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1121 5<sup>th</sup> Street NW Washington, DC 20001 www.edvotek.com

# Safety Data Sheet

Version 1 Revision Date 03/28/2019

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Limonene Product Number: Brand: Edvotek Supplier: Edvotek 1121 5<sup>th</sup> St

Edvotek Edvotek 1121 5<sup>th</sup> Street NW Washington, DC 20001 Telephone:

Fax:

1-800-338-6835 or 202-370-1500 202-370-1501 Emergency Phone #: 202-370-1500

## 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

#### **OSHA Hazards:**

Flammable liquids Skin irritation Skin sensitization Aspiration hazard Acute aquatic toxicity Chronic aquatic toxicity

Signal word Danger



#### Hazard statements

H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

**H410** Very toxic to aquatic life with long lasting effects.

#### Precautionary statements(s) P210 Keep away from

heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

**P243** Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

**P264** Wash skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

**P273** Avoid release to the environment.

**P280** Wear protective gloves/ eye protection/ face protection.

**P301 + P310** IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off

immediately all contaminated clothing. Rinse skin with water/ shower.

P331 Do NOT induce vomiting.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.

**P370 + P378** In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P391 Collect spillage.

P403 + P235 Store in a well-

ventilated place. Keep cool.

P405 Store locked up.

**P501** Dispose of contents/ container to an approved waste disposal plant.

# HMIS Classification:

Health hazard: 2 Flammability: 2 Physical hazard: 0

# NFPA Rating:

Health hazard:	2
Fire:	2
Reactivity Hazard:	0

# Potential Health Effects:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation. Eyes: May cause eye irritation. Ingestion: May be harmful if swallowed.

# 4. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C<sub>10</sub>H<sub>16</sub>

#### Molecular Weight: 136.23 g/mol

Chemical name	EC No.	CAS –No	Concentration
Limonene	227-815-6	5989-54-8	< 98%

# 5. FIRST AID MEASURES

#### General information

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### lf inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

#### In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

#### In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

# 6. FIREFIGHTING MEASURES

#### Conditions of flammability

This chemical is combustible at high temperatures.

#### Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

# Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### Hazardous combustion products Carbon oxides.

# 7. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapours, mist or gas. Avoid vapours accumulating to form explosive concentrations. Ensure adequate ventilation. Remove all sources of ignition.

#### Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

#### Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials or an electrically protected vacuum cleaner if needed and dispose into a chemical waste container.

# 8. HANDLING AND STORAGE

#### **Precautions for safe handling** Avoid contact with skin and eyes. Avoid inhalation. Keep away from sources of ignition - no smoking and prevent the build up of electrostatic charge.

**Conditions for safe storage** Store at room temperature in dry and well ventilated location. Keep upright and sealed to prevent leakage.

#### **Incompatible Products** Strong oxidizing agents.

# 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

#### Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

#### Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

, appoulai an		
Form	liquid	
Colour	colorless	
Odor	characteristic	
Safety da	ta	
рН		no data available
Melting poi	nt/freezing point	-74.29 °C
Boiling poir	nt	176 - 177 °C
Flash point		50 °C
Ignition ten	nperature	no data available
Autoignitio	n Temperature	245 °C at 995 hPa (746 mmHg)
Lower expl	osion limit	0.7 %(V)
Upper expl	osion limit	6.1 %(V)
Vapour pre	ssure	50 hPa (38 mmHg) at ca.50 °C
Density (wa	ater=1)	no data available
Water solu	bility	immiscible
Partition co	efficient:	log Pow: 4.2
n-octanol/w	vater	no data available
Relative va	pour Density	4.70 - (Air = 1.0)
Odour Thre	eshold	no data available
Evaporatio	n rate	no data available

# **10. STABILITY AND REACTIVITY**

SDS- Limonene

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Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions No further relevant data available. Conditions to avoid Heat, flames, and sparks.

Materials to avoid Strong oxidizing agents.

Hazardous decomposition products No data available.

# 11. TOXICOLOGICAL INFORMATION

# Acute toxicity LD/LC50 values no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Skin corrosion/irritation no data available

#### Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA to humans.

Reproductive toxicity no data available

Teratogenicity no data available

#### Aspiration hazard

no data available

Synergistic effects no data available

# 12. ECOLOGICAL INFORMATION

Toxicity no data available Mobility in soil no data available

Persistence and degradability no data available

**Bioaccumulative potential** no data available

PBT and vPvB assessment no data available

Other adverse effects no data available

# 13. DISPOSAL CONSIDERATIONS

#### Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations. **Contaminated packaging** Dispose of as unused product.

# 14. TRANSPORT INFORMATION

DOT (US) Packing group 3, labeled as "Dipentene". IMDG Packing group 3, labeled as "Dipentene". IATA Packing group 3, labeled as "Dipentene"

# 15. **REGULATORY INFORMATION**

#### OSHA Hazards

No known OSHA hazards

#### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

#### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

#### SARA 311/312Hazards

No SARA Hazards.

# 16. OTHER INFORMATION

For educational use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.



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# Safety Data Sheet

Version 1 Revision Date 04/27/2019

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Anethole Product Number: Brand: Edvotek Supplier: Edvotek 1121 5<sup>th</sup> S

Edvotek Edvotek 1121 5<sup>th</sup> Street NW Washington, DC 20001 Telephone:

Fax:

1-800-338-6835 or 202-370-1500 202-370-1501 Emergency Phone #: 202-370-1500

#### 2. HAZARDS IDENTIFICATION

**Emergency Overview** 

OSHA Hazards: Skin sensitization

Signal word Warning

Pictogram



Hazard statements

H317 May cause an allergic skin reaction.

## **Precautionary statements(s)**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. **P321** Specific treatment (see supplemental first aid instructions on this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.

**P501** Dispose of contents/ container to an approved waste disposal plant.

# HMIS Classification:

Health hazard: 1 Flammability: 1 Physical hazard: 0

## **NFPA Rating:**

Health hazard:	1
Fire:	1
Reactivity Hazard:	0

### Potential Health Effects:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation. Eyes: May cause eye irritation. Ingestion: May be harmful if swallowed.

# 4. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C<sub>10</sub>H<sub>12</sub>O

Molecular Weight: 148.20 g/mol

Chemical name	EC No.	CAS –No	Concentration
Anethole	224-052-0	4180-23-8	< 100%

## 5. FIRST AID MEASURES

#### **General information**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

#### In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

#### In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with

water. Get medical attention if symptoms develop.

### 6. FIREFIGHTING MEASURES

**Conditions of flammability** Flammable in the presence of a source of ignition when the temperature is above the flash point.

Suitable extinguishing media Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

# Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products Carbon oxides.

# 7. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing in dust.

#### **Environmental precautions**

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

#### Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 8. HANDLING AND STORAGE

## Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Conditions for safe storage

Store at room temperature in dark, dry and well ventilated location.

Incompatible Products No known products

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

#### Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

#### Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

Form	solid	
Colour	no data available	
Odor	characteristic	
Safety da	ta	
рН		no data available
Melting poin	nt/freezing point	20-21 °C
Boiling poir	nt	234-237 °C
Flash point		no data available
Ignition terr	perature	no data available
Autoignitior	n Temperature	no data available

- Lower explosion limit Upper explosion limit Vapour pressure Density (water=1) Water solubility Partition coefficient: n-octanol/water Relative vapour Density Odour Threshold Evaporation rate
- no data available no data available

#### **10. STABILITY AND REACTIVITY**

#### Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions No further relevant data available. Conditions to avoid Light.

Materials to avoid Strong oxidizing agents.

Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity

no data available

Skin corrosion/irritation no data available

**Carcinogenicity** No components of this product are listed by IARC, ACGIH, NTP and OSHA to humans.

Reproductive toxicity no data available

Teratogenicity no data available

Aspiration hazard no data available

Synergistic effects no data available

## 12. ECOLOGICAL INFORMATION

Toxicity no data available

Persistence and degradability no data available

**Bioaccumulative potential** no data available Mobility in soil no data available

PBT and vPvB assessment no data available Other adverse effects no data available

# 13. DISPOSAL CONSIDERATIONS

Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

**Contaminated packaging** Dispose of as unused product.

# 14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods. IMDG Not dangerous goods. IATA Not dangerous goods.

# 15. **REGULATORY INFORMATION**

#### OSHA Hazards

No known OSHA hazards

#### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

#### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

# SARA 311/312Hazards

No SARA Hazards.

# 16. OTHER INFORMATION

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1121 5<sup>th</sup> Street NW Washington, DC 20001 www.edvotek.com

# Safety Data Sheet

Version 1 Revision Date 04/28/2019

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Eugenol Product Number: Brand: Edvotek Supplier: Edvotek 1121 5<sup>th</sup> Street NW Washington, DC Telephone:

Fax:

1-800-338-6835 or 202-370-1500 202-370-1501 Emergency Phone #: 202-370-1500

## 2. HAZARDS IDENTIFICATION

20001

#### **Emergency Overview**

#### **OSHA Hazards:**

Eye irritation (Category 2A) Skin sensitisation (Category 1) Acute aquatic toxicity (Category 2)

#### Signal word Warning

#### Pictogram



#### Hazard statements

H317 May cause an allergic skin reaction.H319 Causes serious eye irritation.H401 Toxic to aquatic life.

#### Precautionary statements(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.P264 Wash skin thoroughly after handling. **P272** Contaminated work clothing should not be allowed out of the workplace.

**P273** Avoid release to the environment.

**P280** Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and continue rinsing.

**P321** Specific treatment (see supplemental first aid instructions on this label).

**P333 + P313** If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation

persists: Get medical advice/ attention. **P363** Wash contaminated clothing before reuse. **P501** Dispose of contents/ container to an approved waste disposal plant.

# HMIS Classification:

Health hazard: 2 Flammability: 1 Physical hazard: 0

# **NFPA Rating:**

Health hazard:	2
Fire:	1
Reactivity Hazard:	0

# Potential Health Effects:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.Eyes: May cause eye irritation.Ingestion: May be harmful if swallowed.

# 4. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C<sub>10</sub>H<sub>12</sub>O<sub>2</sub> Molecular Weight: 164.20 g/mol

Chemical name	EC No.	CAS –No	Concentration
Eugenol	202-589-1	97-53-0	<= 100%

# 5. FIRST AID MEASURES

# General information

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

#### In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

# In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

# 6. FIREFIGHTING MEASURES

# Conditions of flammability

Flammable in the presence of a source of ignition when the temperature is above the flash point.

#### Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

# Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products Carbon oxides.

# 7. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing in dust.

## **Environmental precautions**

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

## Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

# 8. HANDLING AND STORAGE

# Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Conditions for safe storage

Keep container tightly closed. Store in dry and well ventilated location.

Incompatible Products No known products

# 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

#### Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

#### Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

FormliquidColourclear to lightly yellowOdorcharacteristic

#### Safety data

рН	no data available
Melting point/freezing point	-1210 °C
Boiling point	254 °C
Flash point	112 °C
Ignition temperature	no data available
Autoignition Temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density (water=1)	no data available
Water solubility	no data available
Partition coefficient:	no data available
n-octanol/water	no data available
Relative vapour Density	no data available
Odour Threshold	no data available
Evaporation rate	no data available

# **10. STABILITY AND REACTIVITY**

#### Chemical stability

Stable under recommended storage conditions.

# Possibility of hazardous

reactions

No further relevant data available.

Conditions to avoid Air.

Materials to avoid Strong oxidizing agents.

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

# 11. TOXICOLOGICAL INFORMATION

# Acute toxicity LD/LC50 values no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Skin corrosion/irritation no data available

**Carcinogenicity** No components of this product are listed by IARC, ACGIH, NTP and OSHA to humans.

Reproductive toxicity no data available

Teratogenicity no data available

Aspiration hazard no data available

Synergistic effects no data available

no uala avaliable

# 12. ECOLOGICAL INFORMATION

Toxicity no data available

Persistence and degradability no data available

**Bioaccumulative potential** 

no data available

Mobility in soil no data available

PBT and vPvB assessment no data available

no data available

# Other adverse effects

# 13. DISPOSAL CONSIDERATIONS

#### Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations. **Contaminated packaging** Dispose of as unused product.

# 14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods. IMDG Not dangerous goods. IATA Not dangerous goods.

# 15. **REGULATORY INFORMATION**

# OSHA Hazards

No known OSHA hazards

## SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 303

## SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

#### SARA 311/312Hazards No SARA Hazards.

# 16. OTHER INFORMATION

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# Safety Data Sheet

Version 1 Revision Date 04/28/2019

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: S-Carvone Product Number: Brand: Edvotek Supplier: Edvotek 1121 5<sup>th</sup> Str

Edvotek Edvotek 1121 5<sup>th</sup> Street NW Washington, DC 20001 Telephone:

Fax:

1-800-338-6835 or 202-370-1500 202-370-1501 Emergency Phone #: 202-370-1500

## 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

#### **OSHA Hazards:**

Flammable liquids (Category 4) Skin sensitisation (Sub-category 1B)

#### Signal word Warning

#### Pictogram



## Hazard statements

H227 Combustible liquid. H317 May cause an allergic skin reaction.

#### Precautionary statements(s)

P210 Keep away from heat/sparks/open flames/hot surfaces.No smoking.P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

**P272** Contaminated work clothing should not be allowed out of the workplace.

**P280** Wear protective gloves/ eye protection/ face protection.

**P302 + P352** IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P363 Wash contaminated clothing

before reuse.

**P370 + P378** In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P403 + P235 Store in a wellventilated place. Keep cool.

P501 Dispose of contents/ container to an approved waste disposal plant.

# HMIS Classification:

Health hazard: 0

Flammability: 1 Physical hazard: 0

# **NFPA Rating:**

Health hazard:	0
Fire:	1
Reactivity Hazard:	0

# Potential Health Effects:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. Skin: May be harmful if absorbed

through skin. May cause skin irritation. Eyes: May cause eye irritation. Ingestion: May be harmful if swallowed.

# 4. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C<sub>10</sub>H<sub>14</sub>O Molecular Weight: 150.22 g/mol

Chemical name	EC No.	CAS –No	Concentration
S-Carvone	218-827-2	2244-16-8	<= 100%

# 5. FIRST AID MEASURES

#### General information

If inhaled

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

## In case of skin contact

lf

#### In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

# 6. FIREFIGHTING MEASURES

#### Conditions of flammability

Flammable in the presence of a source of ignition when the temperature is above the flash point.

#### Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

# Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### Hazardous combustion products Carbon oxides.

# 7. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Keep away from sources of ignition.

#### **Environmental precautions**

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

#### Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

# 8. HANDLING AND STORAGE

# Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Conditions for safe storage

Keep container tightly closed. Store in dry and well ventilated location.

Incompatible Products No known products

# 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

## Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

#### Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

FormliquidColourclear to lightly yellowOdorcharacteristicSafety data

# **10. STABILITY AND REACTIVITY**

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

No further relevant data available.

Conditions to avoid Moisture. Heat, flames, and sparks.

# Materials to avoid

Strong oxidizing agents.

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

#### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity LD/LC50 values no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Skin corrosion/irritation no data available

#### Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA to humans.

Reproductive toxicity no data available

Teratogenicity no data available

Aspiration hazard no data available

Synergistic effects no data available

## 12. ECOLOGICAL INFORMATION

Toxicity no data available

Persistence and degradability no data available

**Bioaccumulative potential** no data available

Mobility in soil no data available

PBT and vPvB assessment no data available Other adverse effects no data available

## 13. DISPOSAL CONSIDERATIONS

#### Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations. **Contaminated packaging** Dispose of as unused product.

# 14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods. IMDG Not dangerous goods. IATA Not dangerous goods.

# 15. **REGULATORY INFORMATION**

OSHA Hazards No known OSHA hazards

#### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 303

## SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

#### SARA 311/312Hazards

Fire Hazards.

# 16. OTHER INFORMATION

For educational use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.



1121 5<sup>th</sup> Street NW Washington, DC 20001 www.edvotek.com

# Safety Data Sheet

Version 1 Revision Date 04/28/2019

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Kit 1100 Unknown

Sample

Telephone:

Product Number: Brand: Supplier:

Edvotek Edvotek 1121 5<sup>th</sup> Street NW Washington, DC 20001 Fax:

1-800-338-6835 or 202-370-1500 202-370-1501 Emergency Phone #: 202-370-1500

# 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

#### OSHA Hazards:

Eye irritation (Category 2A) Skin sensitisation (Category 1) Acute aquatic toxicity (Category 2)

Signal word Warning

Pictogram



Hazard statements

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation. H401 Toxic to aquatic life.

## Precautionary statements(s)

**P261** Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

**P264** Wash skin thoroughly after handling.

**P272** Contaminated work clothing should not be allowed out of the workplace.

**P273** Avoid release to the environment.

**P280** Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and continue rinsing.

**P321** Specific treatment (see supplemental first aid instructions on this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation

persists: Get medical advice/ attention. **P363** Wash contaminated clothing before reuse. **P501** Dispose of contents/ container to an approved waste disposal plant.

# HMIS Classification:

Health hazard: 2 Flammability: 1 Physical hazard: 0

# NFPA Rating:

Health hazard:	2
Fire:	1
Reactivity Hazard:	0

# Potential Health Effects:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation. Eyes: May cause eye irritation. Ingestion: May be harmful if swallowed.

# 4. COMPOSITION/INFORMATION ON INGREDIENTS

Formula:  $C_{10}H_{12}O$ ,  $C_{10}H_{12}O_2$ ,  $C_{10}H_{14}O$ 

Molecular Weight: 148.20 g/mol, 164.20 g/mol, 150.22 g/mol

Chemical name	EC No.	CAS –No	Concentration
Anethole	224-052-0	4180-23-8	50-60%
Eugenol	202-589-1	97-53-0	1-10%
S-Carvone	2244-16-8	218-827-2	30-40%

# 5. FIRST AID MEASURES

#### General information

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

#### In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

#### In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

# 6. FIREFIGHTING MEASURES

#### Conditions of flammability

Flammable in the presence of a source of ignition when the temperature is above the flash point.

#### Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

# Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### Hazardous combustion products Carbon oxides.

# 7. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing in dust.

#### Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

#### Methods and materials for containment and cleaning up

#### 8. HANDLING AND STORAGE

**Precautions for safe handling** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep container tightly closed. Store in dry and well ventilated location.

Conditions for safe storage

Incompatible Products No known products

#### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

#### Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

#### Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form liquid Colour clear to lightly yellow Odor characteristic

#### Safety data

pH	no data available
Melting point/freezing point	-1210 °C
Boiling point	254 °C
Flash point	112 °C
Ignition temperature	no data available
Autoignition Temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density (water=1)	no data available
Water solubility	no data available
Partition coefficient:	no data available
n-octanol/water	no data available
Relative vapour Density	no data available
Odour Threshold	no data available
Evaporation rate	no data available

#### **10. STABILITY AND REACTIVITY**

#### Chemical stability

Stable under recommended storage conditions.

# Possibility of hazardous reactions

No further relevant data available.

Conditions to avoid Air.

Materials to avoid Strong oxidizing agents.

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

#### 11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values

no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Skin corrosion/irritation no data available

#### Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA to humans.

Reproductive toxicity no data available

Teratogenicity no data available

Aspiration hazard

no data available

Synergistic effects no data available

#### 12. ECOLOGICAL INFORMATION

Toxicity no data available no data available

**Bioaccumulative potential** no data available

Persistence and degradability

no data available

#### Mobility in soil no data available

Other adverse effects no data available

PBT and vPvB assessment

#### 13. DISPOSAL CONSIDERATIONS

#### Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations. **Contaminated packaging** Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods. IMDG Not dangerous goods. IATA Not dangerous goods.

#### 15. **REGULATORY INFORMATION**

OSHA Hazards No known OSHA hazards

#### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 303

#### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

#### SARA 311/312Hazards No SARA Hazards.

#### 16. OTHER INFORMATION

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1121 5<sup>th</sup> Street NW Washington, DC 20001 www.edvotek.com

# Safety Data Sheet

Version 1 Revision Date 04/28/2019

#### PRODUCT AND COMPANY IDENTIFICATION 1.

Product name:

Product Number:

Anhydrous Sodium Carbonate

Telephone:

Brand: Supplier: Edvotek Edvotek 1121 5<sup>th</sup> Street NW Washington, DC 20001

Fax:

1-800-338-6835 or 202-370-1500 202-370-1501 Emergency Phone #: 202-370-1500

#### 2. HAZARDS IDENTIFICATION

**Emergency Overview** 

**OSHA Hazards:** Eye irritation (Category 2A)

Signal word Warning

Pictogram



Hazard statements H319 Causes serious eye irritation.

**Precautionary statements(s)** P264 Wash skin thoroughly after handling.

P280 Wear eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.		Reactivity Hazard:	0
		Potential Health Ef	fects:
HMIS Classification	:	Inhalation: May	be harmful if
Health hazard: 2		inhaled. May cause re	spiratory tract
Flammability: 0		irritation.	
Physical hazard: 0		Skin: May be harmfu through skin. May cau	
NFPA Rating:		Eyes: May cause eye	e irritation.
Health hazard:	2	Ingestion: May be ha	armful if
Fire:	0	swallowed.	

#### 4. COMPOSITION/INFORMATION ON INGREDIENTS

#### Formula: CNa<sub>2</sub>O<sub>3</sub> Molecular Weight: 105.99 g/mol

Chemical name	EC No.	CAS –No	Concentration
Sodium carbonate	207-838-8	497-19-8	90-100%

#### 5. FIRST AID MEASURES

#### General information

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

#### In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

#### In case of eye contact

Flush eyes with water for 15 minutes. Get medical attention if irritation persists.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

#### 6. FIREFIGHTING MEASURES

## Conditions of flammability

Flammable in the presence of a source of ignition when the temperature is above the flash point.

# Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for firefighters Wear self contained breathing apparatus for fire fighting if necessary.

#### Hazardous combustion products Carbon oxides.

#### 7. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid dust formation. Keep away from sources of ignition.

#### **Environmental precautions**

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

#### Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### 8. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid further processing of solid materials as this may result in the formation of combustible dusts. Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

#### Conditions for safe storage Keep container tightly closed. Store in dry and well ventilated location.

Incompatible Products No known products

#### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

#### Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

#### Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

Form	powder	
Colour	white	
Odor	no data available	
Safety da	ta	
рН		no data available
Melting poir	nt/freezing point	851 °C
Boiling poin	it	1600 °C
Flash point		no data available
Ignition tem	perature	no data available
Autoignition	n Temperature	no data available
Lower explo	osion limit	no data available
Upper explo	osion limit	no data available
Vapour pres	ssure	no data available
Density (wa	ater=1)	no data available
Water solut	oility	no data available

Partition coefficient:
n-octanol/water
Relative vapour Density
Odour Threshold
Evaporation rate

no data available no data available no data available no data available no data available

#### **10. STABILITY AND REACTIVITY**

**Chemical stability** Stable under recommended storage conditions. Hygroscopic.

Possibility of hazardous reactions No further relevant data available. Conditions to avoid Moisture.

Materials to avoid Strong acids.

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

#### 11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Skin corrosion/irritation no data available

#### Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA to humans.

# Reproductive toxicity

no data available

## Teratogenicity

no data available

#### Aspiration hazard

no data available

#### Synergistic effects

no data available

#### 12. ECOLOGICAL INFORMATION

Toxicity no data available Mobility in soil no data available

Persistence and degradability no data available

**Bioaccumulative potential** no data available

PBT and vPvB assessment no data available

Other adverse effects no data available

#### 13. DISPOSAL CONSIDERATIONS

#### Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations. Contaminated packaging Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods. IMDG Not dangerous goods. IATA Not dangerous goods.

#### 15. **REGULATORY INFORMATION**

#### OSHA Hazards

No known OSHA hazards

#### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 303

#### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

## SARA 311/312Hazards

No SARA hazard.

#### 16. OTHER INFORMATION

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# Safety Data Sheet

Version 1 Revision Date 03/28/2019

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Potassium

Telephone:

Product Number: Brand: Supplier:

Permanganate Edvotek Edvotek 1121 5<sup>th</sup> Street NW Washington, DC 20001

Fax:

1-800-338-6835 or 202-370-1500 202-370-1501 Emergency Phone #: 202-370-1500

#### 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

#### **OSHA Hazards:**

Oxidizing solids (Category 2) Acute toxicity, Oral (Category 4) Skin corrosion (Category 1B) Serious eye damage (Category 1) Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1)

Signal word Danger

#### Pictogram



Hazard statements

H272 May intensify fire; oxidizer.H302 Harmful if swallowed.H314 Causes severe skin burns and eye damage.

#### Precautionary statements(s)

P210 Keep away from heat.

**P220** Keep/Store away from clothing/ combustible materials.

**P221** Take any precaution to avoid mixing with combustibles.

P260 Do not breathe dust or mist.

**P264** Wash skin thoroughly after handling.

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

**P273** Avoid release to the environment.

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

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

**P304 + P340 + P310** IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

#### P305 + P351 + P338 + P310 IF

IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Immediately

call a POISON CENTER/doctor.

**P363** Wash contaminated clothing before reuse.

**P370 + P378** In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P391 Collect spillage.

P405 Store locked up.

**P501** Dispose of contents/ container to an approved waste disposal plant.

#### HMIS Classification:

Health hazard: 3 Flammability: 0 Physical hazard: 2

#### NFPA Rating:

Health hazard:	3
Fire:	0
Reactivity Hazard:	2

### Potential Health Effects:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation. Eyes: May cause eye irritation. Ingestion: May be harmful if swallowed.

#### 4. COMPOSITION/INFORMATION ON INGREDIENTS

# Formula: KMn<sub>4</sub>O<sub>4</sub>

Molecular Weight: 158.03 g/mol

Chemical name	EC No.	CAS –No	Concentration
Potassium	100-028-874	7722-64-7	< = 100%
Permanganate			

#### 5. FIRST AID MEASURES

#### General information

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

#### In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

#### In case of eye contact

Flush eyes with water for 15 minutes. Get medical attention immediately if irritation persists.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

#### 6. FIREFIGHTING MEASURES

#### Conditions of flammability

This chemical is combustible at high temperatures.

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Hazardous combustion products Carbon oxides.

#### 7. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid formation of dust and aerosols. Ensure adequate ventilation. Remove all sources of ignition. No smoking. Keep away from heat.

#### Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

#### Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials if needed and dispose into a chemical waste container.

#### 8. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation. Keep away from sources of ignition - no smoking and prevent the build up of electrostatic charge. **Conditions for safe storage** Store at room temperature in dry and well ventilated location.

Incompatible Products No known products

#### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

#### Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

#### Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

, appearance			
Form	crystalline		
Colour	dark violet		
Odor	odourless		
Safety da	ta		
рН		no data available	
Melting poir	nt/freezing point	>240 °C	
Boiling poir	nt	no data available	
Flash point		not applicable	
Ignition tem	perature	no data available	
Autoignition Temperature		no data available	
Lower explosion limit		no data available	
Upper explosion limit		no data available	
Vapour pressure		no data available	
Density (water=1)		no data available	
Water solut	oility	no data available	
Partition coefficient:		no data available	
n-octanol/water		no data available	
Relative vapour Density		no data available	
Odour Threshold		no data available	
Evaporation	n rate	no data available	

Chemical stability	Strong reducing agents, Powdered
Stable under recommended storage conditions.	metals, Peroxides, Zinc, Copper, Alcohols, Hydrogen fluoride, Acids,
	Sulfuric acid
Possibility of hazardous	
reactions	Hazardous decomposition
No further relevant data available.	products
	Hazardous decomposition products
Conditions to avoid	formed under fire conditions

Conditions to avoid No further relevant data available.

Materials to avoid

Potassium oxides, Manganese/manganese oxides

### 11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Skin corrosion/irritation no data available

**Carcinogenicity** No components of this product are listed by IARC, ACGIH, NTP and OSHA to humans.

Reproductive toxicity no data available

Teratogenicity

no data available

Aspiration hazard no data available

Synergistic effects no data available

#### 12. ECOLOGICAL INFORMATION

Toxicity no data available Mobility in soil no data available

no data available

Persistence and degradability no data available

**Bioaccumulative potential** no data available

Other adverse effects no data available

PBT and vPvB assessment

#### 13. DISPOSAL CONSIDERATIONS

#### Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations. **Contaminated packaging** Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

DOT (US)

UN number: 1490 Class: 5.1 Packing group: II Proper shipping name: Potassium permanganate

#### IMDG

UN number: 1490 Class: 5.1 Packing group: II EMS-No: F-H, S-Q Proper shipping name: Potassium permanganate

#### ΙΑΤΑ

UN number: 1490 Class: 5.1 Packing group: II Proper shipping name: Potassium permanganate

#### 15. **REGULATORY INFORMATION**

#### OSHA Hazards

No known OSHA hazards

#### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

SARA 313: This material contains components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313: Potassium permanganate 7722-64-7

#### SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard

#### 16. OTHER INFORMATION

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