

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

1.1. Product identifier

Product form : Mixture
Product name : VOA Gases Standard
Product code : AL0-101206
Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Laboratory Use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Certified reference material for laboratory use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Phenova
6390 Joyce Dr. Suite 100
80403 Golden, CO - United States
T 1-866-942-2978 - F 1-866-283-0269
info@phenova.com - www.phenova.com

1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924
ChemTel Assistance (International) +1 813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225
Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Carc. 1A H350
STOT SE 1 H370
Aquatic Chronic 3 H412
Ozone 1 H420

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc. Cat. 1; R45
F+; R12
T; R23/24/25
T; R39/23/24/25
N; R59

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Signal word (CLP)	: Danger
Hazardous ingredients	: bromomethane, vinyl chloride, inhibited, methanol
Hazard statements (CLP)	: H225 - Highly flammable liquid and vapor H301+H311 - Toxic if swallowed or in contact with skin H350 - May cause cancer H370 - Causes damage to organs H412 - Harmful to aquatic life with long lasting effects H420 - Harms public health and the environment by destroying ozone in the upper atmosphere
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P233 - Keep container tightly closed P260 - Do not breathe dust, fume, gas, mist, spray, vapors P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P273 - Avoid release to the environment P280 - Wear protective gloves, protective clothing, eye protection, face protection P308+P313 - IF exposed or concerned: Get medical advice/attention P403+P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up

No labeling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
methanol (Component)	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	98.8	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
bromomethane (Component)	(CAS No) 74-83-9 (EC no) 200-813-2 (EC index no) 602-002-00-2	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:gas), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 2, H341 STOT SE 3, H335 STOT RE 2, H373 Aquatic Acute 1, H400 Ozone 1, H420
chloroethane (Component)	(CAS No) 75-00-3 (EC no) 200-830-5 (EC index no) 602-009-00-0	0.2	Flam. Gas 1, H220 Carc. 2, H351 Aquatic Chronic 3, H412
chloromethane (Component)	(CAS No) 74-87-3 (EC no) 200-817-4 (EC index no) 602-001-00-7	0.2	Flam. Gas 1, H220 Carc. 2, H351 STOT RE 2, H373 Ozone
dichlorodifluoromethane (Component)	(CAS No) 75-71-8 (EC no) 200-893-9	0.2	Ozone
trichloromonofluoromethane (Component)	(CAS No) 75-69-4 (EC no) 200-892-3	0.2	Ozone
vinyl chloride, inhibited (Component)	(CAS No) 75-01-4 (EC no) 200-831-0 (EC index no) 602-023-00-7	0.2	Flam. Gas 1, H220 Carc. 1A, H350 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
Name	Product identifier	Specific concentration limits	
methanol (Component)	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	(3 ≤ C < 10) STOT SE 2, H371 (C ≥ 10) STOT SE 1, H370	

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a poison center or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May cause cancer by inhalation.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
----------------------	-----------------------------------

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapors/spray.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
-------------------------	--

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Hygiene measures	: Do not eat, drink or smoke when using this product. Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
Storage conditions	: Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.

VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls

: Either local exhaust or general room ventilation is usually required.

Personal protective equipment

: Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



Hand protection

: Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.

Eye protection

: Chemical goggles or safety glasses. Safety glasses.

Skin and body protection

: Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information

: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

: Liquid

Color

: Colorless.

Odor

: characteristic.

pH

: No data available

Melting point

: No data available

Freezing point

: No data available

Boiling point

: No data available

Flash point

: No data available

Auto-ignition temperature

: No data available

Decomposition temperature

: No data available

Flammability (solid, gas)

: Highly flammable liquid and vapor

Relative density

: No data available

Solubility

: No data available

Explosive properties

: No data available

Oxidizing properties

: No data available

Explosion limits

: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established. Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin.

VOA Gases Standard	
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
bromomethane (74-83-9)	
LD50 oral rat	214 mg/kg (Rat)
ATE CLP (oral)	214.000 mg/kg body weight
ATE CLP (gases)	700.000 ppmV/4h
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	0.500 mg/l/4h
chloroethane (75-00-3)	
LC50 inhalation rat (mg/l)	107 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	40700 ppm/4h (Rat)
ATE CLP (gases)	40700.000 ppmV/4h
ATE CLP (vapors)	107.000 mg/l/4h
ATE CLP (dust, mist)	107.000 mg/l/4h
chloromethane (74-87-3)	
LD50 oral rat	1800 mg/kg (Rat)
LC50 inhalation rat (mg/l)	5.3 mg/l/4h (Rat)
ATE CLP (oral)	1800.000 mg/kg body weight
ATE CLP (vapors)	5.300 mg/l/4h
ATE CLP (dust, mist)	5.300 mg/l/4h
dichlorodifluoromethane (75-71-8)	
LC50 inhalation rat (mg/l)	3823 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	760000 ppm/4h (Rat)
ATE CLP (gases)	760000.000 ppmV/4h
ATE CLP (vapors)	3823.000 mg/l/4h
ATE CLP (dust, mist)	3823.000 mg/l/4h
trichloromonofluoromethane (75-69-4)	
LD50 oral rat	> 15000 mg/kg (Rat)
LC50 inhalation rat (mg/l)	150 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	26200 ppm/4h (Rat)
ATE CLP (gases)	26200.000 ppmV/4h
ATE CLP (vapors)	150.000 mg/l/4h
ATE CLP (dust, mist)	150.000 mg/l/4h
methanol (67-56-1)	
LD50 oral rat	> 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)
LD50 dermal rabbit	15800 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat; Literature study)
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (gases)	700.000 ppmV/4h
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	0.500 mg/l/4h

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

Respiratory or skin sensitization : Not classified
Based on available data, the classification criteria are not met

VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: May cause cancer. May cause cancer by inhalation May cause cancer
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Causes damage to organs.
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	: Toxic if swallowed. Toxic in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - air	: Dangerous for the ozone layer.
Ecology - water	: Harmful to aquatic life with long lasting effects.

bromomethane (74-83-9)	
LC50 fish 1	0.7 mg/l (96 h; Oryzias latipes)
LC50 other aquatic organisms 1	1 - 10 mg/l (96 h)
EC50 Daphnia 1	2 mg/l (48 h; Daphnia magna)
LC50 fish 2	0.8 mg/l (96 h; Poecilia reticulata)
Threshold limit other aquatic organisms 1	1 - 10,96 h
Threshold limit algae 1	5 mg/l (72 h; Selenastrum capricornutum)
Threshold limit algae 2	3.2 mg/l (48 h; Scenedesmus quadricauda)
chloroethane (75-00-3)	
LC50 fish 1	36 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	58 mg/l (48 h; Daphnia magna; GLP)
EC50 other aquatic organisms 1	118 mg/l (72 h; Scenedesmus subspicatus; Growth rate)
LC50 fish 2	39.3 mg/l (96 h; Pimephales promelas)
Threshold limit algae 1	< 7.7 mg/l (72 h; Scenedesmus subspicatus)
chloromethane (74-87-3)	
LC50 fish 1	270 ppm (96 h; Menidia beryllina)
LC50 fish 2	550 mg/l (96 h; Lepomis macrochirus)
Threshold limit other aquatic organisms 1	8000 mg/l (16 h; Protozoa; Toxicity test)
Threshold limit other aquatic organisms 2	500 mg/l (Pseudomonas putida; Toxicity test)
Threshold limit algae 1	1450 mg/l (148 h; Scenedesmus quadricauda)
dichlorodifluoromethane (75-71-8)	
LC50 fish 1	80 mg/l (24 h; Poecilia reticulata; Toxicity test)
LC50 fish 2	67 mg/l (48 h; Oryzias latipes)
trichloromonofluoromethane (75-69-4)	
LC50 fish 1	190 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	130 mg/l (48 h; Daphnia magna)
TLM fish 1	40 mg/l (24 h; Poecilia reticulata; Nocivity test)
vinyl chloride, inhibited (75-01-4)	
LC50 fish 1	0.097 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Stabilizer)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
LC50 fish 2	210 mg/l (96 h; Brachydanio rerio)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit algae 1	77 mg/l (96 h; Algae)
Threshold limit algae 2	105 mg/l (48 h; Cyanophyta; Toxicity test)
methanol (67-56-1)	
LC50 fish 1	15400 mg/l (96 h; Lepomis macrochirus; Lethal)
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna; Lethal)
LC50 fish 2	10800 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)

VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

methanol (67-56-1)	
EC50 Daphnia 2	24500 mg/l (48 h; Daphnia magna; Locomotor effect)
Threshold limit other aquatic organisms 1	6600 mg/l (16 h; Pseudomonas putida)
Threshold limit algae 1	530 mg/l (192 h; Microcystis aeruginosa)
Threshold limit algae 2	8000 mg/l (168 h; Scenedesmus quadricauda)

12.2. Persistence and degradability

VOA Gases Standard	
Persistence and degradability	May cause long-term adverse effects in the environment.

bromomethane (74-83-9)	
Persistence and degradability	Not readily biodegradable in water.

chloroethane (75-00-3)	
Persistence and degradability	Not readily biodegradable in water.

chloromethane (74-87-3)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance

dichlorodifluoromethane (75-71-8)	
Persistence and degradability	Not readily biodegradable in water.

trichloromonofluoromethane (75-69-4)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
BOD (% of ThOD)	0 % ThOD

vinyl chloride, inhibited (75-01-4)	
Persistence and degradability	Not readily biodegradable in water. Biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
BOD (% of ThOD)	0 % ThOD

methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O ₂ /g substance
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance
ThOD	1.5 g O ₂ /g substance
BOD (% of ThOD)	0.8 % ThOD

12.3. Bioaccumulative potential

VOA Gases Standard	
Bioaccumulative potential	Not established.

bromomethane (74-83-9)	
BCF fish 1	4.7 (Pisces; Estimated value)
Log Pow	1.08 - 2.3
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

chloroethane (75-00-3)	
BCF other aquatic organisms 1	7.6 ppb (Ostreidae; Fresh weight)
Log Pow	1.43 - 1.52 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

chloromethane (74-87-3)	
Log Pow	0.91
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

dichlorodifluoromethane (75-71-8)	
BCF fish 1	26 (Estimated value)
BCF fish 2	< 10 (Cyprinus carpio; Test duration: 6 weeks)
BCF other aquatic organisms 1	26 (Estimated value)
Log Pow	2.16
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

trichloromonofluoromethane (75-69-4)	
BCF fish 1	4.5 (Scyliorhinus caniculus; Gills, dry weight)
BCF fish 2	5 (Conger conger; Muscles, dry weight)
BCF other aquatic organisms 1	1.4 (Pecten maximus; Mantle, dry weight)

VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

trichloromonofluoromethane (75-69-4)	
BCF other aquatic organisms 2	4.4 (Modiolus modiolus; Mantle, dry weight)
Log Pow	2.3 - 2.53
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
vinyl chloride, inhibited (75-01-4)	
BCF fish 1	< 10 (72 h; Leuciscus idus)
BCF fish 2	3.55 l/kg
BCF other aquatic organisms 1	1100 (120 h; Bacteria; Activated sludge)
BCF other aquatic organisms 2	40 (24 h; Algae)
Log Pow	1.58 (Test data; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
methanol (67-56-1)	
BCF fish 1	< 10 (72 h; Leuciscus idus)
BCF fish 2	1 (72 h; Cyprinus carpio; Blood)
Log Pow	-0.77 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

bromomethane (74-83-9)	
Surface tension	0.025 N/m (0 °C)
chloroethane (75-00-3)	
Surface tension	0.021 N/m (10 °C)
chloromethane (74-87-3)	
Surface tension	0.016 N/m (20 °C)
trichloromonofluoromethane (75-69-4)	
Surface tension	0.019 N/m (25 °C)
vinyl chloride, inhibited (75-01-4)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
methanol (67-56-1)	
Surface tension	0.023 N/m (20 °C)

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1992
UN-No.(IATA) : 1992

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IATA) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (ADN) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Transport document description (ADR) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (methanol(67-56-1)), 3 (6.1), II, (D/E)

14.3. Packing group

Class (ADR) : 3
Classification code (ADR) : FT1

VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Class (IATA) : 3
Class (IMDG) : 3
Class (ADN) : 3
Subsidiary risks (ADR) : 6.1
Hazard labels (ADR) : 3, 6.1



Hazard labels (IATA) : 3, 6.1



14.4. Packing group

Packing group (ADR) : II
Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 336
Classification code (ADR) : FT1
Orange plates :



Special provision (ADR) : 274
Transport category (ADR) : 2
Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E2

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
PCA packing instructions (IATA) : 352
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA max net quantity (IATA) : 1L
PCA Excepted quantities (IATA) : E2
ERG code (IATA) : 3HP

14.6.4. Inland waterway transport

Carriage prohibited (ADN) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions
Contains no REACH candidate substance
Contains no REACH Annex XIV substances.

VOA Gases Standard

Safety Data Sheet

according to Regulation (EC) No. 453/2010

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

PHV SDS EU

Copyright 2015 Phenova, Inc. License granted to make paper copies for internal use. The information contained in this Safety Data Sheet is based on our current knowledge. The information contained in this document should be used only as a guide for appropriate safety precautions and should not be considered to be all inclusive. Users should make their own investigation to determine the suitability of the information for their particular purposes. The document does not represent any guarantee of the properties of the product. Phenova, Inc. shall not be held liable for any damage resulting from the handling or use of this product. Visit the Terms and Conditions of Sale link at www.phenova.com for additional terms and conditions of sale.