Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH), amended by Regulation (EC) No. 2015/830

Mixed Berries, 20mg/ml

Version Number: GHS 1.3 *Date of compilation:2020-01-06*

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

1.1 Product Identifier

Trade name Mixed Berries, 36mg/ml Nicotine Salt (2% Nicotine)

REACH Registration number Not Relevant (Mixture)

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Relevant Identified uses For use in electronic cigarettes only.

1.3 Details of the supplier of the safety data sheet

Xyfil Ltd | Unit 1, 15-19 Sedgwick Street Preston,

Lancashire PR1 1TP

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SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

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

Hazard Class	Category	Hazard Class and Category	Hazard Statement
Acute Toxicity, Oral	Cat. 3	Acute Tox. 3	H301

Remarks

For full text of H-Phrases: See SECTION 16.

2.2 Label Elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal Word Danger

Hazard Pictograms

Hazard Statements

H301 Toxic if swallowed.

Precautionary Statements

Precautionary statements – General

P102 Keep out of reach of children.

Precautionary Statements – Prevention

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Precautionary Statements – Response

P301 + P310 IF SWALLOWED: Immediately call a doctor.

Precautionary Statements – Storage

P405 Store locked up.

Precautionary Statements – Disposal

P501 Dispose of contents, container in accordance with local regulation.

Contains: Nicotine and Salicylic acid

SECTION 3: Composition/Information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	CAS No	EC No	Wt %	Classification acc. to 1272/2008/EC	Pictograms
Glycerol	56-81-5	200-289-5	50-<75	No Classification	None
Propylene Glycol	57-55-6	200-338-0	25-<50	No Classification	None
Nicotine	54-11-5	200-193-3	≤ 2.0	Acute Tox. 2; H300, Acute Tox. 2; H310, Acute Tox. 2; H330, Aquatic Chronic 2; H411	
Salicylic Acid	69-72-7	200-712-3	≤ 1.7	Acute Tox. 4; H302 Eye Dam. 1; H318	
Ethyl butanoate	105-54-4	203-306-4	≤0.2	Eye Irrit. 2, H319Flam liq. 3, H226	
Ethanol	64-17-5	200-578-6	≤1.6	Flam. Liq. 2, H225	

Notes

For full text of abbreviations: Sec SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

Remove casualty from exposure ensuring one's own safety whilst doing so. If symptoms develop seek medical attention. If unconscious, check for breathing and apply artificial respiration if necessary. May cause irritation of the mucous membranes and respiratory system. Prolonged inhalation of mists may cause lung inflammation.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

If conscious, wash the mouth out with water. Never give anything by mouth to an unconscious person. Do not induce vomiting.

4.2 Delayed/Immediate Effects

Immediate effects can be expected after short term exposure (especially if large quantities are ingested or inhaled).

4.3 Immediate/Special Treatment:

None

SECTION 5: Fire Fighting Measures

5.1 Exposure Hazards

The product is not flammable but may support combustion. In combustion it emits toxic fumes of carbon dioxide/carbon monoxide and acrolein.

5.2 Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, polymer foam; Dry chemical powder. Water spray can be used to cool fire exposed surfaces or directly on the fire provided if the risk of spreading the fire is very low.

Unsuitable Extinguishing Media

Water jet

5.3 Protection for Fire-Fighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions

Avoid breathing vapours, mist or gas. Wear respiratory protection. Ensure adequate ventilation. Evacuate personnel to safe areas. Eliminate all sources of ignition. Wear suitable protective clothing. Do not handle the product without suitable protective clothing – see Section 8.

Clean-Up Procedures

Dilute the sample with a good amount of water before absorbing the spillage into a tissue or dry earth or inert absorbent material (depending on the quantity of spillage). After clean-up, wash the spillage site with a large amount of water. Dispose of waste as hazardous. Keep in suitable, closed containers for disposal.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. The product contains nicotine and can pose risk to aquatic animals if released in large quantities.

SECTION 7: Handling and Storage

7.1 Handling

Avoid contact with skin and eyes. Avoid the formation or spread of mists in the air. Causes slippery surface when spilled. Ensure there is enough ventilation of the area.

7.2 Storage

Store in cool, dry and well-ventilated area. Keep containers tightly closed. Protect from low temperatures, frost, direct sunlight or high temperatures. Ideal storage temperature range: between 20 to 25 degrees Celsius.

7.3 Suitable Packaging

Wherever possible, should only be kept in original packaging. Other suitable containers: Steel drums; Aluminium containers, glass containers, and high-density polyethylene. Some rubbers and plastics (low density polyethylene) are attacked by the product.

SECTION 8: Exposure Control/Personal Protection

8.1 Control Parameters
National Limit values
Workplace Exposure Limits

State	Substance	CAS No.	Limit value-8 hours (TWA)		Limit value-15 min (STEL)	
			ppm	mg/m³	ppm	mg/m³
GB	Glycerol	56-81-5		10		
GB	Propylene Glycol	57-55-6		10		
GB	Nicotine	54-11-5		0.5		1.5
GB	Ethanol	64-17-5	1000	1920	-	-

STEL: **S**hort-**T**erm **E**xposure Limit: *a limit value above which exposure should not occur and which is related to a 15-min period unless otherwise specified.*
TWA: **T**ime-**W**eighted **A**verage (Long-term exposure limit): *measured or calculated in relation to a reference period of 8 hours-time weighted average.*

8.2 Exposure Controls

Engineering Measures
Ensure there is enough ventilation of the area.
Eye Protection
Safety goggles (solvent resistant). Ensure eye bath is to hand.
Hand Protection
Wear suitable liquid/chemical resistant gloves. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Suitable material:
Nitrile: Thickness of 0.4 mm
Length: 330 mm
Breakthrough time: ~ 150 min
Skin Protection
Suitable protective clothing: Lab apron or other working clothes.
Respiratory Protection
Not normally required under normal conditions of use and with adequate ventilation. Formation of mist or fumes must be avoided. Respiratory protection must be used if there is a risk of fumes or misting. Particle filter class P1 (EN143). Gas/vapour filter Type A: organic vapours (EN141).
Environmental Exposure Controls
Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic Physical and Chemical Properties

Appearance:	Liquid form
Odour:	Characteristic odour
Odour threshold:	No data available currently.
pH:	No data available currently.
Melting point/freezing point:	No data available currently.
Boiling point:	No data available currently.
Flash Point (°C):	> 65 °C
Evaporation Rate:	Negligible
Flammability limits % lower:	No data available currently.
Flammability limits% Upper:	No data available currently.
Vapour Pressure:	No data available currently.
Vapour density:	No data available currently.
Relative density:	No data available currently.
Solubility (Water):	Soluble
Solubility (Benzene):	Soluble
Solubility (Acetone):	Soluble
Solubility (Ethanol):	Soluble
Partition Coefficient: n-Octanol/Water (Glycerol):	-1.75 at 25 °C
Partition Coefficient: n-Octanol/Water (Propylene Glycol):	-1.07 at 20 °C
Partition Coefficient: n-Octanol/Water (Nicotine):	1.17 at 18 °C
Auto Flammability (°C):	No data available currently.
Decomposition temperature:	No data available currently.
Viscosity:	Viscous
Explosive properties:	No data available currently.
Oxidising properties.	Non-oxidising by EC-criteria

SECTION 10: Stability and Reactivity

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical Stability

Stable under normal conditions. The product is hygroscopic.

10.3 Hazardous Reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to Avoid

Heat; hot surfaces; sources of ignition; flames; static discharge; moist air; humidity; moisture.

10.5 Material to Avoid

Strong acids; Strong alkalis; Strong oxidising agents.

10.6 Hazardous Decomposition Products

In combustion emits toxic fumes of carbon dioxide/carbon monoxide or acrolein. In a fire may liberate acrid and irritant fumes.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

Classification Procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute Toxicity

Toxic if swallowed.

Name of Substance	CAS No	Exposure Route	End Point	Value	Species	Source
Glycerol	56-81-5	Oral	LD50	27,200 mg/kg	Rat	
Glycerol	56-81-5	Dermal	LD50	56,750 mg/kg	Guinea pig	
Propylene Glycol	57-55-6	Oral	LD50	22 000 mg/kg bw	Rat	
Propylene Glycol	57-55-6	Dermal	LD50	20,800 mg/kg bw	Rabbit	
Nicotine	54-11-5	Oral	LD50	77.83 mg/kg bw	Mouse	
Nicotine	54-11-5	Dermal	LD50	70.4 mg/kg bw	Rabbit	
Nicotine	54-11-5	Inhalation	LC50	0.19 mg/L	Rat	
Salicylic acid	69-72-7	Oral	LD50	891 mg/kg bw	Rat	
Salicylic acid	69-72-7	Dermal	LD50	> 2 000 mg/kg bw	Rat	
Ethanol	64-17-5	Oral	LD50	10470 mg/kg	Rat	
Ethanol	64-17-5	Inhalation	LC50	125mg/l 4h	Rat	
Ethyl butyrate	105-54-4	Oral	LD50	> 2 000 mg/kg bw	Rat	
Ethyl butyrate	105-54-4	Inhalation	LC50 (4h)	> 7 380 mg/m^3	Rat	
Ethyl butyrate	105-54-4	Dermal	LD50	> 2 000 mg/kg bw	Rat	

Skin Corrosion/Irritation

Based on available data, this product shall not be classified as corrosive/irritant to skin.

Serious Eye Damage/Eye Irritation

Based on available data, this product shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or Skin Sensitisation

Based on available data, this product shall not be classified as respiratory or skin sensitiser.

Summary of Evaluation of the CMR Properties

Based on available data, this product shall not be classified as germ cell mutagenic, Carcinogenic nor as a reproductive toxicant.

Specific Target Organ Toxicity (STOT)

Based on available data, this product shall not be classified as a specific target organ toxicant.

Aspiration Hazard

Based on available data, this product shall not be classified as presenting an aspiration hazard

SECTION 12: Ecological Information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic Toxicity (Acute)

Aquatic Toxicity (Acute) of components of the mixture

Name of Substance	CAS No	End Point	Value	Species	Exposure Time
Glycerol	56-81-5	LC50	54000 mg/l	Fish	96 h
Propylene Glycol	57-55-6	LC50	40613 mg/l	Fish	96 h
Nicotine	54-11-5	LC50	3 mg/L	Fish	96 h
Salicylic acid	69-72-7	LC50	1.38 mg/L	Fish	96 h
Ethanol	64-17-5	LC50	11200 mg/L	Fish	96 h
Ethyl butyrate	105-54-4	LC50	100 mg/L	Fish	96 h

Biodegradation

The relevant substances of the mixture are readily biodegradable.

12.2 Persistence and Degradability

Degradability of components of the mixture

Name of Substance	CAS No	Process	Degradation Rate	Time
Propylene Glycol	57-55-6	Oxygen consumption	106.80%	28 d
Propylene Glycol	57-55-6	CO_2 Evolution	81.70%	28 d
Nicotine	54-11-5	CO_2 Evolution	71.00%	28 d
Salicylic acid	69-72-7	oxygen consumption	88.10%	14 d
Salicylic acid	69-72-7	TOC Removal	97.60%	14 d
Ethyl butyrate	105-54-4	BOD	82.19%	28 d

12.3 Bioaccumulation Potential

Data is not available.

Bioaccumulation Potential of components of the mixture:

Name of Substance	CAS No	BFC	Log KOW	BOD5/COD
Glycerol	56-81-5		-1.75 at 25 °C and pH 7.4	
Propylene Glycol	57-55-6		-1.07 at 20 °C	
Nicotine	54-11-5		1.17 at 18 °C	
Ethanol	64-17-5		-0.35 at 20 °C	
Ethyl butyrate	105-54-4		2.85 at 25 °C	

12.4 Mobility in Soil

No data available.

12.5 Other Adverse Effects

No data available.

SECTION 13: Disposal Considerations

13.1 Disposal Operations

Very small quantities (say <20 ml) may be discharged into the drains provided it is diluted before discharge. Large quantities should be given to licensed disposal company.

Recovery Operations

No information available currently.

Disposal of Packaging

Contaminated containers can be treated as household waste provided they are washed and cleaned with water. Where practical, containers and packaging should be recycled by a licensed contractor (note regional or national regulations).

SECTION 14: Transport Information

14.1 Transport Information

This product does not require any transport label in accordance The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). ECE/TRANS/242, Vol. I and II and corrigenda. Not dangerous goods for ADR, RID, IMDG and IATA.

14.1 UN Number: Not applicable.

14.2 UN proper Shipping Name: Not applicable.

14.3 Transport Hazard Class(es): Not applicable.

14.4 Packaging group: Not applicable.

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user: There is not additional information.

14.7 Transport in bulk according to Annex II of MARPOL and IBC Code

IMDG: Not applicable.

SECTION 15: Regulatory Information

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

This product is regulated under "Tobacco Products Directive 2014/14/EU (TPD)" and all of its transpositions into individual Member States in the European Union.

15.2 15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance or the mixture by the supplier.

SECTION 16: Other Information

Abbreviations and Acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute Toxicity
BOD	Biological Oxygen Demand
CAS	Chemical Abstract Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances
CMR	Carcinogenic, Mutagenic or Toxic for Reproduction
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
DOC	Dissolved Organic Carbon
GHS	Globally Harmonised System of classification and labelling of chemicals
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
Log KOW	n-Octanol/water
PNEC	Predicted No-effect Concentration
RID	International Carriage of Dangerous Goods by Rail
STEL	Short-Term Exposure Limit
TOC	Total Organic Carbon
TWA	Time Weighted Average

WEL	Workplace Exposure Limit

Key literature references and sources for data
Supplier
ECHA

List of Hazard Codes and Hazard Statements:

H300	Fatal if swallowed
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H310	Fatal in contact with skin
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H371	May cause damage to organs
H373	Causes damage to organs through prolonged or repeated exposure
H225	Highly Flammable liquid and vapor
H226	Flammable liquid and vapor
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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