gas containers.
	Standard EN 388 - Protective gloves against mechanical risk.
- Other	: Consider the use of flame resistant anti-static safety clothing.
	Standard EN ISO 14116 - Limited flame spread materials.
	Standard EN 1149-5 - Protective clothing: Electrostatic properties.
	Wear safety shoes while handling containers.
	Standard EN ISO 20345 - Personal protective equipment - Safety footwear.
Respiratory protection	: Gas filters may be used if all surrounding conditions e.g. type and concentration of the contaminant(s) and duration of use are known.
	Use gas filters with full face mask, where exposure limits may be exceeded for a short-term period, e.g. connecting or disconnecting containers.
	Gas filters do not protect against oxygen deficiency.
	Standard EN 14387 - Gas filter(s), combined filter(s) and full face mask - EN 136.
Thermal hazards	: None in addition to the above sections.
8.2.3. Environmental exposure controls	

Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chem	ical properties	
Appearance		
• Physical state at 20°C / 101.3kPa	: Gas	
• Colour	 Mixture contains one or more component(s) which have the following colour(s): Colourless. 	
Odour	: Odourless.	
Odour threshold	: Odour threshold is subjective and inadequate to warn of overexposure.	
pH	: Not applicable for gases and gas mixtures.	
Melting point / Freezing point	: Not applicable for gas mixtures.	
Boiling point	: Not applicable for gas mixtures.	
Flash point	: Not applicable for gases and gas mixtures.	
Evaporation rate	: Not applicable for gases and gas mixtures.	
Flammability (solid, gas)	: Extremely flammable gas.	
Explosive limits	: Flammability range not available.	
Vapour pressure [20°C]	: Not applicable.	
Vapour pressure [50°C]	: Not applicable.	
Vapour density	: Not applicable.	
Relative density, gas (air=1)	: Lighter or similar to air.	
Partition coefficient n-octanol/water (Log Kow)	: Not applicable for gas mixtures.	
Auto-ignition temperature	: Not known.	
Decomposition temperature	: Not applicable.	
Viscosity	: No reliable data available.	
Explosive properties	: Not applicable.	
Oxidising properties	: Not applicable.	
9.2. Other information		
Molar mass	: Not applicable for gas mixtures.	
Sapio Produzione Idrogeno Ossigeno Srl	EN (English) Internal reference no.: 000125 4/8	



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Revision date: 04/07/2018 Version: 1.0

SDS_Ind.Mix_201

Hydroplus 525

Other data	: None.
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 reactions	
	Can form explosive mixture with air. May react violently with oxidants.
10.4. Conditions to avoid	
	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid moisture in installation systems.
10.5. Incompatible materials	
	Air, Oxidisers. For additional information on compatibility refer to ISO 11114.
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	: Toxicological effects not expected from this product if occupational exposure limit values are not exceed	led.
Skin corrosion/irritation	: No known effects from this product.	
Serious eye damage/irritation	: No known effects from this product.	
Respiratory or skin sensitisation	: No known effects from this product.	
Germ cell mutagenicity	: No known effects from this product.	
Carcinogenicity	: No known effects from this product.	
Toxic for reproduction : Fertility	: No known effects from this product.	
Toxic for reproduction : unborn child	: No known effects from this product.	
STOT-single exposure	: No known effects from this product.	
STOT-repeated exposure	: No known effects from this product.	
Aspiration hazard	: Not applicable for gases and gas mixtures.	

SECTION 12: Ecological inf	ormation
12.1. Toxicity	
Assessment	: No ecological damage caused by this product.
EC50 48h - Daphnia magna	: No data available.
EC50 72h - Algae	: No data available.
LC50 96 h - Fish	: No data available.
12.2. Persistence and degradabilit	y .
Assessment	: No ecological damage caused by this product.
12.3. Bioaccumulative potential	
Assessment	: No data available.
12.4. Mobility in soil	
Assessment	: Because of its high volatility, the product is unlikely to cause ground or water pollution. Partition into soil is unlikely.
12.5. Results of PBT and vPvB ass	essment
Assessment	: Not classified as PBT or vPvB.



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SDS_Ind.Mix_201

Hydroplus 525

12.6. Other adverse effects	
Other adverse effects	: No known effects from this product.
Effect on the ozone layer	: None.
Effect on global warming	: Contains greenhouse gas(es).
SECTION 13: Disposal consideration	าร
13.1. Waste treatment methods	
	Contact supplier if guidance is required.
	Do not discharge into areas where there is a risk of forming an explosive mixture with air. Waste gas should be flared through a suitable burner with flash back arrestor.
	Do not discharge into any place where its accumulation could be dangerous.
	Ensure that the emission levels from local regulations or operating permits are not exceeded.
	Refer to the EIGA code of practice Doc.30 "Disposal of Gases", downloadable at http://www.eiga.eu for more guidance on suitable disposal methods.
	Return unused product in original receptacle to supplier.
List of hazardous waste codes (from Commission Decision 2001/118/EC)	: 16 05 04 *: Gases in pressure containers (including halons) containing dangerous substances.
13.2. Additional information	
	External treatment and disposal of waste should comply with applicable local and/or national regulations.
SECTION 14: Transport information	
14.1. UN number	

UN-No.	: 1954
14.2. UN proper shipping name	
Transport by road/rail (ADR/RID)	COMPRESSED GAS, FLAMMABLE, N.O.S. (Hydrogen, Argon)
Transport by air (ICAO-TI / IATA-DGR)	Compressed gas, flammable, n.o.s. (Hydrogen, Argon)
Transport by sea (IMDG)	COMPRESSED GAS, FLAMMABLE, N.O.S. (Hydrogen, Argon)
14.3. Transport hazard class(es)	

Labelling



:

Transport by road/rail (ADR/RID)	
Class	: 2
Classification code	: 1F
Hazard identification number	: 23
Tunnel Restriction	: B/D - Tank carriage : Passage forbidden through tunnels of category B, C, D and E. Other carriage : Passage forbidden through tunnels of category D and E
Transport by air (ICAO-TI / IATA-DGR)	
Class / Div. (Sub. risk(s))	: 2.1
Transport by sea (IMDG)	
Class / Div. (Sub. risk(s))	: 2.1
Emergency Schedule (EmS) - Fire	: F-D
Emergency Schedule (EmS) - Spillage	: S-U
14.4. Packing group	
Transport by road/rail (ADR/RID)	: Not applicable
Transport by air (ICAO-TI / IATA-DGR)	: Not applicable
Transport by sea (IMDG)	: Not applicable
14.5. Environmental hazards	
Transport by road/rail (ADR/RID)	: None.
Transport by air (ICAO-TI / IATA-DGR)	: None.
Transport by sea (IMDG)	: None.
14.6. Special precautions for user	
Packing Instruction(s)	
Transport by road/rail (ADR/RID)	: P200

Sapio Produzione Idrogeno Ossigeno Srl



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SDS_Ind.Mix_201

	Tiyulopius 525
Transport by air (ICAO-TI / IATA-DGR)	
Passenger and Cargo Aircraft	: Forbidden.
Cargo Aircraft only	: 200.
Transport by sea (IMDG)	: P200
Special transport precautions	: Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.
	Before transporting product containers:
	 Ensure there is adequate ventilation. Ensure that containers are firmly secured.
	- Ensure container valve is closed and not leaking.
	- Ensure valve outlet cap nut or plug (where provided) is correctly fitted.
	- Ensure valve protection device (where provided) is correctly fitted.
14.7. Transport in bulk according to Ann	ex II of MARPOL 73/78 and the IBC Code
	Not applicable.
SECTION 15: Regulatory information	ation
15.1 Safety, health and environmental re	gulations/legislation specific for the substance or mixture
EU-Regulations	
Restrictions on use	: None.
Seveso Directive : 2012/18/EU (Seveso III)	: Covered.
National regulations	
National legislation	: Ensure all national/local regulations are observed.
-	
15.2. Chemical safety assessment	
	A CSA does not need to be carried out for this product.
SECTION 16: Other information	
ndication of changes	: Revised safety data sheet in accordance with commission regulation (EU) No 453/2010.
Abbreviations and acronyms	: ATE: Acute Toxicity Estimate
	CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
	REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
	EINECS: European Inventory of Existing Commercial Chemical Substances
	CAS: Chemical Abstract Service
	PPE: Personal Protection Equipment
	LC50 - Lethal Concentration to 50 % of a test population
	RMM: Risk Management Measures
	PBT - Persistent, Bioaccumulative and Toxic vPvB - Very Persistent and Very Bioaccumulative
	STOT- SE: Specific Target Organ Toxicity - Single Exposure
	CSA: Chemical Safety Assessment
	EN: European Standard
	UN: United Nations
	ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
	IATA - International Air Transport Association
	IMDG code - International Maritime Dangerous Goods
	RID - Regulations concerning the International Carriage of Dangerous Goods by Rail WGK: Water Hazard Class
	STOT - RE: Specific Target Organ Toxicity - Repeated Exposure
Fraining advice	: Ensure operators understand the flammability hazard.
Further information	: Classification using data from databases maintained by the European Industrial Gases Association (EIGA)
	Classification in accordance with the calculation methods of Regulation (EC) 1272/2008 CLP.

Full wording of relevant H Statements and classification codes

Flam. Gas 1	Flammable gases, Category 1
Press. Gas (Comp.)	Gases under pressure: Compressed gas
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SDS_Ind.Mix_201

Hydroplus 525

DISCLAIMER OF LIABILITY

: Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

Details given in this document are believed to be correct at the time of going to press.

Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.