Safety data sheet

according to Regulation EC 1907/2006 (REACH) and subsequent amendment Regulation EU 830/2015

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

1.1. Product identifier

Product name:	Twelve Monkeys Vapor Co. Monkey Mix Origins Lemur 65VG/35PG 0mg/mL 50mL 0

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

Description/Use	Liquid for e-cigarette without nicotine/ Flavoured e-liquid		
Intended use:	Industrial	Professional	Consumer
Electronic cigarette		X	X

1.3. Details of the supplier of the Safety Data Sheet

Name:	RVG Distribution Limited
Full address:	Unit E4 Explorer, Voyager Park, Portfield Road Portsmouth, Hampshire, England PO3 5FL
District and Country:	Great Britain - 0044 2392 292941 - Fax.
E-mail address of the competent person responsible for the Safety Data Sheet:	management@rvgdistribution.com

1.4. Emergency telephone number

For urgent inquiries refer to:	0044 2392 292941; management@rvgdistribution.com; NHS 111

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a Safety Data Sheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements

Hazard pictograms: -

Signal words: -

Hazard statements:

H412	Harmful to aquatic life with long lasting effects.

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EUH208	Contains Citrus aurantifolia (Lime) oil. May produce an allergic reaction.
Precautionary statements:	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P273	Avoid release to the environment.
P501	Dispose of contents/container in accordance with local regulations.

Contains: -

Product not intended for uses provided for by Dir.2004/42/CE.

2.3. Other hazards

On the basis fo available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Identification	**%**	**Classification 1272/2008 (CLP)**
Citrus aurantifolia (Lime) oil	0.20 < x < 0.22	Acute Tox. 4 H302; Skin Irrit. 2 H315; Eye Irrit. 2 H319; Skin Sens. 1 H317; Asp. Tox. 1 H304; Aquatic Acute 1 H400; Aquatic Chronic 1 H410; Flam. Liq. 3 H226
CAS: 8008-26-2		
EC: 616-919-0		
INDEX: -		
REACH: 01-2120138646-51-XXXX		

Identification	**%**	**Classification 1272/2008 (CLP)**
Isobutyl acetate	0.0151 < x < 0.017	Flam. Liq. 2 H225
CAS: 110-19-0		
EC: 203-745-1		
INDEX: 607-026-00-7		
REACH: 01-2119488971-22-XXXX		

Identification	**%**	**Classification 1272/2008 (CLP)**
Ethyl acetate	x < 0.01	Eye Irrit. 2 H319; STOT SE 3 H336; Flam. Liq. 2 H225
CAS: 141-78-6		
EC: 205-500-4		
INDEX: 607-022-00-5		

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REACH: 01-2119475103-46-XXXX

Identification	%	Classification 1272/2008 (CLP)
Isoamyl acetate	x < 0.01	Flam. Liq. 3 H226

CAS: 123-92-2

EC: 204-662-3

INDEX: 607-130-00-2

REACH: 01-2119548408-32-XXXX

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using again.

INHALATION: Remove to open air. If the subject stops breathing, administer artifical respiration. Get medical advice/attentionn immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorized by a doctor.

PROTECTION MEASURES FOR FIRST RESPONDERS: Concerning PPE suitable for first aid operations, please refer to section 8.2 of this safety data sheet.

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

Specific information on symptoms and effects caused by the product are unknown. For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available

SECTION 5. Firefighting measures

5.1. Exstinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use water jets. The water is not effective to extinguish a fire, however it can be used to cool the closed containers next to the flame and prevent explosion.

5.2. Special hazards arising from the sustance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breath combustion products

5.3. Advice for firefighters

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GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of sustances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from drying into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL EQUIPMENTS FOR FIREFIGHTERS

Normal firefighting clothing i.e. fire kit (EN 469), gloves (EN 659) and boots (HO specification A29 and A30) in combination with self contained open circuit positive pressure compressed air breathing apparatus (EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the Safety Data Sheet) to prevent any contamination of a skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergecny procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used for, by checking Section 10. Absorb the reminder with inher absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed in compliance with the provisions set forth in point 13.

6.4. References to other sections

Any information on personal portection and disposal in given in Sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material Safety Data Sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage including any incompatibility

Store only in the original container. Store the containers sealed, in a well ventilaed place, away from direct sunlight. Keep containers away from any incompatible material, see Section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

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8.1. Control parameters

Substance name: **Ethanol**
CAS: 64-17-5
DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available
PNEC (Predicted No-effect Concentration): Not available
WORKPLACE EXPOSURE LIMIT (WEL)
Country: GB (EH40/2005)
Route of exposure: -
8 h [mg/m^3]: 1920
8 h [ppm]: 1000
Short term (15 minutes) [mg/m^3]: -
Short term (15 minutes) [ppm]: -
Substance name: **Ethyl acetate**
CAS: 141-78-6
DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available
PNEC (Predicted No-effect Concentration): Not available
WORKPLACE EXPOSURE LIMIT (WEL)
Country: GB (EH40/2005)
Route of exposure: -
8 h [mg/m^3]: -
8 h [ppm]: 200
Short term (15 minutes) [mg/m^3]: -
Short term (15 minutes) [ppm]: 400
OCCUPATIONAL EXPOSURE LIMIT (OEL)/ INDICATIVE OEL (IOELV)
Country: EU (Directive 2006/15/EC and subsequent amendments)
Route of exposure: -
8 h [mg/m^3]: 734
8 h [ppm]: 200
Short term (15 minutes) [mg/m^3]: 1468
Short term (15 minutes) [ppm]: 400
Substance name: **Glycerol**
CAS: 56-81-5

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DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available
PNEC (Predicted No-effect Concentration): Not available
WORKPLACE EXPOSURE LIMIT (WEL)
Country: GB (EH40/2005)
Route of exposure: -
8 h [mg/m^3]: 10
8 h [ppm]: -
Short term (15 minutes) [mg/m^3]: -
Short term (15 minutes) [ppm]: -
Substance name: **Isoamyl acetate**
CAS: 123-92-2
DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available
PNEC (Predicted No-effect Concentration): Not available
OCCUPATIONAL EXPOSURE LIMIT (OEL)/ INDICATIVE OEL (IOELV)
Country: EU (Directive 2006/15/EC and subsequent amendments)
Route of exposure: -
8 h [mg/m^3]: 270
8 h [ppm]: 50
Short term (15 minutes) [mg/m^3]: 540
Short term (15 minutes) [ppm]: 100
Substance name: **Isobutyl acetate**
CAS: 110-19-0
DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available
PNEC (Predicted No-effect Concentration): Not available
WORKPLACE EXPOSURE LIMIT (WEL)
Country: GB (EH40/2005)
Route of exposure: -
8 h [mg/m^3]: 724
8 h [ppm]: 150
Short term (15 minutes) [mg/m^3]: 903
Short term (15 minutes) [ppm]: 187
OCCUPATIONAL EXPOSURE LIMIT (OEL)/ INDICATIVE OEL (IOELV)
Country: EU (Directive 2006/15/EC and subsequent amendments)
Route of exposure: -

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8 h [mg/m^3]: 241
8 h [ppm]: 50
Short term (15 minutes) [mg/m^3]: 723
Short term (15 minutes) [ppm]: 150
Substance name: **Propylene glycol**
CAS: 57-55-6
DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available
PNEC (Predicted No-effect Concentration): Not available
WORKPLACE EXPOSURE LIMIT (WEL)
Country: GB (EH40/2005)
Route of exposure: -
8 h [mg/m^3]: total vapour and particulates 474; particulates 10
8 h [ppm]: total vapour and particulates 150; particulates -
Short term (15 minutes) [mg/m^3]: total vapour and particulates -; particulates -
Short term (15 minutes) [ppm]: total vapour and particulates -; particulates -

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).
In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask which class must be chosen according to the limit of use concentrations. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

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SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Various
Odour:	Characteristic
Odour threshold :	Not available due to absence of data
pH:	5.00 - 7.00
Melting point / freezing point:	Not available due to absence of data
Initial boiling point:	Not available due to absence of data
Boiling range:	Not available due to absence of data
Flash point:	> 60 °C
Evaporation rate:	Not available due to absence of data
Flammability (solid, gas):	Not applicable because the product is liquid
Lower inflammability limit:	Not available due to absence of data
Upper inflammability limit:	Not available due to absence of data
Lower explosive limit:	Not available due to absence of data
Upper explosive limit:	Not available due to absence of data
Vapour pressure:	Not available due to absence of data
Vapour density:	Not available due to absence of data
Relative density:	1.0 - 1.3 g/cm3
Solubility:	Not available due to absence of data
Partitiion coefficient: n-octano/water:	Not available due to absence of data
Auto-ignition temperature:	Not available due to absence of data
Decomposition temperature:	Not available due to absence of data
Viscosity:	Not available due to absence of data
Explosive properties:	Not available due to absence of data
Oxidising properties:	Not available due to absence of data

9.2. Other information

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reactions with other substances in normal conditions of use

10.2. Chemical stability

The produc is stable in normal conditions of use ad storage

10.3. Possibility of hazardous reactions

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No hazardous reactions are foreseeabe in normal conditions of use and storage

10.4. Condition to avoid

None in particular. However, the usual precautions used for chemical products should be respected

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Acute toxicity

Does not meet the classification criteria for this hazard class

ATE_{mix} (Inhalation - vapours): Not Applicable
ATE_{mix} (Inhalation - mists / powders) of the mixtures: not classified (no significant component)
ATE_{mix} (Oral): 2262829.37 mg/kg
ATE_{mix} (Dermal) of the mixtures: not classified (no significant component)

Citrus aurantifolia (Lime) oil
LD50 Skin > 5000 mg/kg (Rabbit)
LD50 Oral > 5000 mg/kg bw (Rat)

Ethyl acetate
LD50 Oral 1150 mg/kg bw (Rat)

Isoamyl acetate
LD50 ip 819 mg/kg bw (Rat)
LD50 Skin >5000 mg/kg bw (Rabbit)

Skin corrosion / Skin irritation

Does not meet the classification criteria for this hazard class

Serious eye damage / Irritation

Does not meet the classification criteria for this hazard class

Respiratory or skin sensitisation

Does not meet the classification criteria for this hazard class

Germ cell mutagenicity

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Does not meet the classification criteria for this hazard class

Carcinogenity

Does not meet the classification criteria for this hazard class

Reproductive toxicity

Does not meet the classification criteria for this hazard class

STOT – Single exposure

Does not meet the classification criteria for this hazard class

STOT – Repeated exposure

Does not meet the classification criteria for this hazard class

Aspiration toxicity

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

Not being data available, use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

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CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provision of the Code of International Cariage of Dangeroous Goods by Road (ADR) and by Rail (RID), of the International Inland Waterways Dangerous Goods Code (ADN), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA/IACAO) regulations.

14.1 UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Trasport in bulk according to Annex II of MARPOL and the IBC Code

Information no relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC:

None

Restriction relating to the product or contained substnace pursuant to Annex XVII to EC Regolation 1907/2006

Product	
Point	3

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0.1%

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Substances subject to authorization (Annex XIV REACH)
None
Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012
None
Substances subject to the Rotterdam Convention
None
Substances subject to the StockholmConvention
None
Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:	
Acute Tox. 4	Acute toxicity, category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
STOT SE 3	Specific target organ toxicity (single exposure). Category 3
Skin Irrit. 2	Skin Irritation, category 2
Skin Sens. 1	Skin Sensitisation, category 1
EUH208	Contains ... May produce an allergic reaction.
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

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H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Aquatic Chronic 3	Calculation method

Legend:

- ADR: European agreement concerning the carriage of dangerous goods by road
- ADN: Internations inland waterways code for dangerous goods
- ATE: Acute toxicity estimate
- ATEmix: Acute toxicity estimate of mixture
- CAS NUMBER: Chemical abstract service number
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived no effect level
- DMEL: Derived minimal effect level
- EmS: Emergency schedule
- GHS: Globally harmonized system of classification and labeling of chemicals
- IATA DGR: International air transport association dangerous goods regulation
- IMDG: International maritime code for dangerous goods
- IMO: International maritime organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- IOELV: Indicative OEL value
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic compounds
- vPvB: Very persistent and very bioaccumulative as for REACH regulation
- WGK: Water hazard classes (German)
- WEL: Workplace Exposure Limit

General bibliography:

1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
2. Regulation (EU) 453/2010 of the European Parliament
3. Regulation (EU) 830/2015 of the European Parliament
4. Regulation (EC) 1272/2008 of the European Parliament (CLP)
5. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
7. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
8. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
9. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
10. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
11. Regulation (EU) 1221/2015 (VII Atp. CLP) of the European Parliament

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12. Regulation (EU) 918/2016 (VIII Atp. CLP) of the European Parliament
13. Regulation (EU) 1179/2016 (IX Atp. CLP) of the European Parliament
14. Regulation (EU) 776/2017 (X Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- Website ECHA agency

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

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