Safety Data Sheet ***liquid: red box***

Regulation No. 1907/2006, 1272/2008

Revision: 16.06.2012 *Printing date: 30.06.2012*

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

· ***1.1 Product identifier***
· ***Trade name: RED BOX E-LIQUID – MEDIUM 12 MG/ML NICOTINE***
· ***Article number:*** *Not available*
· ***Reg. number:*** *Not available*
· ***1.2 Relevant identified uses of the substance or mixture and uses advised against:***
· ***Application of the substance / the preparation:*** *in electronic cigarettes only*
· ***1.3 Details of the supplier of the safety data sheet***
VALEO LABORATORIES GMBH
ZUM WESTBLICK 19
25770 LIETH
GERMANY
TEL: +49 481 787655 16
FAX:+49 481 787 655 17
· ***Only Representative / other EU contact point:*** *MRS ILONKA PAUL*
· ***Telephone number:*** *+49 481 787 655 16*
· ***Further information obtainable from:*** *VALEO LABORATORIES GMBH*
· ***1.4 Emergency telephone number:*** *Tel: +49 481 787 655 16*

2 Hazards identification

· ***2.1 Classfication of the substance or mixture:***
· ***Hazard description:***
T Toxic

· ***Information concerning particular hazards for human and environment:***
The product has been classified as dangerous according to Directive 67/548/EEC, 1999/45/EC and Regulation (EC) No. 1272/2008.
R 22 Harmful if swallowed.
R 24 Toxic in contact with skin.
· ***Classification system:***
The classification is according to the latest edition of the Directive 67/548/EEC , 1999/45/EC and Regulation (EC) No. 1272/2008, and extended by company and literature data.
· ***2.2 Label elements:***
· ***GHS label elements:***
Danger
3.1/3 - Toxic in contact with skin.
3.1/4 - Harmful if swallowed.

· ***Prevention:***
Wear protective gloves/protective clothing/eye protection/face protection.
· ***Response:***
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Specific measures (see on this label).
Remove/Take off immediately all contaminated clothing.
· ***Storage:***
Store locked up.
· ***Disposal:***
Dispose of contents/container in accordance with local/regional/national/international regulations.
· ***2.3 Other hazards:*** *Not available*

3 Composition/information on ingredients

· **3.1 Substance:** *Not aplicable. Please refer to 3.2 for more information.*
· **3.2 Mixture:** *Please view below*
· **Chemical characterization**
· **Description:**
Mixture of the substances listed below with nonhazardous additions.
For the wording of listed risk phrases refer to section 16.

· **Dangerous components:**

CAS: 64-17-5	Ethanol - CH_3CH_2OH R 11, S (2)-7-16	0,95 %
CAS: 54-11-5 EINECS: 200-193-3 EU number: 614-001-00-4	nicotine T+, N; R 25-27-51/53 Danger: 3.1.O/3, 3.1.D/1 4.1.C/2	1,2%

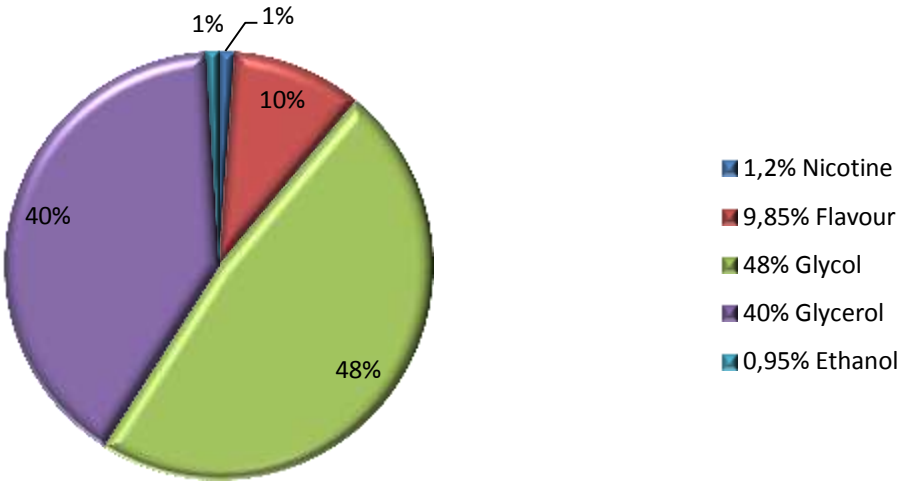
Non dangerous components

CAS: 57-55-6 EINECS: 200-338-0	propane-1,2-diol	48,0%
CAS: 86-51-5	glycerol	40,0 %

Third party components

Foodgrade Flavour	red box	9,85 %

Ingredients - Overview



Remark:

Nicotine(CAS No. :54-11-5)
Synonym:L-Nicotine;

Pyrazin-1-ylethan-1-one(CAS No. :22047-25-2)
Synonym:2-acetylpyrazine

2-hydroxy-3-methylcyclopent-2-enone(CAS No. :80-71-7)

Propane-1,2-diol(CAS No. :57-55-6)

Synonym:1,2-propylene glyco.

First aid measures

· ***4.1 Description of first aid measures:***
· ***General information:***
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· ***After inhalation:*** *In case of unconsciousness place patient stably in side position for transportation.*
· ***After skin contact:*** *Immediately wash with water and soap and rinse thoroughly.*
· ***After eye contact:*** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
· ***After swallowing:*** *Call for a doctor immediately.*
· ***Information for doctor:***
· ***The following symptoms may occur:*** *Not available*
· ***Hazards*** *Not available*
· ***Treatment*** *Not available*
· ***4.2 Most important symptoms and effects, both acute and delayed:*** *Not available*
· ***4.3 Indication of any immediate medical attention and special treatment needed:*** *Not available*

5 Firefighting measures

· ***5.1 Extinguishing media:***
· ***Suitable extinguishing agents:*** *Use fire extinguishing methods suitable to surrounding conditions.*
· ***5.2 Special hazards arising from the substance or mixture:*** *Not available*
· ***Protective equipment:*** *No special measures required.*
· ***5.3 Advice for firefighters:*** *Not available*

6 Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures:*** *Not available*
· ***6.2 Environmental precautions:***
Do not allow product to reach sewage system or any water sourse.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· ***6.3 Methods and material for containment and cleaning up:***
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· ***6.4 Reference to other sections:*** *Not available*

7 Handling and storage

· **7.1 Precautions for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:** No special measures required.
· **7.2 Conditions for safe storage, including any incompatibilities:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep container tightly sealed.
· **Incompatibilities:** Not available

· **7.3 Specific end use(s):** Not available

8 Exposure controls/personal protection

· **8.1 Control parameters:**
· **Additional information about design of technical facilities:** No further data; see item 7.

· Ingredients with limit values that require monitoring at the workplace:	
57-55-6 propane-1,2-diol	
WEL (Great Britain)	474* 10** mg/m³, 150* ppm
MAK (Germany)	*total vapour and particulates **particulates vgl.Abschn.IIb
54-11-5 nicotine	
WEL (Great Britain)	Short-term value: 1,5 mg/m³
AGW (Germany)	Long-term value: 0,5 mg/m³
VME (France)	Sk 0,5 mg/m³ 2(II);EU, 13, H 0,5 mg/m³ Risque de pénétration percutanée

· **Additional information:** The lists valid during the making were used as basis.
· **8.2 Exposure controls:**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Protection of hands:**

Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves:**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality

and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· ***Penetration time of glove material:***
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· ***Eye protection:*** *Goggles recommended during refilling*

Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties:***

· *.Form:* ***Clear liquid***
· *Colour:* ***transparent to pale yellow***
· *Odour:* ***Sweet/fruity***
· *Change in condition*
Melting point/Melting range: ***Not available***
Boiling point/Boiling range: ***> 250°C***
· *Freezing point:* ***-65° C***
· *Flash point:* ***171°C***
· *Flammability (solid, gaseous):* ***Not available***
· *Ignition temperature:* ***Not available***
· *Decomposition temperature:* ***Not available***
· *Self-igniting:* ***Product is not selfigniting.***
· *Danger of explosion:* ***Product does not present an explosion hazard.***
· *Explosion limits:*
Lower: ***Not available***
Upper: ***Not available***
· *Oxidizing properties* ***Not available***
· *Density:* ***1,125 g/cm³***
· *Relative density* ***Not available***
· *Vapour density* ***>1 vs aih***
· *Evaporation rate* ***Not available***
· *Solubility in / Miscibility with water:* ***50 mg/ml***
· *pH-value:* ***Not available***

· *Partition coefficient (n-octanol/water):* ***Not available***

· *Viscosity:*

Dynamic at 20°C: ***1412 mPas***

· *Auto-ignition temperature:* ***421.1° C***

· *9.2 Other information:* ***Not available***

10 Stability and reactivity

· ***10.1 Reactivity:*** *No decomposition if used according to specifications.*
· ***10.2 Chemical stability:*** *Not available*
· ***10.3 Possibility of hazardous reactions:*** *Not available*
· ***10.4 Conditions to avoid:*** *Not available*
· ***10.5 Incompatible materials:*** *Not available*
· ***Materials to be avoided:***
· ***Dangerous reactions:*** *No dangerous reactions known.*
· ***10.6 Hazardous decomposition products:*** *Not available*

11 Toxicological information

· ***11.1 Information on toxicological effects:***

· ***Acute toxicity***

· *LD/LC50 values relevant for classification:*

121-33-5 vanillin		
Oral	*LD50*	*1580 mg/kg (rat)*
54-11-5 nicotine		
Oral	*LD50*	*50 mg/kg (rat)*
Dermal	*LD50*	*50 mg/kg (rat)*
57-55-6 propane-1,2-diol		
Oral	*LD50*	*2000 mg/kg (rat)*
Dermal	*LD50*	*20800 mg/kg (rabbit)*

· ***Primary irritant effect***
· ***on the skin:*** *Irritating effect possible.*
· ***on the eye:*** *Irritating effect possible.*
· ***Sensitization:*** *Sensitization possible through skin contact.*
· ***Additional toxicological information:***
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Toxic
Harmful
· ***Toxicokinetics, metabolism and distribution:*** *Not available*
· ***Acute effects (acute toxicity, irritation and corrosivity):*** *Not available*
· ***Repeated dose toxicity:*** *Not available*

12 Ecological information

· ***12.1 Toxicity:*** *Not available*
· ***12.2 Persistence and degradability:*** *Not available*
· ***12.3 Bioaccumulative potential:*** *Not available*
· ***12.4 Mobility in soil:*** *Not available*
· ***12.5 Results of PBT and vPvB assessment:*** *Not available*
· ***12.6 Other adverse effects:*** *Not available*
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

· ***13.1 Waste treatment methods:***

· ***Product***
· ***Recommendation:***
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
· ***Uncleaned packaging***
· ***Recommendation:*** *Disposal must be made according to official regulations.*

14 Transport information

· **14.1 Land transport ADR/RID (cross-border)**
· **14.1.1 ADR/RID class:** *6.1 Toxic substances.*
· **Danger code (Kemler):** *60*
· **14.1.2 UN-Number:** *2810*
· **14.1.3 Packaging group:** *III*
· **14.1.4 Description of goods:** *2810 TOXIC LIQUID, ORGANIC, N.O.S. (NICOTINE, vanillin)*
· **Limited quantities (LQ):** *LQ7*
· **Transport category:** *2*
· **Tunnel restriction code:** *E*

· **14.2 Maritime transport IMDG**
· **14.2.1 IMDG Class:** *6.1*
· **14.2.2 UN Number:** *2810*
· **Label:** *6.1*
· **14.2.3 Packaging group:** *III*
· **EMS Number:** *F-A,S-A*
· **Marine pollutant:** *No*
· **14.2.4 Proper shipping name:** *TOXIC LIQUID, ORGANIC, N.O.S. (NICOTINE, vanillin)*

· **14.3 Air transport ICAO-TI and IATA-DGR**
· **14.3.1 ICAO/IATA Class:** *6.1*
· **14.3.2 UN/ID Number:** *2810*
· **Label:** *6.1*
· **14.3.3 Packaging group:** *III*
· **14.3.4 Proper shipping name:** *TOXIC LIQUID, ORGANIC, N.O.S. (NICOTINE, vanillin)*

· **UN "Model Regulation":** *UN2810, TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III*
· **14.4 Environmental hazards:** *Not available*
· **14.5 Special precautions for users:** *Not available*
· **14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** *Not available*

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

· Sara	
· Section 335(extremely hazadous substances):	
54-11-5	*nicotine*
· Section 313(specific toxic chemical listings):	
54-11-5	*nicotine*
· TSCA(Toxic Substances Control Act):	
57-55-6	*propane-1,2-diol*
54-11-5	*nicotine*

· *Proposition 65*

· *Chemical known to cause cancer:*

None of the ingredients is listed.

· *Chemicals known to cause reproductive toxicity for females:*

None of the ingredients is listed.

· *Chemicals known to cause reproductive toxicity foe males:*

None of the ingredients is listed.

· *Chemicals known to cause developmental toxicity:*

54-11-5 nicotine

· *Cancerogenity categories*

· *EPA(Environmental Protection Agency)*

None of the ingredients is listed.

· *IARC(International Agency for Research on Cancer)*

None of the ingredients is listed.

· *NTP(National toxicology Program)*

None of the ingredients is listed.

· *TLV(Threshold Limit Value established by ACGIH)*

None of the ingredients is listed.

· *MAK(German Maximum Workplace Concentration)*

None of the ingredients is listed.

· *NIOSH-Ca(National Institution for Occupational Safety & Health)*

None of the ingredients is listed.

· *OSHA-Ca(Occupational Safety & Health Administration)*

None of the ingredients is listed.

· ***Labelling according to EU guidelines:***
The product has been classified as dangerous according to Directive 67/548/EEC, 1999/45/EC and Regulation (EC) No. 1272/2008.
· ***Code letter and hazard designation of product:***
T Toxic

· ***Hazard-determining components of labelling:***
nicotine
· ***Risk phrases:***
22 Harmful if swallowed.
24 Toxic in contact with skin.
· ***Safety phrases:***
1/2 Keep locked up and out of the reach of children.
29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
· ***National regulations***
· ***Candidate List of Substances of very high concern (SVHC) according to ECHA (18/06/2010)***
None of the igredients is listed
· ***REACH Regulation Annex XVII Restriction List*** *None of the igredients is listed*
· ***REACH Regulation Annex XIV Authorization Recommendation List*** *None of the igredients is listed*
· ***15.2 Chemical safety assessment:*** *Not available*

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The contents and format of this MSDS/SDS are in according with REGULATION(EC) No. 1272/2008, (EC) No. 1907/2006, EU Commission Directive 1999/45/EC, 67/548/EEC.
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· ***Relevant R-phrases***
11 Highly flammable.
22 Harmful if swallowed.
25 Toxic if swallowed.
27 Very toxic in contact with skin.
36/37/38 Irritating to eyes, respiratory system and skin.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· ***Abbreviations and acronyms:***

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
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End of report