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

1.1. Product identifier	
Trade name:	E-Liquid
Proper shipping name:	No data available
Other means of identification:	No data available

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

#### 1.2.1. Relevant identified uses

USING FOR ELECTRONIC CIGARETTE.

#### 1.2.2. Uses advised against

Advice against other uses

1.3. Details of the supplier of the safety data sheet					
Supplier:	Ritchy Group Limited.				
Address:	Room 805, Beverly House, 93-107 Lockhart Road, Wanchai, Hong Kong.				
Telephone:	852 2520 0826				
Fax:	852 2520 0079				
E-mail:	info@goritchy.com				
Importer:					
Address:					
Telephone:					
Fax:					
Email:					

#### 1.4. Emergency telephone number

Country	Advisory body	Address	Emergency number			
SECTION 2: Hazards identification						

#### 2.1. Classification of the substance or mixture

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

Classification	Category	Exposure Route		
Acute toxicity	2	-		

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Risk codes	Risk phrases
R27	Very toxic in contact with skin.

#### Other adverse physicochemical, human health and environmental effects

No reliable data available.

#### 2.2. Label elements

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

Hazard pictogram:



Signal word:	Danger
Hazard Statements:	H310: Fatal in contact with skin.

#### **Precautionary Statements:**

According to Regulation (EC) No. 453/2010

Prevention:	P262: Do not get in eyes, on skin, or on clothing.			
	P264: Wash thoroughly after handling.			
	P270: Do not eat, drink or smoke when using this product.			
	P280: Wear protective gloves/protective clothing/eye protection/face protection.			
Response:	P302+350: IF ON SKIN: Gently wash with plenty of soap and water.			
	P310: Immediately call a POISON CENTER or doctor/physician.			
	P361: Remove/Take off immediately contamined clothing and skin with plenty of water before removing clothes.			
	P363: Wash contaminated clothing before reuse.			
Storage:	P405: Store locked up.			
Disposal:	P501 Dispose of contents/container in accordance with local/regional/national/international regulation.			

#### 2.3. Other hazards

No reliable data available.

#### **SECTION 3: Composition/information on ingredients**

3.1. Substances

#### Not applicable

#### 3.2. Mixtures

Name	CAS No.	EC No.	Index No.	REACH No.	% wt/wt	Classification according to CLP	Classification according to DSD
Propylene Glycol	57-55-6	200-338-0	-	-	75	Not classified	Not classified
Vegetable Glycerol	56-81-5	200-289-5	-	-	18.6	Not classified	Not classified
FoodFlavor	8037-19-2	-	-	-	4	Acute toxicity category 1;H310 Acute toxicity category 4;H302 Aquatic Chronic category 3;H412	T+; R27 Xn; R22 R52-53
Nicotine	54-11-5	200-193-3	614-001- 00-4	-	2.4	Acute toxicity category 1;H310 Acute toxicity category 3;H301 Aquatic Chronic category 2;H411	T+; R27 T; R25 N; R51-53

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.

Eye contact: Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Get medical attention.

Ingestion: Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention.

Advice for the doctor: Symptomatic treatment.

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

Fatal in contact with skin.

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

No reliable data available.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media:

Foam.

Dry chemical powder.

Carbon dioxide.

BCF(Where regulations permit)

#### 5.2. Special hazards arising from the substance or mixture

Fire/explosion hazard: Emits toxic fumes under fire conditions.

Main combustion gas: carbon monoxide and carbon dioxide gases.

#### 5.3. Advice for firefighters

Alert Fire Brigade and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water courses.

Use water delivered as a fine spray to control fire and cool adjacent area.

DO NOT approach containers suspected to be hot.

According to Regulation (EC) No. 453/2010

Cool fire exposed containers with water spray from a protected location.

If safe to do so, remove containers from path of fire.

#### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Wear suitable protective equipment.

#### 6.1.2. For emergency responders

Remove ignition sources and provision of sufficient ventilation, evacuate the danger area and consult experts.

#### 6.2. Environmental precautions

Take precautions to prevent entry into waterways, sewers, or surface drainage systems. Dispose according to local or international regulations.

#### 6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled solid in suitable container for recovery or disposal, avoid splashing.

#### 6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the MSDS

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Avoid ingestion, inhalation, skin and eye contact. Minimize spill and splashing. Handle in accordance with good industrial hygiene practice and any legal requirements.

#### 7.2. Conditions for safe storage, including any incompatibilities

Suitable container: Lined metal can. Lined metal drum. Lined metal safety cans.

Storage incompatibility: Avoid reaction with oxidizing agents.

#### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as is practically possible and occupational exposure must be kept to a minimum.

Substance	Propane-1,2-diol, total vapour & particulates
CAS No.	57-55-6

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Australia	150	474		
Canada - Ontario	50	155		
New Zealand	150 (1)	474		
		10 (1)		
United Kingdom	150	474		
Substance		Glyd	cerol, mist	
CAS No.		5	6-81-5	
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Australia		10 (1)		
Austria				
Belgium		10		

## Safety Data Sheet According to Regulation (EC) No. 453/2010

Canada - Ontario	10	
Canada - Québec	10	
France	10	
Germany (AGS)		
Germany (DFG)	50 inhalable aerosol	100 inhalable aerosol
New Zealand	10 (1)	
Poland	10	
Singapore	10	
Spain	10	
Sweden		
Switzerland	50 inhalable aerosol	100 inhalable aerosol
USA - OSHA	15 inhalable dust	
	5 respirable dust	
United Kingdom	10	
Substance	Nicotine	
CAS No.	54-11-5	

Limit value - Eight hours

Limit value - Short term

	ppm	mg/m³	ppm	mg/m³
Australia		0,5		
Austria	0,07	0,5	0,28	2
Belgium		0,5		
Canada - Ontario		0,5		
Canada - Québec		0,5		
Denmark		0,5		1
European Union		0,5		
France		0,5		
Germany (AGS)		0,5		1 (1)
Germany (DFG)				
Hungary		0,5		
Italy		0,5		
Japan				
New Zealand		0,5		
Poland		0,5		
Singapore		0,5		
Spain		0,5		
Sweden				
Switzerland	0,07	0,5	0,14	1
The Netherlands		0,5		
USA - NIOSH		0,5		
USA - OSHA		0,5		

EN (English)

According to Regulation (EC) No. 453/2010

United Kingdom

0,5

## 8.2. Exposure controls

Appropriate engineering controls Use: process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

General Personal Protection: Safety goggles or face shield, protective chemical resistant gloves, protective clothing.

SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and chemical properties			
Physical state:	Liquid		
Colour:	No data available		
Odour:	No data available		
Oduour threshold	No data available		
pH:	No data available		
Melting point:	No data available		
Boiling point:	No data available		
Flash point:	No data available		
Evapotation rate:	No data available		
Flammability:	No data available		
Explosive limits:	No data available		
Vapour pressure:	No data available		
Relative density:	No data available		
Solubility(ies):	No data available		
Partition coefficient: n-octanol/water:	No data available		
Auto/self-ignition temperature:	No data available		
Viscosity:	No data available		
Explosive properties:	No data available		
Oxidising properties:	No data available		

#### 9.2. Other information

No additional data available.

SECT	ION 10: Stability and reactivity
10.1.	Reactivity
See sec	tion 7.2
10.2.	Chemical stability
Stable u	Inder normal condition.
10.3.	Possibility of hazardous reactions
See sec	stion 7.2
10.4.	Conditions to avoid
Strong a	acid, alkali and oxidizing agents.
10.5.	Incompatible materials
See sec	tion 7.2
10.6.	Hazardous decomposition products
Therma	I decomposition products: carbon monoxide and carbon dioxide gases.
SECT	ION 11: Toxicological information
11.1.	Information on toxicological effects
	Dropulano Olygoli

TI.I. Information on toxicological effects	
Acute toxicity:	Propylene Glycol: LD <sub>50</sub> (Oral, Rat): 22000 mg/kg bw LD <sub>50</sub> (Dermal, rabbit): > 2000 mg/kg bw Vegetable Glycerol: LD <sub>50</sub> (Oral, Rat): 27 mg/kg bw; L(Ct) <sub>50</sub> (inhalation, Rat): 4655 mg-min/liter LD <sub>50</sub> (dermal, guinea pig): 45 mL/kg bw
Skin corrosion/irritation:	Propylene Glycol: Skin irritation: not irritating (OECD TG 404) Vegetable Glycerol: Skin irritation: not irritating

According to Regulation (EC) No. 453/2010

Serious eye damage/irritation:	Propylene Glycol: Eye irritation: not irritating Vegetable Glycerol: Eye irritation: not irritating	
Respiratory or skin sensitisation:	Propylene Glycol: Skin sensitisation: not sensitising Vegetable Glycerol: Skin sensitisation: not sensitising	
Germ cell mutagenicity:	Propylene Glycol: Negative Vegetable Glycerol: Negative	
Carcinogenicity:	Propylene Glycol: NOAEL: 1700 mg/kg bw/day	
Reproductive toxicity:	No data available	
Specific target organ toxicity (single exposure):	No data available	
Specific target organ toxicity (repeated exposure):	No data available	
Aspiration hazard:	No data available	

#### **SECTION 12: Ecological information**

12.1.

Toxicity

Acute (short-term) toxicity: Propylene Glycol:

Fish (Oncorhynchus mykiss, 96h): LC<sub>50</sub>: 40613 mg/L

Crustacea(Ceriodaphnia dubia, 48h): LC<sub>50</sub> : 18340 mg/L

Toxicity to microorganisms (Skeletonema costatum, 72h): EC<sub>50</sub>: 19300 mg/L (OECD TG 201)

Vegetable Glycerol:

Fish (Oncorhynchus mykiss, 96h): LC<sub>50</sub>: 54000 mg/L

Crustacea (Daphnia magna, 48h): LC<sub>50</sub>: 1955 mg/L

Aquatic algae and cyanobacteria (Scenedesmus quadricauda, 8d): EC3: > 10000 mg/L

#### 12.2. Persistence and degradability

#### Propylene Glycol:

Abiotic Degradation: No data available Physical- and photo-chemical elimination: No data available

Biodegradation: readily biodegradable 12.3. **Bioaccumulative potential** 

No data available 12.4. Mobility in soil

No data available

Results of PBT and vPvB assessment 12.5.

No data available.

Other adverse effects 12.6.

No data available.

#### SECTION 13: Disposal considerations

#### Waste treatment methods 13.1.

Product disposal: Observe specific national regulation.

Contaminated packaging: Contaminated, empty containers must be disposed of as chemical waste.

SECTION 14: Transport information				
Land transport (ADR / RID / GGVSE)				
14.1 UN number	No data available	14.4 Packing group	No data available	
14.2 UN proper shipping name	No data available	14.5 Environmental hazard	No data available	
14.3 Transport hazard class(es)	No data available	14.6. Special precautions for user	No data available	

#### Air transport (ICAO-IATA / DGR)

14.1 UN number	No data available	14.4 Packing group	No data available
14.2 UN proper shipping	No data available	14.5 Environmental hazard	No relevant data
name		14.6 Special precautions for user	No data available
14.3 Transport hazard class(es)	No data available		

According to Regulation (EC) No. 453/2010

# Sea transport (IMDG-Code / GGVSee) 14.1 UN number No data available 14.4 Packing group No data available 14.2 UN proper shipping name No data available 14.5 Environmental hazard No data available 14.3 Transport hazard class(es) No data available 14.6 Special precautions for user No data available

#### Inland waterways transport (ADNR/River Rhine)

14.1 UN number	No data available	14.4 Packing group	No data available
14.2 UN proper shipping name	No data available	14.5 Environmental hazard	No data available
		14.6 Special precautions for user	No data available
14.3 Transport hazard class(es)	No data available		

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

No data available

#### SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

This safety data sheet is in compliance with the following EU legislation and its adaptations – as far as applicable - 67/548/EEC, 1999/45/EC, Regulation (EC) No 1272/2008, Regulation (EC) No. 453/2010; Regulation (EC) No 1907/2006, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC and 1999/13/EC.

#### 15.1.2. International/National regulations

No data available.

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance by the supplier.

#### **SECTION 16: Other information**

#### 16.1 Indication of changes

No data available

#### 16.2 Key literature references and sources for data

ESIS (European chemical Substances Information System), http://esis.jrc.ec.europa.eu/

- REACH registered chemicals, http://echa.europa.eu/chem\_data\_en.asp

- IFA GESTIS - International limit values for chemical agents - occupational exposure limits (OELs), http://www.dguv.de/ifa/en/gestis/limit\_values/index.jsp

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.