

# HD Life Style VOLUME & SHINE MOUSSE 300ml

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## 1 IDENTIFICATION OF THE COMPANY

- 1.1 Mixture / Product identifier: HD MOUSSE
- 1.2 Relevant identified uses of the mixture: Hair Mousse
- Uses advised against: The pertinent uses are listed above. Other uses are not recommended.
- 1.3 Distributed by **FARMAVITA s.r.l.**  
Via Garibaldi 82/84  
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Tel.: 0331833467 Fax: 0331-833827  
Email: info@farmavita.it  
Sito: www.farmavita.it
- 1.4 Emergency telephone:
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Tel. 0382.24444

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## 2 HAZARDS IDENTIFICATION

### Classification of cosmetic product

The mixture is a mousse for hair and falls into the category of cosmetics, however it is contained in a container under pressure and so the product falls into the category of aerosols.

• Classification system: The classification is based on the directives: 75 / 324CE - 94/1 EC - 2008 / 47CE (aerosol) - EU 2013/10, and on the following regulations: Regulation 807/2003 CE

Regulation 1223 / 2009CE

GHS02 flame

Signal Word: DANGER

Flam. Aerosol 1, H222: Extremely flammable aerosol.

H229: Pressurized container: May burst if heated.

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# HD Life Style VOLUME & SHINE MOUSSE 300ml

## Label elements



### DANGER

H222: Extremely flammable aerosol.

H229: Pressurized container: May burst if heated.

P251: Do not pierce or burn, even after use.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211: Do not spray on an open flame or other ignition source.

P410 + P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P102: Keep out of reach of children.

INGREDIENTS (INCI): Aqua, Butane, VP / VA Copolymer, Propane, Isobutane, Cetrimonium Chloride, Caprylyl (and) capryl Glucoside, Parfum, PEG / PPG-18/18 Dimethicone, Polyquaternium-10, Polyquaternium-11, Lauramine Oxide, DMDM Hydantoin, PEG-40 Hydrogenated Castor Oil, Argania Spinosa Kernel Oil, Amyl Cinnamal.

**Other hazards:** The mixture does not contain substances considered PBT (persistent, bioaccumulative and toxic) and / or very persistent and very bioaccumulative vPvB) in Annex XIII of Regulation 1907 / 2006CE (REACH).

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

**MIXTURE OF SUBSTANCES DEFINED AS LIQUEFIED PETROLEUM GAS (LPG) C3-C4 hydrocarbons (CAS N°68476-40-4; EINECS N° 270-681-9; EC N°649-199-00-9; REACH N° 01-2119486557-22-xxxx): 5% -10%**

Regulation (EC) No. 1272/2008 (CLP):

GHS02 Flam. Gas 1, H220 Extremely flammable gas

GHS04 Press Gas. Gas H280 Contains gas under pressure; may explode if heated.

Full text of hazard symbols and H-phrases of the ingredients are listed in section 16.

## 4 FIRST AID MEASURES

### 4.1 Description of first aid measures

Inhalation:	Not relevant. However in case of illness take away from the contaminated area, if breathing is irregular or stops, make artificial respiration. Do not give drinks or medications to the patient. If the person is unconscious, take the position and seek medical advice.
Eye contact:	In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Seek medical attention if necessary
Skin contact:	Wash with water. If irritation persists, seek medical advice.
Ingestion:	If you were to verify the ingestion, do not induce vomiting, in order to avoid the risk of aspiration of the product into the trachea, with possible pulmonary congestion. Keep at rest. Seek medical advice

4.2 Most important symptoms of both acute and delayed: not available

4.3. Indication of any immediate medical attention and special treatment needed: not available

# HD Life Style VOLUME & SHINE MOUSSE 300ml

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## 5 FIRE FIGHTING MEASURES

- |  |   |
|--|---|
| 5.1 Suitable extinguishing media:                          | Fire extinguishers, powder or foam.   |
| Unsuitable extinguishing media:                            | Do not use water jet. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.  |
| 5.2 Special hazards arising from the substance or mixture: | Excess pressure may form in containers exposed to fire at a risk of explosion. Avoid to breathe combustion products (carbon oxide, toxic pyrolysis products, etc.).   |
| 5.3 Advice for firefighters:                               | Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Keep containers cool by spraying with water if exposed to fire. Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), self-respirator (self-protector). |

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## 6 MEASURES IN CASE OF ACCIDENTAL RELEASE

- |  |   |
|--|---|
| 6.1 Personal precautions, protective equipment and emergency procedures: | Eliminate all sources of ignition (cigarettes, flames, sparks, etc.). In the case of solid product to avoid the formation of dust spraying the product with water if there are no contraindications. If dust or vapors are present use breathing equipment. Stop leak if safe to do so. Do not handle damaged containers or leaked product before donning appropriate protective gear. Keep away unprotected persons. For information on risks for the environment and health, protection of the respiratory airways, ventilation and individual protective measures refer to the other sections of this sheet. |
| 6.2 Environmental precautions:   | Do not discharge into drains/surface waters/groundwater   |
| 6.3 Methods and materials for containment and cleaning up:               | For liquid products, suck into a suitable container (made of material compatible with the product) and soak up the residual product with suitable absorbent material (sand, vermiculite, diatomaceous earth, Kieselguhr, etc.). Collect the majority of the remaining material and deposit in containers for disposal. The disposal of contaminated material must be made in accordance with point 13.  |
| 6.4 Reference to other sections:   | See also section. 8 and 13.   |

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## 7 HANDLING AND STORAGE

- |                                    |   |
|------------------------------------|---|
| 7.1 Precautions for safe handling: | Avoid the accumulation of electrostatic charges.<br>Vapours may ignite with explosion, it is, therefore, necessary to avoid their accumulation keeping the windows and doors opened with adequate ventilation. Without adequate ventilation, the vapors may accumulate and ignite.<br>Open and handle container with care. Pressurized container. Do not pierce or burn the container or tamper with the valve, neither after use. Do not use near open flames or other sources of possible injection. Do not turn on electrical appliances until the vapors have evaporated. |
| 7.2 Conditions for safe storage,   | Keep containers upright and in secure position in order to avoid falls or collisions.   |
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## HD Life Style VOLUME & SHINE MOUSSE 300ml

including any incompatibilities:

Protect from sunlight, heat sources and do not keep at temperatures above 50 ° C. Keep away from oxidising agents and strong acid or alkaline products. Store in places intended for flammable products, with appropriate ventilation and electrical system. The product can accumulate electrostatical charges.

7.3 Specific end uses:

not provided

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

Data refer to the individual ingredients listed in section 3:

**MIXTURE OF SUBSTANCES DEFINED AS LIQUEFIED PETROLEUM GAS (LPG) C3-C4 hydrocarbons (CAS N°68476-40-4; EINECS N° 270-681-9; EC N°649-199-00-9; REACH N° 01- 2119486557-22-xxxx):**

It is suggested to work in conditions of natural or mechanical ventilation to be sure that the gas does not exceed 25% of the LEL (lower explosion limit in air 1.8%).

Dangerous concentrations by professional inhalation are provided by ACGIH TLV 2010 tables as follows:

TLV TWA Average weighted concentration for working day of 8 hours (chronic exposure) to which almost all workers may be repeatedly exposed day after day without adverse effects:

Alkanes C1-C4: 1000 ppm

ACGIH also recommended that the exposure limit values of biologically inert particles, without a value TLV, is maintained below 3 mg / m<sup>3</sup> for the respirable particles; to below 10 mg / m<sup>3</sup> for the inhalable.

For monitoring / control conditions, it is suggested to refer to the current legislation.

Values DNEL (Derived Non Effect) and DMEL (Derived Minimum Effect Level):

Not derived in that the mixture contains no hazardous components for the health.

It is suggested to stick to the values according to the above exposure limits for all applications.

(Refer to Section 15)

Values PNEC (S) (Predicted No Effect Concentration):

PNEC values in water (continuous release):

Not derived as the mixture does not contain hazardous components for the environment

PNEC values in water (intermittent release):

Not derived because the mixture does not contain hazardous components for the environment

PNEC values in soil

Not derived because the mixture does not contain hazardous components for the environment

PNEC values for sedimentation:

Not derived because the mixture does not contain hazardous components for the environment

PNEC values in sewage treatment plants:

Not derived because the mixture does not contain hazardous components for the environment

8.2 personal and environmental exposure control:

Respiratory protection:

Not necessary.

Hand protection:

In general not necessary because it is a cosmetic product that comes in contact with the skin. However in case of prolonged use (professional use) of the product, use protective gloves to work Category I (EN 374)

## HD Life Style VOLUME & SHINE MOUSSE 300ml

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Eye protection:	as latex, PVC or equivalent. For the final choice of work glove material must be considered: degradation, breakage times and permeation. Not necessary, however, in case of prolonged use of this product, use eye protection. (Ref. Standard EN 166).
Skin protection:	Use antistatic clothing, preferably in natural fibers. After contact with the product, all skin wetted parts must be washed.
Thermal hazards:	not available
Environmental exposure controls:	avoid littering

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 General informations:

- appearance:	colorless liquid under pressure (aerosol)
- odour:	scented

### 9.2 Important information on health, safety and the environment:

- pH	not applicable
- Melting point / freezing point:	not available
- Point / boiling range:	not available
- Flash point:	from -104 ° C to -80 ° C (propellant)
- Flammability (solid, gas):	extremely flammable
- Upper / lower flammability limits:	Lim. Inf. 1.8% - Sup. 9.5% vol / vol in the air (propellant)
- Explosive properties:	not available
- Oxidizing properties:	not available
- Vapor pressure:	not available
- relative density:	0.85-0.89 (liquid + propellant)
- Solubility:	
- Water solubility:	partially soluble
- Fat solubility (n-hexane):	partially soluble
- Partition coefficient: (N-octanol / water)	not available
- viscosities	not available
- Vapor density:	not available
- Evaporation rate:	not available
- Auto-ignition temperature	From 400 to 490 ° C (propellant)
- Decomposition temperature	not available

### 9.3 Other information:

VOC (Directive 1999/13 / EC): 20% liquid inside

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## 10 STABILITY AND REACTIVITY

10.1 Reactivity	See sec. 10.4 and 10.6
10.2 Chemical stability	The product is stable if properly stored.
10.3 Possibility of hazardous reactions	See sec. 10.5
10.4 Conditions to avoid:	The aerosol containers overheated to temperatures exceeding 50 ° C., They may deform, burst and be thrown to considerable distances. The preparation is stable at the handling and storage conditions recommended in paragraph HANDLING AND STORAGE.

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## HD Life Style VOLUME & SHINE MOUSSE 300ml

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Avoid overheating, electrostatic discharge and all ignition sources.  
Avoid exposure to sources of heat and open flames.

- 10.5 Incompatible materials: Keep away from oxidizing agents, chemicals or basic products, in order to avoid corrosion of the container.
- 10.6 Hazardous decomposition products: When heated or in case of fire, potentially vapours dangerous to health can be released
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## 11 TOXICOLOGICAL INFORMATION

Acute toxicity Ingestion: Product ingestion is an unlikely event. Any ingestion causes irritation to gastrointerico tract. Other symptoms may be nausea, vomiting.

Acute inhalation toxicity: inhalation of this product is an individual low probability event.

Contact with the skin: the product is a cosmetic suitable for contact with the skin. People allergic to one of the substances listed in INGREDIENTS may have redness

Eye contact: Irritation with redness and tearing phenomena.

The product is not irritating.

### TOXICITY INFORMATION OF INGREDIENTS INDICATED IN SECTION 3:

**MIXTURE OF SUBSTANCES DEFINED AS LIQUEFIED PETROLEUM GAS (LPG) C3-C4 hydrocarbons (CAS N°68476-40-4; EINECS N° 270-681-9; EC N°649-199-00-9; REACH N° 01-2119486557-22-xxxx):**

#### INFORMATION ON TOXICOLOGICAL EFFECTS

Literature data concerning the toxicokinetic studies about the short chain alkanes (C1-C4), show how these alkanes exist in the vapor form at room temperature, and they are poorly absorbed. If the exposure involves an absorption (situation of higher concentrations), the latter would not be particularly relevant: there is little evidence of metabolism, as such mixture if it were absorbed, would normally be quickly exhaled.

In addition the studies, it would appear that the absorption tends to increase with increasing molecular weight.

Unbranched molecules would be more easily absorbed than those branched and the aromatic molecules would be more easily absorbed than paraffin.

The main toxicological studies have been performed on rats.

#### ACUTE TOXICITY

The mixture at room temperature and atmospheric pressure, is presented as a colorless gas.

Consequently the information relating to acute toxicity by the oral and inhalation are not particularly relevant.

#### ACUTE TOXICITY FOR ORAL

According to point 2 of Annex XI of the EC Regulation No. 1907/2006 (REACH), such testing may be omitted because the mixture comes to a gaseous state at atmospheric temperature and pressure.

Extremely volatile and flammable at room temperature, it tends to form explosive mixtures with air. A high risk of fire and explosion would be associated with any significant concentrations in tests.

#### ACUTE TOXICITY BY INHALATION

The vapors may cause narcotic effects.

High inhaled air concentrations can lead to unconsciousness and asphyxiation from lack of oxygen.

For propane:

Key study propane:

LC50 rat (male / female) [15 minutes]: 800,000 ppm

LC50 rat (male / female) [15 minutes]: 14,442,738 mg / m3

LC50 rat (male / female) [15 minutes]: 1443 mg / L

[Source: DG Clark and Tiston DJ (1982)]

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## HD Life Style VOLUME & SHINE MOUSSE 300ml

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For isobutane

Key study isobutane

LC50 rat (male) [2 hours] Gas Phase: 520400

ppm [Source: Aviado (1982)]

For butane

rat LC50 [inhalation]: 658 mg / l 4 h (literature value)

No labeling required - related to substance: Butane

human studies [general population] have shown that the smell is not detectable below 20000 ppm (2%) and a concentration of 100,000 ppm (10%) has produced mild irritation to eyes, nose and respiratory tract but caused slight dizziness within a few minutes [evidenze\_Anon weight of 198, Herman (Chairman 1966)]

### ACUTE TOXICITY DERMAL

According to point 2 of Annex XI of the EC Regulation No. 1907/2006 (REACH), such testing may be omitted because the mixture is a gas at atmospheric temperature and pressure. Extremely volatile and flammable at room temperature, it tends to form explosive mixtures with air. A high risk of fire and explosion would be associated with any significant concentrations in tests.

### CORROSION / IRRITATION

According to point 2 of Annex XI of the EC Regulation No. 1907/2006 (REACH), such testing may be omitted because the mixture is a gas at atmospheric temperature and pressure. Extremely volatile and flammable at room temperature, it tends to form explosive mixtures with air. A high risk of fire and explosion would be associated with any significant concentrations in tests. Contact with liquefied gas can cause cold burns.

### SERIOUS EYE DAMAGE / IRRITATION SERIOUS

According to point 2 of Annex XI of the EC Regulation No. 1907/2006 (REACH), such testing may be omitted because the mixture is a gas at atmospheric temperature and pressure. Extremely volatile and flammable at room temperature, it tends to form explosive mixtures with air. A high risk of fire and explosion would be associated with any significant concentrations in tests. Contact with liquefied gas can cause cold burns.

### RESPIRATORY OR SKIN

SENSITIZATION respiratory sensitization

There are no studies that indicate this type of effect

skin sensitization

According to point 2 of Annex XI of the EC Regulation No. 1907/2006 (REACH), such testing may be omitted because the mixture is a gas at atmospheric temperature and pressure. Extremely volatile and flammable at room temperature, it tends to form explosive mixtures with air. A high risk of fire and explosion would be associated with any significant concentrations in tests. Contact with liquefied gas can cause cold burns

### GERM CELL MUTAGENICITY

Experiments in vitro and on animals, we do not tell no evidence genotoxicity. Moreover the mixture may contain as an impurity 1,3-butadiene in a concentration of less than 0.1%; consequently it is not classified mutagenic in accordance with legislation on hazardous substances.

Information regarding propane

Genetic toxicity in vitro - Key study propane Ames

test in Salmonella typhimurium [OECD 471] No

evidence of mutagenic effects

Metabolic activation: no

Method: Mutagenicity (Salmonella typhimurium - wise reversion)

[Source: Kirwin CJ Thomas and WC (1980)]

Information concerning the Liquefied Petroleum Gas [LPG Key study] Test in vivo

Micronucleus test: rats - inhalation - [OECD Guideline

474] Result: negative

[Source: Huntingdon Life Sciences (HLS), 2009b]

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## HD Life Style VOLUME & SHINE MOUSSE 300ml

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### Carcinogenicity

There is no indication or evidence of carcinogenicity. The present state of knowledge, the test results for mutagenicity and toxicity with repeated administration, we should not expect a carcinogenic effect. Moreover the mixture may contain as an impurity 1,3-butadiene in a concentration of less than 0.1%; consequently it is not classified carcinogenic according to the Dangerous Substances legislation.

### TOXIC TO REPRODUCTION

#### Reproductive toxicity

Literature data revealed no consistent evidence of toxicity for fertility; therefore the mixture is not classified as toxic for reproduction according to the Dangerous Substances legislation.

Here are the information about the individual substances in the mixture:

For propane:

Screening for toxicity inherent in the reproductive / developmental Inhalation rat (male / female)

Number of exposure: daily

NOAEL (No Observed Adverse Effect Level) Parents: 21641 mg /

L NOAEL F1: 21,641 mg / L

Method: OECD Test Guideline 422

In animal studies (422 OECD, research screening) There were no effects that harm fetuses

For isobutane:

Screening for toxicity inherent in the reproductive / developmental

Inhalation rat (male / female)

Number of exposure: daily

NOAEL (No Observed Adverse Effect Level) parents: 7,131 mg / L

NOAEL F1: 21,394 mg / L

Method: OECD Test Guideline 422

For butane:

Screening for toxicity inherent in the reproductive / developmental Inhalation rat (male / female)

Number of exposure: daily

NOAEL (No Observed Adverse Effect Level) Parents: 21,394 mg /

L NOAEL F1: 21,394 mg / L

Method: OECD Test Guideline 422

In animal research (OCSE 422, research screening) there have been no indications of effects that harm fetuses.

Information concerning the Liquefied Petroleum Gas [LPG Key study] in vivo study

Rat - Inhalation Exposure 13 wk., 6h / g., 5g / wk.

OECD Guideline 413 EPA OPPTS 870.4365 (90-

NOAEC: 10000 ppm

(M / F) no effect on the menstrual cycle, spermatogenesis, mobility and sperm count

Source: Huntingdon Life Sciences (HLS), 2009b]

#### Developmental Toxicity / Teratogenicity

Literature data revealed no consistent evidence of developmental toxicity / teratogenicity: the main impurities of the mixture mean that the latter is not classified as toxic for reproduction within the meaning of the Dangerous Substances legislation.

Here are the information about the individual substances in the mixture

For propane

Screening for toxicity inherent in the reproductive / developmental Inhalation rat (male / female)

Number of exposure: daily

NOAEL (No Observed Adverse Effect Level) Parents: 21641 mg /

L NOAEL F1: 21,641 mg / L

Method: OECD Test Guideline 422

In animal research (OCSE 422, research screening) there wasn't indication of effects about harm on fetuses.

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## HD Life Style VOLUME & SHINE MOUSSE 300ml

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For isobutane:

Inhalation rat (male / female)

Number of exposure: daily

NOAEL (No Observed Adverse Effect Level) Parents: 21,394 mg /

L NOAEL maternal: 21,394 mg / L

Method: OECD Test Guideline 422

In animal research (OCSE 422, research screening) there wasn't indication about damage on development.

For butane

Inhalation rat (male / female)

Number of exposure: daily

NOAEL (No Observed Adverse Effect Level) Parents: 21,394 mg /

L NOAEL maternal: 21,394 mg / L

Method: OECD Test Guideline 422

In animal research (OCSE 422, research screening) there wasn't indication about damage on development.

### SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

No information

### SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED

EXPOSURE Oral

According to point 2 of Annex XI of the EC Regulation No. 1907/2006 (REACH), such testing may be omitted because the mixture is a gas at atmospheric temperature and pressure. Extremely volatile and flammable at room temperature, it tends to form explosive mixtures with air. A high risk of fire and explosion would be associated with any significant concentrations in tests.

Cutaneous

According to point 2 of Annex XI of the EC Regulation No. 1907/2006 (REACH), such testing may be omitted because the mixture is a gas at atmospheric temperature and pressure. It is extremely volatile and flammable at room temperature and it tends to form explosive mixtures with air. A high risk of fire and explosion would be associated with any significant concentrations in tests.

Inhalation

Literature data showed no consistent evidence due to inhalation: Literature data about inhalation showed no consistent evidence: the mixture with the main impurities is not classified as toxic according to the Dangerous Substances legislation

Here are the information about the individual substances in the mixture

For propane

From studies conducted for a period of 6 weeks old on male and female rats they were not observed neurological, hematologic or clinical effects. At doses of 12,000 ppm for male animals showed a 25% decrease in weight during the first week of exposure.

The lowest concentration at which adverse effects are observed (LOAEC) in this study is 12,000 ppm (equivalent to 21 641 mg / m<sup>3</sup>).

For isobutane

From studies conducted for a period of 6 weeks old on male and female rats they were not observed neurological, hematologic or clinical effects.

The lowest concentration at which adverse effects are observed (LOAEC) in this study is of 21,394 mg / L

[OECD TG 422] method.

For butane

From studies conducted for a period of 6 weeks on male and female rats they were not observed neurological, hematologic or clinical effects.

The lowest concentration at which adverse effects are observed (LOAEC) in this study is of 21,394 mg / L

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## HD Life Style VOLUME & SHINE MOUSSE 300ml

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[OECD TG 422] method.

The vapors may cause narcotic effects

High concentrations in the air inhaled can lead to unconsciousness and asphyxiation due to lack of oxygen.

### DANGER ASPIRATION

Not applicable. The mixture at room temperature and atmospheric pressure, is a colourless gas.

### FURTHER INFORMATION

Under normal conditions of use, the mixture can be used in safety according to the above.

However, the deliberate abuse of high concentrations of vapor, even for short periods, may result in unconsciousness or prove fatal.

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## 12 ECOLOGICAL INFORMATION

### 12.1 ecotoxicity:

The toxicity of individual ingredients:

**MIXTURE OF SUBSTANCES DEFINED AS LIQUEFIED PETROLEUM GAS (LPG) C3-C4 hydrocarbons (CAS N°68476-40-4; EINECS N° 270-681-9; EC N°649-199-00-9; REACH N° 01- 2119486557-22-xxxx):**

#### Toxicity

current data related to the aquatic toxicity showed no evidence of toxicity phenomena from an ecological point of view and the PNEC (S) were not derived for freshwater, marine water, sediment and soil.

A temperature and atmospheric pressure, the mixture is presented as a gas, colorless, extremely volatile and practically insoluble in water: in accordance with column 2 of Annexes VII and VIII of the REACH Regulation, the acute toxicity tests (acute toxicity to aquatic environment, chronic toxicity in the aquatic environment, toxicity on earth) can not be performed if there are conditions that indicate that aquatic toxicity is unlikely.

As regards the treatment of waste water, no particular actions to be performed because the mixture is, at atmospheric temperature and pressure, in the gaseous state, extremely volatile and practically insoluble in water

#### Toxicity for fish

Given the above mentioned chemical and physical properties of the mixture, literature data have shown no toxicity phenomena because of the volatility.

Information about butane:

Key study butane Fish - Short term QSAR EPA 2008 LC50 96 / h  
24.11 mg / L

#### Toxicity to daphnia

Given the aforementioned physical and chemical characteristics of, mix, literature data have shown no toxicity phenomena improbable because of the volatility.

Information about butane:

Key study butane Daphnia - Short-term USEPA OPP 48 2008 LC50 / h  
14:22 mg / L

#### Algae toxicity

Given the above mentioned chemical and physical properties of the mixture, literature data have shown no toxicity phenomena improbable because of the volatility

#### Toxicity to bacteria

Given the above mentioned chemical and physical properties of the mixture, literature data have shown no toxicity phenomena improbable because of the volatility

Information regarding propane

Ames test Salmonella typhimurium

No evidence of mutagenic effects

Metabolic activation: with or without

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## HD Life Style VOLUME & SHINE MOUSSE 300ml

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Method: Mutagenicity (Salmonella typhimurium - wise reversion)  
Information about the isobutane  
Ames test Salmonella typhimurium  
No evidence of mutagenic effects  
Metabolic activation: S-9 rat liver mix  
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay) reported to isobutane  
Information regarding butane  
Ames test Salmonella typhimurium  
No evidence of mutagenic effects  
Metabolic activation: with or without  
Method: Mutagenicity (Salmonella typhimurium - wise reversion)  
chromosome aberration in vitro human lymphocytes  
not clastogenic  
Metabolic activation: with or without  
Method: OECD Test Guideline 473

Toxicity to living organisms in the soil  
Given the above mentioned chemical and physical properties of the mixture, literature data have shown no toxicity phenomena improbable because of the volatility.

Toxicity to terrestrial plants  
Given the above mentioned chemical and physical properties of the mixture, literature data have shown no toxicity phenomena improbable because of the volatility.

12.2 Mobility in soil: Date not available  
12.3 Persistence and degradability: Date not available.  
12.4 Potential to accumulate: Data not available, the individual ingredients are not bioaccumulative.  
12.5 Results of PBT and vPvB No PBT or vPvB (evaluation done on the individual ingredients)  
12.6 Other adverse effects: not provided

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## 13 DISPOSAL CONSIDERATIONS

The product must not be disposed of with household waste. Do not empty into drains. Disposal of the product must be authorized in place and in compliance with applicable national laws. CONTAINERS not completely empty must be brought to a disposal authorized and equipped to recover the metal container containing flammable gas. The aerosol container superheated to temperatures above 50 ° C may burst even if it contains a small residual gas.

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## 14 TRANSPORT INFORMATION

Road / rail transport ADR / RID (cross-border)

- ADR / RID-GGVS / E: 2 5F Gases
- Kemler Number: -
- UN-Number: 1950
- Packaging group: -
- Label: 2.1
- Description of goods: 1950 AEROSOLS
- Limited quantity (LQ) LQ2
- the Tunnel restriction code D

• Maritime transport IMDG:

- IMDG Class: 2.1
- UN-Number: 1950
- Label 2.1
- Packaging group: -
- EMS Number: F-D, S-U
- Marine pollutant:
- Proper shipping name: AEROSOLS

• Air transport ICAO-TI and IATA-DGR:

- ICAO / IATA: 2.1
-

## HD Life Style VOLUME & SHINE MOUSSE 300ml

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- UN / ID Number: 1950
  - Label 2.1
  - Packaging group: -
  - Correct technical name: AEROSOLS, flammable
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## 15 REGULATORY INFORMATION

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

REGULATION (EC) No. 1223/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 November 2009 on cosmetic products.

Statement Aerosol

Directives: 75 / 324CE - 94/1 EC - 2008 / 47CE - 2013/10 EU

Regulation EC 807/2003

Regulation EC 219/2009

Regulation 1907/2006 / EC (REACH).

Regulation 1272/2008 / EC (CLP) VII ATP

Regulation EC 453/2010

D. lgs. April 9, 2008, n. 81 ACT ON HEALTH AND SAFETY AT WORK (Italy)

This is not an exhaustive list.

15.2 Chemical Safety Assessment

Not applicable

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## 16 FURTHER INFORMATION

Hazard symbols and full text of H-phrases quoted in section 3 of the MSDS for the individual components:

REGULATION EC 1272/2008

GHS02: flame

Flam. Gas 1: Flammable gas Category 1

H220 Extremely flammable gas

GHS04: gas cylinder

Press. Gas: Gas under pressure

H280 Contains gas under pressure, may explode if heated.

MSDS Version 1.0 of 21.06.2016

ABBREVIATIONS and ACRONYMS:

ACGIH = American Conference of Governmental Industrial

Hygienists CSR = Chemical Safety Report

DNEL = Derived No Effect

DMEL = Derived Minimum Effect Level

EC50 = Effective Concentration median

IC50 = inhibitory concentration, 50%

Klimisch = Evaluation criterion for the reliability (reliability) of the method used

LC50 = Lethal concentration, 50%

LD50 = Lethal Dose Media

PNEC = Expected Non Effect Concentration

N.A. = Not applicable

n.d. = Not available

Substance PBT = Persistent, Bioaccumulative and

Toxic CNS = central nervous system

## HD Life Style VOLUME & SHINE MOUSSE 300ml

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= STOT specific target organ toxicity

(STOT) RE Repeated Exposure =

(STOT) SE = Single exposure

Key study = study of greatest relevance

TLV®TWA = Threshold Limit Value - Time Weighted Average

TLV®STEL = Threshold Limit Value - for a short time exposure limit

UVCB = substance from the composition is not known and variable (substances of Unknown or Variable composition)

vPvB = very Persistent and very Bioaccumulative

P = Persistent