

Skeda e të Dhënave të Sigurisë

hydrogen

sipas rregullores REACH (KE) 1907/2006 e ndryshuar nga rregullorja (BE) 2020/878

Numër referencë: 067A

Data e inspektimit: 21.12.2022

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Versioni: 9.0

Rrezik



SEKSION 1: Identifikimi i substancës/i përzierjes dhe i shogërisë/i firmës

1.1. Identifikues të produktit

Trade name : hydrogen
SDS no : 067A
Mjete të tjera identifikimi : hydrogen
Nr. CAS : 1333-74-0
Nr. i KE : 215-605-7
Nr. i indeksit të KE : 001-001-00-9

REACH registration No : Listed in Annex IV / V REACH, exempted from registration.

Chemical formula : H₂

1.2. Përdorime të identikuara si me vend për substancën apo përzierjen dhe përdorime që nuk këshillohen

Relevant identified uses : Industrial and professional uses. Perform risk assessment prior to use.
Test gas/Calibration gas.
Chemical reaction / Synthesis.
Laboratory use.
Use as a fuel.
Shield gas for welding processes.
Use for manufacture of electronic/photovoltaic components.
Laser gas.
Contact supplier for more information on uses.
Uses advised against : Consumer use.
Uses other than those listed above are not supported, contact your supplier for more information on other uses.

1.3. Informacione lidhur me furnizuesin dhe skedën e të dhënave të sigurisë

Company identification : GAZRA TEKNIKE SHQIPTARE SH.P.K
Rr Kavajes Dalje Kombinat
Tirana - Albania
<http://www.sol.it/msds2/msds.asp>
msds@sol.it

1.4. Numri i telefonit të urgjencës

Emergency telephone number : +355 (0)42 352877

SEKSION 2: Identifikimi i rreziqeve

2.1. Klasifikimi i substancës apo i përzierjes

Klasifikimi sipas rregullores (CE) Nr. 1272/2008 [CLP]

Reziqe fizike	Gaze të ndezshme, Kategoria 1A	H220
	Gaze nën presion: Gaz i kompresuar	H280

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2.2. Elemente etiketimi

Etiketimi sipas rregullores (CE) Nr. 1272/2008 [CLP]

Piktogramet e rrezikut (CLP) :



GHS02

GHS04

Fjalë sinjalizuese (CLP) :

Deklaratat e rrezikut (CLP) :

Deklaratat e masave paraprake (CLP)

- Prevention

- Response

- Storage

: Rrezik

: H220 - Gaz jashtëzakonisht i ndezshëm.

H280 - Përmban gaz nën presion; mund të shpërthejë nëse nxehet.

: P210 - Mbajeni larg nga nxehtësia, sipërfaqet e nxehta, shkëndijat, flakët e ekspozuara dhe nga burime të tjera të ndezshme. Ndalohet pirja e duhanit.

: P377 - Rrjedhja e gazit djegës: Mos e shuani, përveç rastit kur rrjedhja mund të mbyllet pa rrezik.

P381 - Në rast rrjedhjeje, eliminoni të gjitha burimet e ndezshme.

: P403 - Ruajeni në një vend të mirëajrosur.

2.3. Rreziqe të tjera

Asphyxiant in high concentrations.

These high concentrations are within the flammability range.

SEKSION 3: Përbërja/informacionet mbi përbërësit

3.1. Substancat

Emri	%	Identifikues të produktit	Klasifikimi sipas rregullores (CE) Nr. 1272/2008 [CLP]
hydrogen	100	Nr. CAS: 1333-74-0 Nr. i KE: 215-605-7 Nr. i indeksit të KE: 001-001-00-9 REACH registration No: *1	Flam. Gas 1A, H220 Press. Gas (Comp.), H280

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

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

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

Jo i zbatueshëm

3.2. Përzierje

SEKSION 4: Ndihma e shpejtë

4.1. Përshkrimi i ndihmës së shpejtë

- 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. Simptoma dhe efekte kryesore, akute e të mëvonshme

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation.

See section 11.

4.3. Indikimi për kujdes të mundshëm mjekësor të menjëhershëm dhe për trajtime të veçanta të nevojshme

None.

SEKSION 5: Masa të luftës kundër zjarrit

5.1. Mjete shuarjeje

- Suitable extinguishing media : Water spray or fog.
Dry powder.
Carbon dioxide.
Shutting off the source of the gas is the preferred method of control.
Be aware of the risk of formation of static electricity with the use of CO2 extinguishers. Do not use them in places where a flammable atmosphere may be present.
- Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Rreziqe të veçanta që rrjedhin nga substanca apo përzjerja

- Specific hazards : Exposure to fire may cause containers to rupture/explode.
- Hazardous combustion products : None.

5.3. Këshilla për zjarrfikësat

- Specific methods : 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. 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.

SEKSION 6: Masat që duhen marrë në rast derdhjeje aksidentale

6.1. Masa individuale, pajisje mbrojtëse dhe procedurat e urgjencës

- Për mospjesëmarrësit e ekipeve të shpëtimit : Act in accordance with local emergency plan.
Try to stop release.
Evacuate area.
Eliminate ignition sources.
Ensure adequate air ventilation.
Stay upwind.
See section 8 of the SDS for more information on personal protective equipment.
- Për pjesëmarrësit e ekipeve të shpëtimit : 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.
See section 5.3 of the SDS for more information.

6.2. Masa parandaluese për mbrojtjen e mjedisit

Try to stop release.

6.3. Metoda dhe materiali i vënies kufi dhe i pastrimit

Ventilate area.

6.4. Referencë për seksionet e tjera

See also sections 8 and 13.

SEKSION 7: Manipulimi dhe ruajtja

7.1. Masa që duhen marrë për një manipulim pa rrezik

Safe 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 relief device(s) in gas installations.
- Ensure the complete gas system was (or is regularly) 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 temperature. Contact your gas supplier if in doubt.
- 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 static discharges).
- Consider the use of only non-sparking tools.
- Do not breathe gas.
- Avoid release of product into work area.
- Ensure equipment is adequately earthed.

Safe handling of the gas receptacle

- : Refer to supplier's container handling instructions.
- Do not allow backfeed into the container.
- Protect containers from physical damage; do not drag, roll, slide or drop.
- When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) 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 and is ready for use.
- If user experiences any difficulty operating 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 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 content of the container.
- Suck back of water into the container must be prevented.
- Open valve slowly to avoid pressure shock.

7.2. Kushtet e nevojshme për të garantuar sigurinë e ruajtjes, duke marrë parasysh papajtueshmëri të mundshme

For more guidance on the safe storage of liquid oxygen, liquid nitrogen or liquid argon, refer to EIGA Doc.115 "Storage of Cryogenic Air Gases at Users Premises", downloadable at <http://www.eiga.eu> and consult your supplier.

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.

7.3. Përdorimi(e) final(e) i(të) veçantë(a)

None.

SEKSION 8: Kontrollle ekspozimi /mbrojtje individuale

8.1. Parametra kontrolli

hydrogen (1333-74-0)	
SHBA - ACGIH - Limiti i Ekspozimit në Punë	
Emri i agjentit	Hydrogen
Vërejtje (ACGIH)	TLV® Basis: Simple Asphyxiant
Referenca rregullatore	ACGIH 2019

OEL (Occupational Exposure Limits) : None available.

DNEL (Dozë e derivuar pa efekt) : None available.

PNEC (Përqendrim(e) i(të) parashikuar(a) pa efekt) : None available.

8.2. Kontrollle ekspozimi

8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation.
Product to be handled in a closed system.
Systems under pressure should be regularly checked for leakages.
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.

8.2.2. Individual protection measures, e.g. personal 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, performance level 1 or higher.
 - 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 : None necessary.
- 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.

SEKSION 9: Vetë fizike e kimike

9.1. Informacione mbi vetitë fizike e kimike thelbësore

- Appearance
- Physical state at 20°C / 101.3kPa : Gaz.
 - Ngjyra : Colourless.
- Era : Odourless.
Odour threshold is subjective and inadequate to warn of overexposure.
- Pika e shkrirjes / Pika e ngrirjes : -259 °C
-259 °C
- Pika e vlimit : -253 °C
- Ndezshmëria : Gaz jashtëzakonisht i ndezshëm.

Kufiri minimal i shpërthimit	: Nuk disponohet
Kufiri maksimal i shpërthimit	: Nuk disponohet
Pika e flakërimit	: Not applicable for gases and gas mixtures.
Temperatura e vetë-ndezjes	: 560 °C
Temperatura e dekompozimit	: Not applicable.
pH	: Not applicable for gases and gas mixtures.
Viskoziteti, kinematika	: No reliable data available.
Tretshmëri në ujë [20°C]	: 1,6 mg/l
Koeficienti i ndarjes n-oktanol/ujë (Log Kow)	: Nuk disponohet
Presioni i avullit [20°C]	: Not applicable.
Presioni i avullit [50°C]	: Not applicable.
Density and/or relative density	: Not applicable.
Relative vapour density (air=1)	: 0,07
Karakteristikat e grimcave	: Not applicable.

9.2. Informacione të tjera

9.2.1. Informacion në lidhje me klasat e rrezikut fizik

Vetitë shpërthyesë	: Not applicable.
Limitet e ekspozimit	: 4 – 77 vëll %
Vetitë oksiduese	: Not applicable.
Critical temperature [°C]	: -240 °C

9.2.2. Karakteristikat e tjera të sigurisë

Molar mass	: 2 g/mol
Shpejtësia e avullimit	: Not applicable for gases and gas mixtures.
Grupi i gazeve	: Gaz i ngjeshur.
Other data	: Burns with an invisible flame.

SEKSION 10: Stabiliteti dhe reaktiviteti

10.1. Reaktiviteti

No reactivity hazard other than the effects described in sub-sections below.

10.2. Stabiliteti kimik

Stable under normal conditions.

10.3. Mundësi reaksionesh të rrezikshme

Can form explosive mixture with air.
May react violently with oxidants.

10.4. Kushte për t'u shmangur

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Avoid moisture in installation systems.

10.5. Lëndë të papajtueshme

Air, Oxidisers.
For additional information on compatibility refer to ISO 11114.

10.6. Produkte të rrezikshme dekompozimi

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SEKSION 11: Informacione toksikologjike

11.1. Informacion mbi klasat e rrezikut siç përcaktohet në Rregulloren (Ke) nr. 1272/2008

Acute toxicity	: No known toxicological effects from this product.
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.

11.2. Informacion mbi rreziqet e tjera

Nuk ka në dispozicion informacione plotësuese

SEKSION 12: Informacione ekologjike

12.1. Toxicity

Assessment : No ecological damage caused by this product.

12.2. Persistence and degradability

Assessment : No ecological damage caused by this product.

12.3. Bioaccumulative potential

Assessment : No ecological damage caused by this product.

12.4. Mobility in soil

Assessment : No ecological damage caused by this product.

12.5. Results of PBT and vPvB assessment

Assessment : Not classified as PBT or vPvB.

12.6. Vetë të agjentëve hormonalë

Assessment :

12.7. Other adverse effects

Efekte të tjera fatale : No known effects from this product.
Effect on the ozone layer : No effect on the ozone layer.
Global warming potential [CO₂=1] : 6
Effect on global warming : When discharged in large quantities may contribute to the greenhouse effect.
Contains greenhouse gas(es).

SEKSION 13: Konsiderata lidhur me eliminimin

13.1. Metoda të trajtimit të mbeturinave

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.org> for more guidance on suitable disposal methods.
Return unused product in original container to supplier.
List of hazardous waste codes (from Commission Decision 2000/532/EC as amended) : 16 05 04 *: Gases in pressure containers (including halons) containing hazardous substances.

13.2. Additional information

External treatment and disposal of waste should comply with applicable local and/or national regulations.

SEKSION 14: Informacione lidhur me transportin

14.1. Numri i KB ose numri i identifikimit

Në përputhje me dispozitat ADR / RID / IMDG / IATA / ADN
Nr-OKB : 1049

14.2. Emri i dërgesës së OKB-së

Transport by road/rail (ADR/RID) : HYDROGEN, COMPRESSED
Transport by air (ICAO-TI / IATA-DGR) : Hydrogen, compressed
Transport by sea (IMDG) : HYDROGEN, COMPRESSED

14.3. Klasë (a) rreziku për transportin

Etiketimi :



2.1 : Flammable gases.

Transport by road/rail (ADR/RID)

Class : 2
Classification code : 1F
Hazard identification number : 23
Tunnel Restriction : B/D - Transporti me cisternë: Ndalohet kalimi në tunele të kategorisë B, C, D, dhe E.
Mënyra të tjera: Ndalohet kalimi në tunele të kategorisë D dhe 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. Grupi i ambalazhimit

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. rreziqe për mjedisin

Transport by road/rail (ADR/RID) : None.
Transport by air (ICAO-TI / IATA-DGR) : None.
Transport by sea (IMDG) : None.

14.6. Masa parandaluese të veçanta që duhen marrë nga përdoruesi

Packing Instruction(s)

Transport by road/rail (ADR/RID) : P200.
Transport by air (ICAO-TI / IATA-DGR)
Passenger and Cargo Aircraft : Forbidden.
Cargo Aircraft only : 200.
Transport by sea (IMDG) : P200.

Masat paraprahe të veçanta të transportit : 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 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 masiv detar sipas instrumenteve të IMO-së

Not applicable.

SEKSION 15: Informacione mbi rregulloret

15.1. Rregulloret/legjislati i veçantë për substancën apo pëzierjen në lidhje me çështjen e sigurisë, shëndetit dhe mjedisit

Normativa BE

Kufizime përdorimi : None.
Informacione të tjera, kufizime dhe dispozita ligjore : Nuk renditet në listën e PIC (Rregullorja e BE-së 649/2012).
Seveso Directive : 2012/18/EU (Seveso III) : Listed.

Direktiva kombëtare

Referenca rregullatore : Ensure all national/local regulations are observed.

15.2. Vlerësimi i sigurisë kimike

A CSA does not need to be carried out for this product.

SEKSION 16: Informacione të tjera

Tregues ndryshimi : Revised safety data sheet in accordance with commission regulation (EU) No 2015/830.

Shkurtime dhe akronime : 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 number.
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.
UFI : Unique Formula Identifier.
Këshilla trajnimi : Ensure operators understand the flammability hazard.
Further information : Classification in accordance with the procedures and calculation methods of Regulation (EC) 1272/2008 (CLP).
Key literature references and sources of data are maintained in EIGA doc 169 :
'Classification and Labelling Guide', downloadable at <http://www.Eiga.eu>.

Teksti i plotë i frazave H dhe EUH

Flam. Gas 1A	Gaze të ndezshme, Kategoria 1A
H220	Gaz jashtëzakonisht i ndezshëm.
H280	Përmban gaz nën presion; mund të shpërthejë nëse nxehet.
Press. Gas (Comp.)	Gaze nën presion: Gaz i kompresuar

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DISCLAIMER OF LIABILITY

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

Fundi i dokumentit