

BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#1/16

In conformity to Regulation (EU) 2020/878

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

1.1. Product identifier

Product code: BEAMZ FSMA-E Smoke Fluid Add.Energizer

Trades code: 160.655
Product line: SMOKEFLUID
UFI: 8E.J1-E0HX-H00P-RHJ4

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

Liquid for producing artificial smoke

Sectors of use:

Other (Professional and/or consumer uses)[SU0]

Product category:
Perfumes, Fragrances
Process categories:
Professional Use
Uses advised against

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Tronios BV Bedrijvenpark Twente Noord 18 7602 KR Almelo The Netherlands

Telefoonnummer: +31 (0)85 105 3155

e-mail: info@tronios.com

National contact: email of the competent person responsible for the Safety Data Sheet: info@tronios.com

1.4. Emergency telephone number

In the case of emergency Members of Public in England, Scotland and Wales can contact NHS 111/NHS 24 by dialling 111

In Northern Ireland contact your local GP

In Republic of Ireland contact:

Consumer poison service: tel. 01 809 2166 (8am-10pm) Healthcare Professionals: Tel. 01 809 2566 (24h/7days)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

CAS miscela/blend EINECS miscela/blend REACH miscela/blend 2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS07

Hazard Class and Category Code(s):

Skin Sens. 1B, Aquatic Chronic 3

Hazard statement Code(s):

H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

The product, if brought into contact with skin can cause skin sensitization.

The product is dangerous to the environment as it is harmful to aquatic life with long lasting effects

2.2. Label elements

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

Pictogram, Signal Word Code(s):

GHS07 - Warning

Hazard statement Code(s):

H317 - May cause an allergic skin reaction.





BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#2/16

In conformity to Regulation (EU) 2020/878

H412 - Harmful to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):

not applicable

Precautionary statements:

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Contains

Ethyl 2,3-epoxy-3-phenylbutyrate, Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE)

UFI: 8EJ1-E0HX-H00P-RHJ4

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

The mixture is not corrosive and no Serious Health Effects or Acute Health Toxicity hazards are expected.

The most important adverse physical-chemical human health and environmental effects are listed in sections 9 to 12 of this safety data sheet.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Allergens contained:

Benzyl alcohol = 0,005

Limonene = 0.012

Linalool = 0.001

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
isopentyl acetate - FEMA 2055 Note: C substance for which there are Community workplace exposure limits	>= 10 < 20%	EUH066; Flam. Liq. 3, H226 ATE oral = 7.400,0 mg/kg ATE dermal = 5.000,0 mg/kg	607-130-00-2	123-92-2	204-662-3	01-2119548 408-32-000 0
Benzyl acetate - FEMA 2135	>= 5 < 10%	Aquatic Chronic 3, H412 Acute toxicity M-factor = 1 ATE oral = 2.000,0 mg/kg ATE dermal = 5.000,0 mg/kg ATE inhal = 766,0mg/l/4 h	ND	140-11-4	205-399-7	01-2119638 272-42-000 0
Ethyl 2,3-epoxy-3-phenylbutyrate - FEMA 2444	>= 5 < 10%	Skin Sens. 1B, H317; Aquatic Chronic 2, H411 Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1 ATE oral = 4.050,0 mg/kg	ND	77-83-8	201-061-8	01-2119967 770-28-000 0



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#3/16

In conformity to Regulation (EU) 2020/878

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		ATE dermal = 2.000,0 mg/kg				
3a,4,5,6,7,7a-hexahydro-4,7-meth anoinden-6-yl acetate	>= 1 < 5%	Eye Irrit. 2, H319; Aquatic Chronic 3, H412 Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1 ATE oral = 5.000,0 mg/kg ATE dermal = 2.000,0 mg/kg ATE inhal = 1,0mg/l/4 h	ND	5413-60-5	226-501-6	01-2119934 491-39-000 0
Ethyl butyrate - FEMA 2427	>= 1 < 5%	Flam. Liq. 3, H226; Eye Irrit. 2, H319 ATE oral = 2.000,0 mg/kg ATE dermal = 2.000,0 mg/kg ATE inhal = 7,4mg/l/4 h	ND	105-54-4	203-306-4	01-2120118 576-54-000 0
Allyl hexanoate - FEMA 2032	>= 0,1 < 1%	Acute Tox. 3, H301; Acute Tox. 3, H311; Eye Irrit. 2, H319; Acute Tox. 3, H331; Aquatic Acute 1, H400; Aquatic Chronic 3, H412 ATE oral = 218,0 mg/kg ATE dermal = 820,0 mg/kg	ND	123-68-2	204-642-4	01-2119983 573-26-000 0
Reaction mass of 3,5-dimethylcyclohex-3-ene-1-car baldehyde and 2,4-dimethylcyclohex-3-ene-1-car baldehyde (2,4-DIMETHYL-3-CYCLOHEXEN E CARBOXALDEHYDE) - FEMA 4505	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411 Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1 ATE oral = 3.900,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	68039-49-6	943-728-2	01-2119982 384-28-000 0

Fractionated global values

H226	= 18,00	H412	= 10,50	H411	= 5,15	H317	= 5,15
H319	= 6,50	H301	= 0,50	H311	= 0,50	H331	= 0,50
H400	= 0,50	H315	= 0,15				

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area.



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#4/16

In conformity to Regulation (EU) 2020/878

If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:

Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product).:

Do not use eye drops or ointments of any kind before the examination or advice from an oculist. Ingestion:

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

If skin irritation or rash occurs: Get medical advice/attention.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:

Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear gloves and protective clothing

6.1.2 For emergency responders:

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provision of sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.

If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities. Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:

Rapidly recover the product, wear a mask and protective clothing

Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#5/16

In conformity to Regulation (EU) 2020/878

Prevent it from entering the sewer system.

6.3.2 For cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid handling the liquid with bare hands. In case of accidental contact with the product, wash your hands thoroughly with soapy water.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.

Keep containers upright and safe by avoiding the possibility of falls or collisions.

Store in a cool place, away from sources of heat and 'direct exposure of sunlight.

Keep in the original container tightly closed. Do not store in open or unlabeled containers.

Keep the containers in an upright position and be careful to avoid falls or collisions.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid direct exposure to sunlight.

Keep containers away from any incompatible materials, checking section 10.

7.3. Specific end use(s)

Other (Professional and/or consumer uses):

Handle with care.

Store in ventilated area and away from heat sources.

Keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:

isopentyl acetate:

TLV TWA - 50 ppm - 266,26 mg/m3

TLV STEL - 100 ppm - 532,52 mg/m3

VLE 8h - 270 mg/m3 - 50 ppm

VLE short - 540 mg/m3 - 100 ppm

- Substance: isopentyl acetate

DNEL

Systemic effects Long term Workers inhalation = 20,8 (mg/m3)

Systemic effects Long term Workers dermal = 2,95 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 5,1 (mg/m3)

Systemic effects Long term Consumers dermal = 1,47 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 1,47 (mg/kg bw/day)

PNEC

Sweet water = 0.022 (mg/I)

Sea water = 0,0022 (mg/I)

intermittent emissions = 0,22 (mg/l)

STP = 100 (mg/l)

- Substance: Benzyl acetate

DNEL

Systemic effects Long term Workers inhalation = 9 (mg/m3)

Systemic effects Long term Workers dermal = 2,5 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 2,2 (mg/m3)



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#6/16

In conformity to Regulation (EU) 2020/878

```
Systemic effects Long term Consumers dermal = 1,3 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 1,3 (mg/kg bw/day)
Systemic effects Short term Workers inhalation = 43,8 (mg/m3)
Systemic effects Short term Workers dermal = 12,5 (mg/kg bw/day)
Systemic effects Short term Consumers inhalation = 11 (mg/m3)
Systemic effects Short term Consumers dermal = 6,25 (mg/kg bw/day)
Systemic effects Short term Consumers oral = 6,25 (mg/kg bw/day)
PNEC
Sweet water = 0.018 \text{ (mg/I)}
sediment Sweet water = 0,526 (mg/kg/sediment)
Sea water = 0,002 \text{ (mg/I)}
sediment Sea water = 0,053 (mg/kg/sediment)
intermittent emissions = 0,04 (mg/l)
STP = 8,55 (mg/l)
ground = 0.094 (mg/kg ground)
- Substance: Ethyl 2,3-epoxy-3-phenylbutyrate
Systemic effects Long term Workers inhalation = 2,45 (mg/m3)
Systemic effects Long term Workers dermal = 0,7 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 0,61 (mg/m3)
Systemic effects Long term Consumers dermal = 0.35 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,35 (mg/kg bw/day)
PNEC
Sweet water = 0.008 \, (mg/I)
sediment Sweet water = 0,214 (mg/kg/sediment)
Sea water = 0,0008 \text{ (mg/I)}
sediment Sea water = 0,021 (mg/kg/sediment)
intermittent emissions = 0,084 (mg/l)
STP = 10 (mg/l)
ground = 0.038 (mg/kg ground)
- Substance: 3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate
Systemic effects Long term Workers inhalation = 4,93 (mg/m3)
Systemic effects Long term Workers dermal = 0,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 0,87 (mg/m3)
Systemic effects Long term Consumers dermal = 0,209366 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,5 (mg/kg bw/day)
PNEC
Sweet water = 0.0104 \text{ (mg/l)}
sediment Sweet water = 0,106 (mg/kg/sediment)
Sea water = 0.00104 \, (mg/l)
sediment Sea water = 0.0106 (mg/kg/sediment)
intermittent emissions = 0,075 (mg/l)
STP = 2,45 (mg/l)
ground = 0,0152 (mg/kg ground)
- Substance: Ethyl butyrate
DNEL
Systemic effects Long term Workers inhalation = 49,3 (mg/m3)
Systemic effects Long term Workers dermal = 2,33 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 7,4 (mg/m3)
Systemic effects Long term Consumers dermal = 0,833 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,833 (mg/kg bw/day)
PNEC
Sweet water = 0.0297 \text{ (mg/l)}
sediment Sweet water = 0,173 (mg/kg/sediment)
Sea water = 0,00297 \text{ (mg/I)}
sediment Sea water = 0,0173 (mg/kg/sediment)
intermittent emissions = 1 (mg/l)
STP = 23.6 (mg/l)
```



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#7/16

In conformity to Regulation (EU) 2020/878

ground = 0.0171 (mg/kg ground) - Substance: Allyl hexanoate Systemic effects Long term Workers inhalation = 15 (mg/m3) Systemic effects Long term Workers dermal = 4,3 (mg/kg bw/day) Systemic effects Long term Consumers inhalation = 3,7 (mg/m3) Systemic effects Long term Consumers dermal = 2,1 (mg/kg bw/day) Systemic effects Long term Consumers oral = 2,1 (mg/kg bw/day) **PNEC** Sweet water = 0.0117 (mg/l)sediment Sweet water = 0,00446 (mg/kg/sediment) Sea water = 0,00117 (mg/I)sediment Sea water = 0,000446 (mg/kg/sediment) intermittent emissions = 0,00117 (mg/l) STP = 10 (mg/l)ground = 0.825 (mg/kg ground) - Substance: Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE) Systemic effects Long term Workers inhalation = 1,837 (mg/m3) Systemic effects Long term Workers dermal = 0,521 (mg/kg bw/day) Systemic effects Long term Consumers inhalation = 0,543 (mg/m3) Systemic effects Long term Consumers dermal = 0,312 (mg/kg bw/day) Systemic effects Long term Consumers oral = 0,312 (mg/kg bw/day) **PNEC** Sweet water = $0.0075 \, (mg/l)$ sediment Sweet water = 0,226 (mg/kg/sediment) Sea water = $0.00075 \, (mg/I)$ sediment Sea water = 0,023 (mg/kg/sediment) intermittent emissions = 0,075 (mg/l) STP = 10 (mg/l)ground = 0,041 (mg/kg ground)

8.2. Exposure controls

Appropriate engineering controls:

Other (Professional and/or consumer uses):

Not expected

Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

- (b) Skin protection
- (i) Hand protection

Hand protection: use protective gloves:

Polychloroprene / Layer thickness 0,5 - 0,7 mm / Break through time> 480 min (level 6) / EN 374-3 Butyl-rubber / Layer thickness 0.6 - 0.8 mm / Break through time> 480 min (level 6) / EN 374

Nitrile latex / Layer thickness 1.0 mm / Break through time> 480 min (level 6)

In the Laboratory:

Nitrile latex / Layer thickness 0.1 mm / Break through time> 480 min (level 6) / EN 374

In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as unpredictable. The gloves have a wear time that depends on the duration and the mode of use. General recommendation: the wearing time of protective gloves is recommended to be around 50% of the time measured in the laboratory.

(ii) Other

When handling the pure product wear full protective skin clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#8/16

In conformity to Regulation (EU) 2020/878

Use according with good manufacturing practices, avoiding environmental dispersion. Alert the relevant authorities if case of spillage into rivers, sewers or contamination of soil or vegetation.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method		
Physical state	Clear liquid	visivo/visual/visuel/visuell/zichtb aar		
Colour	colorless	visivo/visual/visuel/visuell/zichtb aar		
Odour	typical	empirico/empirical/empirique/e mpirisch		
Odour threshold	not determined			
Melting point/freezing point	not determined	OECD Guideline 102		
Boiling point or initial boiling point and boiling range	not determined	ASTM D86		
Flammability	nonflammable			
Lower and upper explosion limit	nonflammable			
Flash point	> 65 °C	ASTM D93		
Auto-ignition temperature	nonflammable	DIN 51794		
Decomposition temperature	irrelevant			
рН	5.00-7.50	UNI 24003		
Kinematic viscosity	<= 14 mm2/sec (40 °C)	ASTM D7042		
Solubility	miscible with water			
Water solubility	miscible with water			
Partition coefficient n-octanol/water (log value)	not determined	OECD Guideline 107		
Vapour pressure	not determined			
Density and/or relative density	not determined	ISO 2811-3		
Relative vapour density	not determined	UNI EN 13016-1:2018		
Particle characteristics	not applicable			

9.2. Other information

Content of VOC ready to use condition: 0,00 %

9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#9/16

In conformity to Regulation (EU) 2020/878

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Related to contained substances: Ethyl 2,3-epoxy-3-phenylbutyrate: Avoid moisture. Heat, flames and sparks Ethyl butyrate

**** Not translated ****

Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE):

Heat, flames and sparks

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

ATE(mix) oral = 43.600,0 mg/kg

ATE(mix) dermal = 164.000,0 mg/kg

ATE(mix) inhal = 600,0 mg/l/4 h

- (a) acute toxicity: based on available data, the classification criteria are not met.
- (b) skincorrosion/irritation: Benzyl acetate: Skin-rabbit

Result: no skin irritation-4h

(c) serious eye damage/irritation: Benzyl acetate: Eyes-rabbit

Result: no eye irritation

(d) respiratoryorskinsensitisation: The product, if brought into contact with skin can cause skin sensitization. Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE): Suspected skin sensitiser: The Toolbox profiler Protein binding alerts for skin sensitization by OASIS v1.3 gives an alert for skin sensitisation; CAESAR skin sensitisation model in VEGA (Q)SAR platform predicts that the chemical is Sensitizer (good reliability)

- (e) germ cell mutagenicity: based on available data, the classification criteria are not met.
- (f) carcinogenicity: Benzyl acetate: Carcinogenicity Rat Oral

Oncogenia: neoplastic according to RTECS Gastrointestinal system: tumors

Carcinogenicity - Mouse - Oral

Oncogenia: neoplastic according to RTECS Liver: tumors

Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE): Suspected carcinogen: The Toolbox profiler Carcinogenicity



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

10 / 16

In conformity to Regulation (EU) 2020/878

(genotox and nongenotox) alerts by ISS gives an alert for carcinogenicity; CAESAR Carcinogenicity model in VEGA (Q)SAR platform predicts that the chemical is Carcinogen (moderate reliability); ISS Carcinogenicity model in VEGA (Q)SAR platform predicts that the chemical is Carcinogen (moderate reliability)

(g) eproductivetoxicity: Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and

2.4-dimethylcyclohex-3-ene-1-carbaldehyde (2.4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE): NOAEL 25 mg/kg bw/day (subchronic, rat)

(h) specific target organ toxicity (STOT) single exposure: Ethyl butyrate: Inhalation-Can irritate the respiratory system.

(i) specific target organ toxicity (STOT) repeated exposureisopentyl acetate: NOAEL (rat): 250 - 1 250 mg/kg bw/day

NOEL (rat): 100 - 500 mg/kg bw/day

Benzyl acetate: NOAEL (rat): 250 - 500 mg/kg bw/day

NOAEL (mouse): 1 000 mg/kg bw/day Ethyl 2,3-epoxy-3-phenylbutyrate: oral NOAEL (rat): 35 - 60 mg/kg bw/day NOAEL (rat): 1 000 mg/kg diet

dermal

NOAEL (rat): 1 000 mg/kg bw/day

3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate: NOAEL (rat): 1 125 mg/kg bw/day

Ethyl butyrate: NOAEL (rat): 1 000 mg/kg bw/day

NOAEL (rat): 500 mg/kg diet

Allyl hexanoate: NOAEL (rat): 214 mg/kg bw/day

NOAEL (rat): 2 500 mg/kg diet

Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE): NOAEL (rat): 120 - 150 mg/kg bw/day

(j) aspiration hazard: Benzyl acetate: Target organ-specific toxicity-single exposure Inhalation-Can irritate the respiratory system.

3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate: LOAEC (mouse): 1 039.62 mg/L air

Ethyl butyrate: NOAEL (rat): 60 mg/m³ air

No toxicological tests were performed of this product. The health hazards were evaluated according to the test methods referred to in Regulation (EC) no 440/2008 of May 30, 2008 and subsequent amendments and in any case in accordance with article 9.2 of Regulation (EC) no 1272/2008 (CLP) of December 16, 2008.

Appear in chapters 2 and 15.

The complete toxicological data for components are available on demand.

Related to contained substances:

isopentyl acetate:

LD50 (rat) Oral (mg/kg body weight) = 7400

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Benzyl acetate:

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 766

Ethyl 2.3-epoxy-3-phenylbutyrate:

LD50 (rat) Oral (mg/kg body weight) = 4050

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate:

LD50 (rat) Oral (mg/kg body weight) = 5000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 1,01

Ethyl butyrate:

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 7,38

Allyl hexanoate:

LD50 (rat) Oral (mg/kg body weight) = 218

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 820

Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde

(2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE):

LD50 (rat) Oral (mg/kg body weight) = 3900

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#11/16

In conformity to Regulation (EU) 2020/878

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

isopentyl acetate:

Short-term toxicity to fish

LC50 (4 days) 22 - 46 mg/L

NOEC (4 days) 21.5 mg/L

Short-term toxicity to aquatic invertebrates

EC50 (48 h) 42 mg/L

C(E)L50 (mg/I) = 22

NOEC (mg/I) = 21,5

Benzyl acetate:

Short-term toxicity to fish

LC50 (4 days) 4 mg/L

Long-term toxicity to fish

NOEC (28 days) 920 μg/L

Short-term toxicity to aquatic invertebrates

EC50 (48 h) 17 mg/L

EC50 (24 h) 25 mg/L

NOEC (48 h) 10 mg/L

Toxicity to aquatic algae and cyanobacteria

EC50 (72 h) 92 - 110 mg/L

NOEC (72 h) 52 mg/L

C(E)L50 (mg/I) = 4

NOEC (mg/I) = 0.92

Ethyl 2,3-epoxy-3-phenylbutyrate:

Short-term toxicity to fish

LC50 (4 days) 4.2 mg/L

NOEC (4 days) 3.2 mg/L

Short-term toxicity to aquatic invertebrates

EC50 (48 h) 52 mg/L

EC50 (24 h) 95 mg/L

Toxicity to aquatic algae and cyanobacteria

EC50 (4 days) 42 mg/L

EC50 (72 h) 36 mg/L

NOEC (4 days) 9.3 mg/L

NOEC (72 h) 9.3 mg/L

C(E)L50 (mg/I) = 4,2

NOÉC (mg/l) = 3.2

3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate:

Short-term toxicity to fish

LC50 (4 days) 16.623 - 18.049 mg/L

LC50 (48 h) 76 mg/L

EC50 (4 days) 10.89 mg/L

Long-term toxicity to fish

LC50 (14 days) 346.663 mg/L

Short-term toxicity to aquatic invertebrates

EC50 (48 h) 53.81 mg/L

EC50 (24 h) 19.181 - 164 mg/L

LC50 (48 h) 15.795 mg/L

Toxicity to aquatic algae and cyanobacteria

EC50 (72 h) 13.075 mg/L

NOEC (72 h) 1.706 mg/L



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

#12/16

In conformity to Regulation (EU) 2020/878

C(E)L50 (mg/I) = 10,89

NOEC (mg/I) = 1,706

Ethyl butyrate:

Short-term toxicity to fish

LC50 (4 days) 100 mg/L

Long-term toxicity to fish

NOEC (28 days) 1.483 mg/L

Short-term toxicity to aquatic invertebrates

EC50 (48 h) 116.6 mg/L

Long-term toxicity to aquatic invertebrates

NOEC (21 days) 28.833 mg/L

C(E)L50 (mg/I) = 100

NOEC (mg/I) = 1,483

Allyl hexanoate:

Short-term toxicity to fish

LC50 (4 days) 117 µg/L

LC50 (72 h) 117 µg/L

LC50 (48 h) 117 µg/L

LC50 (24 h) 201 µg/L

Short-term toxicity to aquatic invertebrates

EC50 (48 h) 2 mg/L

Toxicity to aquatic algae and cyanobacteria

EC50 (72 h) 778 - 4 600 µg/L

NOEC (72 h) 158 µg/L

C(E)L50 (mg/I) = 0,117

NOEC (mg/I) = 0,158

Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE):

Short-term toxicity to fish

LC50 (4 days) 7.5 mg/L

Short-term toxicity to aquatic invertebrates

EC50 (48 h) 22.4 mg/L

EC50 (24 h) 23.2 mg/L

Toxicity to aquatic algae and cyanobacteria

EC50 (72 h) 28 mg/L

NOEC (72 h) 10 mg/L

C(E)L50 (mg/I) = 7.5

NOEC (mg/I) = 10

The product is dangerous for the environment as it is toxic for aquatic organisms following acute exposure. Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:

isopentyl acetate:

Readily biodegradable

Benzyl acetate:

Readily biodegradable

Ethyl 2,3-epoxy-3-phenylbutyrate:

Inherently biodegradable, not fulfilling specific criteria

3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate:

Readily biodegradable

Ethyl butyrate:

No data

Allyl hexanoate:

Readily biodegradable (100%)

Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE):

Under test conditions no biodegradation observed



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

13 / 16

In conformity to Regulation (EU) 2020/878

12.3. Bioaccumulative potential

Related to contained substances: isopentyl acetate:
Bioaccumulation Factor (BCF) - L/kg ww
28.1 L/kg ww

12.4. Mobility in soil

Related to contained substances:

isopentyl acetate:

Koc at 20°C

225.4

3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate:

Koc

66.4 - 1500

Ethyl butyrate:

log Koc

1.346 dimensionless @ 25 °C

Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE):

Koc at 20°C

158

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

12.6. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Disposal of the mixture:

Recover if possible. Send to authorised disposal plants. Operate in accordance with current local and national rules.

Disposal of packaging:

Always clean the packaging before disposal or recycling by rinsing thoroughly with water, cleaning solutions or if possible by treating them as described above. Empty and clean packaging can be recycled or disposed of in accordance with regulations in force. Refers to the environmental labelling for details. Check local rules for disposal.

SECTION 14. Transport information

14.1. UN number or ID number

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

In conformity to Regulation (EU) 2020/878

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

It is not intended to carry bulk

SECTION 15. Regulatory information

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

More information:

The evaluation of information on the dangers of mixtures were made in accordance with the criteria referred to in articles 8 and 9 of Regulation (EC) no 1272/2008.

EU reference legislation:

- Regulation (EC) 1907/2006 (REACH), current text.
- Regulation (EC) 440/2008 (REACH test methods), current text.
- Regulation (EC) 1272/2008 (CLP), current text.
- Regulation (EU) 878/2020 (drafting of safety data sheets).
- Regulation (EC) 648/2004, current text (relating to detergents).
- Regulation (EC) 1223/2009, current text (cosmetic products).
- ADR 2021 agreement

The substance / mixture complies with / does not fall within the scope of the following Regulations:

- Regulation (EC) 1005/2009, current text (substances that reduce the Ozone layer)
- Regulation (EU) 2019/1021, current text (persistent organic pollutants POPs)
- Regulation (EU) 649/2012, current text (export and import of dangerous chemicals)
- Directive (EU) 2012/18 (Seveso III)

Other statements:

- The product is free from GMOs (genetically modified organisms), it is not obtained or derived from GMOs, as defined in Regulation (EC) 834/2007, current text
- The product is excluded from the field of application of Regulation (EC) 1139/2003 (BSE) and of Regulation (EC) no. 999/2001 (TSE), current text, because it is not of animal origin, does not contain animal derivatives and has not come into contact with animal derivatives at any stage of production.
- Our company does not perform or commission animal tests on the product or its components.
- The product has not been treated with ionizing radiation.
- Directive 2010/59 / EU: the product is free from residual solvents or if present these do not exceed the maximum limits provided for in the Directive.
- The product is free from residues of unauthorized contaminants or the maximum limits provided for in Regulation (EC) 396/2005, current text, are not exceeded for those authorized.

#14/16



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

15 / 16

In conformity to Regulation (EU) 2020/878

Any registrations, restrictions, belonging to restricted categories of one or more members, are listed below. The absence of information means that no further specification is necessary or that all components belong to the lowest risk category.

The list of Regulations reported is not exhaustive of all local, national and Community information applicable to the substance / mixture (including its components). For additional information, contact the Person Responsible for this Safety Data Sheet.

All substances are registered / pre-registered / identified for registration / exempt from registration in the ECHA database of chemicals.

Substances in the Candidate List (REACH Article 59)

Based on available data, no SVHC substances are present

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Description of the hazard statements exposed to point 3

H226 = Flammable liquid and vapour.

H412 = Harmful to aquatic life with long lasting effects.

H317 = May cause an allergic skin reaction.

H411 = Toxic to aquatic life with long lasting effects.

H319 = Causes serious eve irritation.

H301 = Toxic if swallowed.

H311 = Toxic in contact with skin.

H331 = Toxic if inhaled.

H400 = Very toxic to aquatic life.

H315 = Causes skin irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

H317 - May cause an allergic skin reaction. Classification procedure: Calculation method

H412 - Harmful to aquatic life with long lasting effects. Classification procedure: Calculation method

Carefully read the instructions for use on the packaging and/or on the product leaflet.

The information contained in this sheet is provided in good faith and refers to the current state of our scientific and technical knowledge at the date of revision of the sheet. All the information on the sheet regarding the composition and chemical-physical properties are provided exclusively for correct handling and use of the product and for any interventions in the event of an emergency. They do not indicate the complete composition of the product (shown on the packaging) nor do they represent any sales specification.

Relevant key information on possibly available exposure scenarios for substances are summarized in sections 1.2, 7.3 and 8.2 of this safety data sheet. The information relates only to the substance/mixture specifically designated in section 1 and is not valid if the substance/mixture is used in combination with other materials or in processes not specifically specified in section 1.

The recipient of this Safety Data Sheet is required to ensure that the information contained is read and understood by all persons who handle, store, use, or otherwise come into contact in any way with the substance / mixture to which this sheet refers. In particular, the recipient must provide adequate training to personnel assigned to the use of substances or mixtures. The recipient must ensure the suitability and completeness of the information in relation to the specific use he makes of the substance / mixture. The substance / mixture to which this sheet refers must not be used for uses other than those specified in section 1. The Safety Data Sheet Manager assumes no responsibility for improper uses. Since the use of the product does not fall under the direct control of the supplier, it is the user's obligation to comply, under his own responsibility, with the laws and regulations in force regarding national and Community hygiene and safety.

Additional contact person responsible for the contents of the safety data sheet: Fabrizio Cioci. Tel. +39 338 3446012 MSDS@consulting-in-cosmetics.com

Bibliography:

Supplier Safety Data Sheets. Related exposure scenarios.

European Commission, Health and Consumers, ECETOC center for chemical safety assessment



BEAMZ SMOKE FLUID ADD. ENERGIZER

Issued on 02/02/2023 - Rel. # 1 on 02/02/2023

16 / 16

In conformity to Regulation (EU) 2020/878

EFSA Journal. European Food Safety Authority

ECHA Brief Profiles (http://echa.europa.eu)

eChemPortal (OECD) Existing Chemicals Database

U.S. National Library of Medicine: ChemIDplus

CIR. Cosmetic Ingredient review

The Good Scents Company (http://www.thegoodscentscompany.com)

EFFA code of practices. IFRA Standards Library. RIFM Fragrance Material Safety Assessment Center

FEMA Flavor Ingredients Library

INRS Fiche Toxicologique

U.S. National Toxicology Program. NIOSH Pocket Guide to Chemical Hazard

U.S. FDA. SCOGS Selected Committee on GRAS Substances

BIBRA Toxicology advice & consulting

HERA Human and Environmental Risk Assessment on ingredients of household cleaning products

Pubchem Database

WHO. INCHEM Internationalally Peer Reviewed CHemical Safety Information

NICNAS Australian Industrial Chemicals Intruduction Scheme

USDA Dr. Duke's Phytochemical and Ethnobotanical Databases