

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 13.07.2010

Revision: 13.07.2010

1 Identification of substance

Product details

Trade name

n-Octane-d18

Stock number:

42339

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com

Informing department:

Product safety department.

Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

2 Hazards identification

Hazard designation:

Xn Harmful
F Highly flammable
N Dangerous for the environment

Information pertaining to particular dangers for man and environment

R 11 Highly flammable.
R 38 Irritating to skin.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 65 Harmful: may cause lung damage if swallowed.
R 67 Vapours may cause drowsiness and dizziness.

GHS label elements

**Danger**

H224 - Extremely flammable liquid and vapour.

**Danger**

H304 - May be fatal if swallowed and enters airways.

**Warning**H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.**Warning**H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
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.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Prevention:

Response:

Storage:

Disposal:

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

n-Octane-d18 (CAS# 17252-77-6), 100%

Identification number(s):

241-285-3

EINECS Number:

4 First aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice.

After skin contact

Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.

After swallowing

Rinse opened eye for several minutes under running water. Then consult doctor.

Information for doctor

Seek immediate medical advice.

The following symptoms may occur:

Sickness
Dazed
Gastric or intestinal trouble
Headache
Breathing difficulty
If swallowed or in case of vomiting, danger of entering the lungs.

Danger

5 Fire fighting measures

Suitable extinguishing agents

CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents

Water.

Special hazards caused by the material, its products of combustion or flue gases:

Can be released in case of fire:
Carbon monoxide (CO)
Wear self-contained breathing apparatus.
Wear full protective suit.

Protective equipment:

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation
Keep away from ignition sources
Do not allow material to be released to the environment without proper governmental permits.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Keep away from ignition sources.

Measures for cleaning/collecting:

See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Additional information:

7 Handling and storage

Handling

Information for safe handling:

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.(Contd. on page 2)
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Information about protection against explosions and fires:

Ensure good ventilation/exhaustion at the workplace.

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.

**Storage Requirements to be met by storerooms and containers:
Information about storage in one common storage facility:
Further information about storage conditions:**

Store in cool location.

Store away from oxidizing agents.

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection**Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace:

n-Octane

	ppm
ACGIH TLV	300; 375-STEL
Belgium TWA	300; 375-STEL
Denmark TWA	300
Finland TWA	300; 375-STEL
France TWA	300
Germany TWA	500 (all isomers)
Hungary TWA	500; 1500-STEL
Ireland TWA	300; 375-STEL
Poland TWA	200
Russia TWA	300
Sweden TWA	200; 300-STEL
Switzerland TWA	300; 600-STEL
USA PEL	500
No data	

Additional information:**Personal protective equipment
General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
Use breathing protection with high concentrations.
Safety glasses
Face protection
Protective work clothing.

Breathing equipment:**Eye protection:****Body protection:****9 Physical and chemical properties:****General Information**

Form:	Liquid
Colour:	Colourless
Smell:	Not determined

Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	Not determined

Flash point:	16°C
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Ignition temperature:	Not determined
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Decomposition temperature:	Not determined
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Critical values for explosion:

Lower:	Not determined
Upper:	Not determined

Steam pressure:	Not determined
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Density at 20°C	0.815 g/cm³
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Solubility in / Miscibility with Water:	Not miscible or difficult to mix
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10 Stability and reactivity**Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

Materials to be avoided:

Oxidizing agents

Dangerous reactions:

No dangerous reactions known

Dangerous products of decomposition:

Carbon monoxide and carbon dioxide

11 Toxicological information**Acute toxicity:****Primary irritant effect:****on the skin:**

Irritant for skin and mucous membranes.

on the eye:

Irritant effect.

Sensitization:

No sensitizing effect known.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:**Ecotoxic effects:****Remark:**

Very toxic for fish

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Additional ecological information:
General notes:

Water danger class 3 (Self-assessment): extremely hazardous for water.
 Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
 Danger to drinking water if even extremely small quantities leak into soil.
 Also poisonous for fish and plankton in water bodies.
 Do not allow material to be released to the environment without proper governmental permits.
 Very toxic for aquatic organisms

13 Disposal considerations

Product:
Recommendation

Consult state, local or national regulations for proper disposal.
 Hand over to disposers of hazardous waste.
 Must be specially treated under adherence to official regulations.

Uncleaned packagings:
Recommendation:

Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)


ADR/RID-GGVS/E Class: 3 (F1) Flammable liquids.
 Kemler Number: 33
 UN-Number: 1262
 Packaging group: II
 Label: 3
 Special marking: Symbol (fish and tree)
 Designation of goods: 1262 OCTANES
 Limited quantities (LQ): LQ4
 Transport category: 2
 Tunnel restriction code: D/E

Maritime transport IMDG/GGVSea:


IMDG/GGVSea Class: 3
 UN Number: 1262
 Label: 3
 Packaging group: II
 Marine pollutant: No
 Correct technical name: OCTANES

Air transport ICAO-TI and IATA-DGR:


ICAO/IATA Class: 3
 UN/ID Number: 1262
 Label: 3
 Packaging group: II
 Correct technical name: OCTANES

UN "Model Regulation":

UN1262, OCTANES, 3, II
 Environmentally hazardous substance, liquid; Marine Pollutant

15 Regulatory information

Designation according to EC guidelines:
Code letter and hazard designation of product:


Xn Harmful
 F+ Highly flammable
 N Dangerous for the environment

Risk phrases:

11 Highly flammable.
 38 Irritating to skin.
 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 65 Harmful: may cause lung damage if swallowed.
 67 Vapours may cause drowsiness and dizziness.

Safety phrases:

9 Keep container in a well-ventilated place.
 16 Keep away from sources of ignition - No smoking.
 29 Do not empty into drains.
 33 Take precautionary measures against static discharges.
 60 This material and its container must be disposed of as hazardous waste.
 61 Avoid release to the environment. Refer to special instructions/safety data sheets.
 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

National regulations
Information about limitation of use:

Employment restrictions concerning young persons must be observed.
 For use only by technically qualified individuals.

Water hazard class:

Water danger class 3 (Self-assessment): extremely hazardous for water.

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Contact: Zachariah Holt

Abbreviations and acronyms:
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association

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IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

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