

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

1.1. Product identifier

Product name: OCTANE

CAS number: 111-65-9

EINECS number: 203-892-1

Index number: 601-009-00-8

Product code: A69711

Synonyms: N-OCTANE

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

Use of substance / mixture: Laboratory Chemicals, Manufacture of Substances.

1.3. Details of the supplier of the safety data sheet

Company name: PHILIP HARRIS

2 Gregory Street

Hyde

Cheshire

SK14 4HR

United Kingdom

Tel: +44 (0)845 1200 506

Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

1.4. Emergency telephone number

Emergency tel: +44 (0) 845 1200 506

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Skin Irrit. 2: H315; STOT SE 3: H336

Most important adverse effects: Highly flammable liquid and vapour. May be fatal if swallowed and enters airways.
Causes skin irritation. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

Hazard statements: H225: Highly flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

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H336: May cause drowsiness or dizziness.

H400: Very toxic to aquatic life.

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

Signal words: Danger

Hazard pictograms: GHS02: Flame

GHS07: Exclamation mark

GHS08: Health hazard

GHS09: Environmental



Precautionary statements: P273: Avoid release to the environment.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.

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

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

P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/.

P302+352: IF ON SKIN: Wash with plenty of water/.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P331: Do NOT induce vomiting.

2.3. Other hazards

Other hazards: In use, may form flammable / explosive dust-air mixture.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: OCTANE

CAS number: 111-65-9

EINECS number: 203-892-1

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor. Never give anything by mouth to an unconscious person

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Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

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

Immediate / special treatment: IF exposed or if you feel unwell: Call a POISON CENTRE or DOCTOR. Show this safety data sheet to the doctor in attendance. The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Alcohol resistant foam. Water spray. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Highly flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. Vapour may travel considerable distance to source of ignition and flash back.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Do not use equipment in clean-up procedure which may produce sparks. Absorb into dry earth or sand. Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Contain spillage, and then collect with an electronically protected

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vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4. Reference to other sections

Reference to other sections: Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Smoking is forbidden. Use non-sparking tools. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids. Containers which are open must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

Specific end use(s): Apart from uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Respiratory protection: Respiratory protection not required. Where risk assessment shows air-purifying respirators are appropriate use a full face respirator with multi purpose combination (US) or type AXBEK (EN14387 respirator cartridges as a back up to engineering controls. If the respirator is the sole means of protection use a full face supplied air respirator. Use respirators and components tested & approved under appropriate government standards eg CEN (EU) or NIOSH (US).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use.

Wash and dry hands. Full contact

Material: Nitrile rubber

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Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Eye protection: Face shield and safety glasses. Use equipment for eye protection test and approved under appropriate government statements such as NIOSH (US) or EN 166(EU)

Skin protection: Protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Characteristic odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: No data available.

Boiling point/range°C: 125-127

Melting point/range°C: -57

Flammability limits %: lower: 0.96%

upper: 6.5%

Flash point°C: 13

Part.coeff. n-octanol/water: No data available.

Autoflammability°C: 220

Vapour pressure: 14.7

Relative density: 0.703

pH: No data available.

VOC g/l: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid: Heat. Sources of ignition. Flames.

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10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes. In the event of fire see section 5. Carbon Monoxide and Carbon Dioxide are emitted.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

OCTANE

IVN	MUS	LDLO	428	mg/kg
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Relevant hazards for substance:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
STOT-single exposure	-	Hazardous: calculated
Aspiration hazard	-	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H LC50	0.42	mg/l
Daphnia magna	48H EC50	0.38	mg/l
ALGAE	72H ErC50	5.8	mg/l

Hazardous ingredients:

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ALGAE	72H ErC50	5.8	mg/l
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Daphnia magna	48H EC50	0.38	mg/l
FISH	96H LC50	0.42	mg/l

12.2. Persistence and degradability

Persistence and degradability: Not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms. Toxic to soil organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN1262

14.2. UN proper shipping name

Shipping name: OCTANES

14.3. Transport hazard class(es)

Transport class: 3

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

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14.6. Special precautions for user

Tunnel code: D/E

Transport category: 2

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

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

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H225: Highly flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H336: May cause drowsiness or dizziness.

H400: Very toxic to aquatic life.

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

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.