

Skeda e të Dhënave të Sigurisë

R407A

sipas rregullores REACH (KE) 1907/2006 e ndryshuar nga rregullorja (BE) 2020/878
Numër referencë: 528
Data e inspektimit: 2.3.2023
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Versioni: 5.0

Kujdes



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

1.1. Identifikues të produktit

SDS no : 528

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.
Use as refrigerant.
Contact supplier for more information on uses.

Uses advised against : Consumer use.

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 nën presion: Gaz i lëngshëm : H280

2.2. Elemente etiketimi

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

Piktogramet e rrezikut (CLP) :



GHS04

Fjalë sinjalizuese (CLP) : Kujdes
Deklaratat e rrezikut (CLP) : H280 - Përmban gaz nën presion; mund të shpërthejë nëse nxehet.
Deklaratat e masave paraprake (CLP) : P410+P403 - Mbrojeni nga rrezet e diellit. Magazinojeni në një vend me ventilim të mirë.
- Storage

2.3. Rreziqe të tjera

None.

SEKSION 3: Përbërja/informacionet mbi përbërësit

3.1. Substancat

Jo i zbatueshëm

3.2. Përzierje

Emri	Identifikues të produktit	%	Klasifikimi sipas rregullores (CE) Nr. 1272/2008 [CLP]
Pentafluoroethane	Nr. CAS: 354-33-6 Nr. i KE: 206-557-8 Nr. i indeksit të KE: nr. REACH: 01-2119485636-25	40	Press. Gas (Liq.), H280
Tetrafluoroethane (R134a)	Nr. CAS: 811-97-2 Nr. i KE: 212-377-0 Nr. i indeksit të KE: nr. REACH: 01-2119459374-33	40	Press. Gas (Liq.), H280
Difluoromethane (R32)	Nr. CAS: 75-10-5 Nr. i KE: 200-839-4 Nr. i indeksit të KE: nr. REACH: 01-2119471312-47	20	Flam. Gas 1B, H221 Press. Gas (Liq.), H280

Tekst i plotë i deklaratave H-dhe EUH: shi seksionin 16

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

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 : For liquid spillage - flush with water for at least 15 minutes.
- Eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes.
- Ingestion : Ingestion is not considered a potential route of exposure.

4.2. Simptoma dhe efekte kryesore, akute e të mëvonshme

See section 11.

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

Obtain medical assistance.

SEKSION 5: Masa të luftës kundër zjarrit

5.1. Mjete shuarjeje

- Suitable extinguishing media : Water spray or fog.
- Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Rreziqe të veçanta që rrjedhin nga substanca apo përzierja

- Specific hazards : Exposure to fire may cause containers to rupture/explode.
- Hazardous combustion products : Mund të shpërbëhet në temperaturë të lartë duke çliruar gazra toksike Carbon monoxide. Hydrogen fluoride. Carbonyl fluoride.

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.
Move containers away from the fire area if this can be done without risk.

Special protective equipment for fire fighters : 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 mbrojtjeje dhe procedurat e urgjencës

Try to stop release.
Evacuate area.
Monitor concentration of released product.
Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
Ensure adequate air ventilation.
Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
Act in accordance with local emergency plan.
Stay upwind.

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.
Avoid exposure, obtain special instructions before use.
Protect eyes, face and skin from liquid splashes.
Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.
Installation of a cross purge assembly between the container and the regulator is recommended.
Purge system with dry inert gas (e.g. helium or nitrogen) before gas is introduced and when system is placed out of service.
Do not breathe gas.
Avoid release of product into work area.

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.
- Containers should be stored in the vertical position and properly secured to prevent them from falling over.

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

- 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.

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

None.

SEKSION 8: Kontrollle ekspozimi /mbrojtje individuale

8.1. Parametra kontrolli

Tetrafluoroethane (R134a) (811-97-2)	
DNEL: Derived no effect level (Workers)	
Afatgjatë - efekte sistemike, frymëmarrje	13936 mg/m ³

Difluoromethane (R32) (75-10-5)	
DNEL: Derived no effect level (Workers)	
Afatgjatë - efekte sistemike, frymëmarrje	7035 mg/m ³

Tetrafluoroethane (R134a) (811-97-2)	
PNEC: Predicted no effect concentration	
Aqua (freshwater)	0,1 mg/l
Aqua (marine water)	0,01 mg/l
Aquatic, intermittent releases	1 mg/l
Sediment, freshwater	0,75 mg/kg penivejt

Micro-organisms in sewage treatment plant (STP)	73 mg/l
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Difluoromethane (R32) (75-10-5)	
PNEC: Predicted no effect concentration	
Aqua (freshwater)	0,142 mg/l
Aquatic, intermittent releases	1,42 mg/l
Sediment, freshwater	0,534 mg/kg penivejt

8.2. Kontrollë ekspozimi

8.2.1. Appropriate engineering controls

Product to be handled in a closed system and under strictly controlled conditions.
Provide adequate general and local exhaust ventilation.
Preferably use permanent leak-tight installations (e.g. welded pipes).
Systems under pressure should be regularly checked for leakages.
Ensure exposure is below occupational exposure limits (where available).
Gas detectors should be used when toxic gases 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:

• Eye/face protection

- : PPE compliant to the recommended EN/ISO standards should be selected.
- : Wear safety glasses with side shields.
- : Wear goggles and a face shield when transfilling or breaking transfer connections.
- : 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.
- : Wear safety shoes while handling containers.
- : Standard EN ISO 20345 - Personal protective equipment - Safety footwear.

- Other

• 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.
- : Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.
- : Consult respiratory device supplier's product information for the selection of the appropriate device.
- : Gas filters do not protect against oxygen deficiency.
- : Standard EN 14387 - Gas filter(s), combined filter(s) and standard EN136, full face masks .
- : Keep self contained breathing apparatus readily available for emergency use.
- : Self contained breathing apparatus is recommended, where unknown exposure may be expected, e.g. during maintenance activities on installation systems.

• Thermal hazards

- : Wear cold insulating gloves when transfilling or breaking transfer connections.
- : Standard EN 511 - Cold insulating gloves.

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
- Ngjyra

- : Gaz.
- : Colourless.

Era	: Odour threshold is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour: Ethereal. Odour threshold is subjective and inadequate to warn of overexposure. Odour threshold is subjective and inadequate to warn of overexposure.
Pika e shkrirjes / Pika e ngrirjes	: Not applicable for gas mixtures.
Pika e vlimit	: Not applicable for gas mixtures. : Difluoromethane (R32) -51,7 °C
Ndezshmëria	: Nuk disponohet
Kufiri minimal i shpërthimit	: Nuk disponohet
Kufiri maksimal i shpërthimit	: Nuk disponohet
Pika e flakërimit	: Not applicable for gas mixtures.
Temperatura e vetë-ndezjes	: Non flammable.
Temperatura e dekompozimit	: Nuk disponohet
pH	: Not applicable for gas mixtures.
Viskoziteti, kinematika	: Not applicable.
Tretshmëri në ujë [20°C]	: Mixture is partially soluble in water
Koeficienti i ndarjes n-oktanol/ujë (Log Kow)	: Not applicable for gas mixtures.
Presioni i avullit [20°C]	: No reliable data available. : Pentafluoroethane 1,2 bar(a) : Difluoromethane (R32) 14,8 bar(a)
Presioni i avullit [50°C]	: No reliable data available.
Density and/or relative density	: Not applicable.
Relative vapour density (air=1)	: Heavier than air.
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	: Non flammable.
Vetitë oksiduese	: Not applicable.

9.2.2. Karakteristikat e tjera të sigurisë

Molar mass	: Not applicable for gas mixtures.
Shpejtësia e avullimit	: Not applicable for gas mixtures.
Other data	: Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

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

None.

10.4. Kushte për t'u shmangur

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

10.5. Lëndë të papajtueshme

None.

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 : Toksike me anë të inhalacionit.

Tetrafluoroethane (R134a) (811-97-2)

LC50 Inhalacionit - Miu [ppm]	567000 ppm/4h
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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 rreziket e tjera

Nuk ka në dispozicion informacione plotësuese

SEKSION 12: Informacione ekologjike

12.1. Toxicity

Assessment : Classification criteria are not met.

12.2. Persistence and degradability

Assessment : No data available.

12.3. Bioaccumulative potential

Assessment : No data available.

12.4. Mobility in soil

Assessment : No data available.

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

Effect on the ozone layer : None.
 Effect on global warming : 2352,55

SEKSION 13: Konsiderata lidhur me eliminimin

13.1. Metoda të trajtimit të mbeturinave

Contact supplier if guidance is required.
 Must not be discharged to atmosphere.
 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.
 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

None.

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 : 3338

14.2. Emri i dërgesës së OKB-së

Transport by road/rail (ADR/RID) : REFRIGERANT GAS R 407A

Transport by air (ICAO-TI / IATA-DGR) : Refrigerant gas R 407A

Transport by sea (IMDG) : REFRIGERANT GAS R 407A

14.3. Klasë (a) rreziku për transportin

Etiketimi

:



2.2 : Non-flammable, non-toxic gases.

Transport by road/rail (ADR/RID)

Class : 2

Classification code : 2A

Hazard identification number : 20

Tunnel Restriction : C/E - Transporti me cisternë: Ndalohet kalimi në tunele të kategorisë C, D, dhe E. Mënyra të tjera: Ndalohet kalimi në tunele të kategorisë E.

Transport by air (ICAO-TI / IATA-DGR)

Class / Div. (Sub. risk(s)) : 2.2

Transport by sea (IMDG)

Class / Div. (Sub. risk(s)) : 2.2

Emergency Schedule (EmS) - Fire : F-C

Emergency Schedule (EmS) - Spillage : S-V

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 : 200.

Cargo Aircraft only : 200.

Transport by sea (IMDG) : P200.

- Masat paraprake 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/legjislacioni i veçantë për substancën apo pëzierjen në lidhje me çështjen e sigurisë, shëndetit dhe mjedisit

Normativa BE

- Kufizime përdorimi : Nuk përmban substanca të renditura në listën e kandidatëve REACH.
- Informacione të tjera, kufizime dhe dispozita ligjore : Ensure all national/local regulations are observed.
- Nuk përmban asnjë substancë(s) të renditur në listën e PIC (Rregullorja e BE-së 649/2012 në lidhje me eksportin dhe importin e kimikateve të rrezikshme).
- Seveso Directive : 2012/18/EU (Seveso III) : Covered.

Direktiva kombëtare

Nuk ka në dispozicion informacione plotësuese

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.
- Këshilla trajnimi : Users of breathing apparatus must be trained.
- Ensure operators understand the toxicity hazard.
- Receptacle under pressure.
- Further information : This Safety Data Sheet has been established in accordance with the applicable European Union legislation.
- Classification in accordance with the procedures and calculation methods of Regulation (EC) 1272/2008 (CLP).

Teksti i plotë i frazave H dhe EUH	
Flam. Gas 1B	Gaze të ndezshme, Kategoria 1B
H221	Gaz i ndezshëm.
H280	Përmban gaz nën presion; mund të shpërthejë nëse nxehet.
Press. Gas (Liq.)	Gaze nën presion: Gaz i lëngshëm

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.

Fundi i dokumentit