

according to Regulation (EC) No 1907/2006

**R2Y2 (6 mg Nicotine)**

Print date: 05.02.2015

Product code:

Page 1 of 8

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

R2Y2 (6 mg Nicotine)

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

To use in electronic cigarettes.

**Uses advised against**

not determined

**1.3. Details of the supplier of the safety data sheet**

Company name:	Flavourtec Sp. z o.o.	
Street:	Poleska 25	
Place:	PL-81-321 Gdynia	
Telephone:	+48 796 288 685	
Responsible Department:	Dr. Timo Gans-Eichler Chemieberatung Raesfeldstr. 22 48149 Münster	e-mail: info@tge-consult.de Tel.: +49 (0)251/924520-60 www.tge-consult.de

**1.4. Emergency telephone number:**

+48 796 288 685

**SECTION 2: Hazards identification**
**2.1. Classification of the substance or mixture**

Indications of danger: Xn - Harmful

R phrases:

Harmful in contact with skin.

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

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

**2.2. Label elements**
**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
200-193-3	3-(N-methyl-2-pyrrolidiny)pyridine, nicotine (ISO)	
54-11-5	T+ - Very toxic, T - Toxic, N - Dangerous for the environment R25-27-51-53	< 1 %
	Acute Tox. 1, Acute Tox. 2, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 2; H300 H310 H400 H411	

Full text of R-, H- and EUH-phrases: see section 16.

**Further Information**

Product does not contain listed SVHC substances.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**R2Y2 (6 mg Nicotine)**

Print date: 05.02.2015

Product code:

Page 2 of 8

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).

**After inhalation**

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment. Change contaminated clothing.

**After contact with eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of skin irritation, seek medical treatment. In all cases of doubt, or when symptoms persist, seek medical advice.

**After ingestion**

Rinse mouth thoroughly with water. Let water be swallowed in little sips (dilution effect). Make affected person vomit if conscious. Immediately call a POISON CENTER or doctor/physician.

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

No information available.

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

First Aid, decontamination, treatment of symptoms.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Extinguishing materials should be selected according to the surrounding area. Carbon dioxide (CO<sub>2</sub>). Dry extinguishing powder. alcohol resistant foam. Atomized water.

**Unsuitable extinguishing media**

High power water jet.

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

In case of fire and/or explosion do not breathe fumes.

Can be released in case of fire: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide. Nitrogen oxides (NO<sub>x</sub>).

**5.3. Advice for firefighters**

Protective respiration apparatus not using surrounding air (breathing apparatus) (DIN EN 133). Wear protective gloves/protective clothing. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Ventilate affected area. See protective measures under point 7 and 8. Avoid contact with skin, eye and clothing.

**6.2. Environmental precautions**

Cover drains. Do not empty into drains or the aquatic environment. Avoid release to the environment. Inform competent authorities in case of accidental release. (Larger quantities)

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

Suitable absorbing material: Sand. Chemical bond, acidic. sawdust. diatomaceous earth. Remove

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**R2Y2 (6 mg Nicotine)**

Print date: 05.02.2015

Product code:

Page 3 of 8

mechanically, placing in appropriate containers for disposal. Ventilate affected area.

**6.4. Reference to other sections**

See protective measures under point 7 and 8.

**SECTION 7: Handling and storage**
**7.1. Precautions for safe handling**
**Advice on safe handling**

Avoid contact with skin, eye and clothing. Wear personal protection equipment. Refer to chapter 8.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Further information on handling**

No information available.

**7.2. Conditions for safe storage, including any incompatibilities**
**Requirements for storage rooms and vessels**

Keep/Store only in original container.

Keep the packing dry and well sealed to prevent contamination and absorption of dampness.

Recommended storage temperature: 20°C

**Advice on storage compatibility**

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances.

Infectious substances. Food and animal feedingstuff.

**Further information on storage conditions**

Protect against: Light. UV-radiation/sunlight. heat. moisture.

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
54-11-5	Nicotine	-	0.5		TWA (8 h)	WEL
		-	1.5		STEL (15 min)	WEL
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

**8.2. Exposure controls**
**Appropriate engineering controls**

In case of open handling, use devices with built-in suction where possible.

**Protective and hygiene measures**

Always close containers tightly after the removal of product. Avoid contact with skin, eye and clothing.

Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work. Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use.

**Eye/face protection**

Wear safety glasses; chemical goggles (if splashing is possible).

**Hand protection**

Avoid contact with skin.

For prolonged or repeated skin contact use suitable protective gloves.

Suitable gloves type:

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### R2Y2 (6 mg Nicotine)

Print date: 05.02.2015

Product code:

Page 4 of 8

penetration time (maximum wearing period): 8 h

Butyl rubber. (0,5 mm)

FKM (fluororubber). (0,4 mm)

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

In case of reutilization, clean gloves before taking off and store in well-aired place.

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection required in case of:

Generation/formation of aerosols

exceeding critical value

Suitable respiratory protective equipment: Combination filter device (DIN EN 141).. Type A/P2-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

Only use breathing apparatus with CE-label including the four-digit identification number.

#### Environmental exposure controls

Do not allow uncontrolled leakage of product into the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	not determined
Odour:	characteristic

#### Test method

pH-Value:	not determined
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#### Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Flash point:	not determined

#### Explosive properties

Product itself is not explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined

#### Oxidizing properties

none/none

Vapour pressure:	not determined
Vapour pressure:	not determined
Density:	not determined
Bulk density:	not determined
Water solubility:	not determined
Partition coefficient:	not determined

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**R2Y2 (6 mg Nicotine)**

Print date: 05.02.2015

Product code:

Page 5 of 8

Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Flow time:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent content:	No data available

**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

No information available.

**10.2. Chemical stability**

Stable under normal storage and handling conditions.

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

Protect against: UV-radiation/sunlight. heat.

**10.5. Incompatible materials**

Materials to avoid: Reducing agents. Oxidizing agents.

**10.6. Hazardous decomposition products**

 Can be released in case of fire: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide. Nitrogen oxides (NO<sub>x</sub>).

**SECTION 11: Toxicological information**
**11.1. Information on toxicological effects**
**Toxicokinetics, metabolism and distribution**

No information available.

**Acute toxicity**

Based on available data, the classification criteria are not met.

**Acute toxicity**

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
54-11-5	3-(N-methyl-2-pyrrolidiny)pyridine, nicotine (ISO)				
	oral	LD50	50 mg/kg	Rat.	GESTIS
	dermal	LD50	50 mg/kg	Rabbit.	GESTIS

**Irritation and corrosivity**

Based on available data, the classification criteria are not met.

Irritant effect on the skin: Not an irritant.

Irritant effect on the eye: Not an irritant.

**Sensitising effects**

Based on available data, the classification criteria are not met.

Product is: no danger of sensitization. The statement is derived from the properties of the components.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**Severe effects after repeated or prolonged exposure**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

according to Regulation (EC) No 1907/2006

**R2Y2 (6 mg Nicotine)**

Print date: 05.02.2015

Product code:

Page 6 of 8

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Specific effects in experiment on an animal**

No data available

**SECTION 12: Ecological information**
**12.1. Toxicity**

CAS No	Chemical name	Method	Dose	[h]   [d]	Species	Source
54-11-5	3-(N-methyl-2-pyrrolidinyl)pyridine, nicotine (ISO)					
	Acute fish toxicity	LC50	4 mg/l	96 h		GESTIS
	Acute crustacea toxicity	EC50	0,24 mg/l	48 h		GESTIS

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**
**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
54-11-5	3-(N-methyl-2-pyrrolidinyl)pyridine, nicotine (ISO)	1,17

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

This substance does not meet the criteria for classification as PBT or vPvB.

**12.6. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations**
**13.1. Waste treatment methods**
**Advice on disposal**

Waste disposal according to official state regulations. Cleaned containers may be recycled.

**Waste disposal number of waste from residues/unused products**

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing dangerous substances  
Classified as hazardous waste.

**Waste disposal number of used product**

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing dangerous substances  
Classified as hazardous waste.

**Waste disposal number of contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances  
Classified as hazardous waste.

**Contaminated packaging**

Handle contaminated packaging in the same way as the substance itself.

**SECTION 14: Transport information**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**R2Y2 (6 mg Nicotine)**

Print date: 05.02.2015

Product code:

Page 7 of 8

**Land transport (ADR/RID)**
**Other applicable information (land transport)**

Not a hazardous material with respect to these transportation regulations.

**Inland waterways transport (ADN)**
**Other applicable information (inland waterways transport)**

Not a hazardous material with respect to these transportation regulations.

**Marine transport (IMDG)**
**Other applicable information (marine transport)**

Not a hazardous material with respect to these transportation regulations.

**Air transport (ICAO)**
**Other applicable information (air transport)**

Not a hazardous material with respect to these transportation regulations.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

refer to chapter 6-8

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

irrelevant

**SECTION 15: Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
**EU regulatory information**

1999/13/EC (VOC): No data available

**Additional information**

The preparation is dangerous in the sense of Directive 1999/45/EC.

This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [GHS].

**National regulatory information**

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 2 - water contaminating

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**
**Changes**

Rev 1,00 Initial release 03.02.2015

**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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**R2Y2 (6 mg Nicotine)**

Print date: 05.02.2015

Product code:

Page 8 of 8

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed effect level

**Relevant R-phrases (Number and full text)**

- |    |   |
|----|---|
| 25 | Toxic if swallowed.   |
| 27 | Very toxic in contact with skin.                                |
| 51 | Toxic to aquatic organisms.                                     |
| 53 | May cause long-term adverse effects in the aquatic environment. |

**Relevant H- and EUH-phrases (Number and full text)**

- |      |  |
|------|--|
| H300 | Fatal if swallowed.                              |
| H310 | Fatal in contact with skin.                      |
| H400 | Very toxic to aquatic life.                      |
| H411 | Toxic to aquatic life with long lasting effects. |

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*