

SAFETY DATA SHEET

JET A1

Last changed: 16/03/2011

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

1.1 Product identifier

Trade name / designation JET A1
Substance name Kerosine (petroleum)
CAS NO. 8008-20-6;
EC NO. 232-366-4;
INDEX NO. 649-404-00-4;
REG.NO 01-2119485517-27-0014;

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

RELEVANT IDENTIFIED USES Surface treatment Additive for cleaning agents. Lubricant Release agents and binders. Agrochemicals. Fuel. Functional fluids. Road and construction. Explosives.
USES ADVISED AGAINST None.

1.3 Details of the supplier of the safety data sheet

NATIONAL MANUFACTURER/IMPORTER

Enterprise Statoil ASA (OTS)
Address Forusbeen 50
Postal code 4035 Stavanger
Country Norge
E-mail Statoil chemical competence center: chem@statoil.com
Telephone +47 51 99 00 00

1.4 Emergency Telephone Number

Emergency Phone	Type of assistance	Opening Hours
+ 47 22 591300	Norway Poisons Information (NO)	

2 Hazards identification

2.1 Classification of the substance or mixture

DSD R10, Xi; R38, N; R51/53, Xn; R65

Classification:

CLP Classification: Flam. Liq. 3H226, Asp. Tox. 1H304, Skin Irrit. 2H315, STOT SE 3H336, Aquatic Chronic 2H411

Most important HSE hazard effects: Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects. May cause chemical pneumonia if ingested or vomited. Prolonged or repeated inhalation of vapours may cause damage to the central nervous system..

2.2 Label elements



Signal word: Danger

COMPOSITION

Kerosine (petroleum) (100 %)

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H Statements

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

P Statements

P102 Keep out of reach of children.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P331 Do NOT induce vomiting.
P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P501 Dispose of contents/container in accordance with local regulation.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

2.3 Other hazards

The substance does not meet the criteria for PBT or vPvB.

3 Composition/information on ingredients

3.1 Substances

Ingredient name	Reg.No	EC No.	CAS No.	Conc. (wt%)	DSD-Classification	CLP-classification
Kerosine (petroleum)	01-2119485517-27-0014	232-366-4	8008-20-6	100 %	Xn,Xi,N,R38 - R51/53 - R10 - R65	Flam. Liq. 3 H226 Skin Irrit. 2 H315 STOT SE 3 H336 Asp. Tox. 1 H304 Aquatic Chronic 2 H411

Full text of R-, H- and EUH-phrases: see section 16.

The EUH hazard statements mentioned in CLP-classification are only label elements.

4 First aid measures

4.1 Description of first aid measures

INHALATION

Seek fresh air. Seek medical advice in case of persistent discomfort.

INGESTION

Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. If vomiting occurs, keep head low so that stomach contents do not enter lungs. Immediately call a POISON CENTER or doctor/physician.

SKIN CONTACT

Remove contaminated clothing. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.

EYE CONTACT

Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

BURNS

Flush with water until pain ceases. Remove clothing that is not stuck to the skin & seek medical advice/transport to hospital. If possible, continue flushing until medical attention is obtained.

GENERAL

Other information: When obtaining medical advice, show the safety data sheet or label.

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4.2 Most important symptoms and effects, both acute and delayed

Irritating to skin - may cause reddening. May cause chemical pneumonia if ingested or vomited. The product releases organic solvent vapours which may cause lethargy and

4.3 Indication of any immediate medical attention and special treatment needed

Ensure that medical personnel are aware of the material involved, and take precautions to protect themselves.

5 Fire-fighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING MEDIA:

Extinguish with powder, foam, carbon dioxide or water mist. Use water or water mist to cool non-ignited stock.

UNSUITABLE EXTINGUISHING MEDIA

Do not use water stream, as it may spread the fire.

5.2 Special hazards arising from the substance or mixture

Explosive mixtures may form with air when heated/exposed to fire. Heating will cause a rise in pressure in packaging with a risk of bursting. Can generate harmful flue gases containing carbon monoxide in the event of fire.

5.3 Advice for fire-fighters

Wear Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit. Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases - seek fresh air.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

FOR NON-EMERGENCY PERSONNEL

Stop leak if this can be done without risk. Smoking and naked flames prohibited. Wear gloves. Keep unnecessary personnel away. Provide good ventilation.

FOR EMERGENCY RESPONDERS

In addition to the above: Protective suit equivalent to EN 368, type 3, is recommended.

6.2 Environmental precautions

Prevent spillage from entering drains and/or surface water. Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

6.3 Methods and material for containment and cleaning up

METHODS AND MATERIAL

Contain and absorb spill with sand or other absorbent, non-combustible material and transfer to suitable waste containers.

6.4 Reference to other sections

See section 13 for instructions on disposal.

7 Handling and Storage

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7.1 Precautions for safe handling

Work under effective process ventilation (e.g. local exhaust ventilation). Running water and eye wash equipment must be available. Smoking and naked flames prohibited. Wash hands before breaks, before using restroom facilities, and at the end of work.

7.2 Conditions for safe storage, including any incompatibilities

Store safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Keep in tightly closed original packaging. Store in a well-ventilated area.

7.3 Specific end uses

None.

8 Exposure controls / Personal protection

8.1 Control parameters

LEGAL BASIS

EH40/2005 Workplace exposure limits incl. supplement from October 2007.

BIOLOGICAL THRESHOLD VALUES

DNEL values: 8008-20-6:

Population in general:

Oral DNEL (long-term exposure - systemic effects), 19 mg/kg/24 h, Assessment factor 40, Dose descriptor NOAEL, Most sensitive endpoint Repeated dose toxicity PNEC values: 8008-20-6:

PNEC aqua (freshwater) 0,098 mg/l, Assessment factor: 1

OTHER INFORMATION REGARDING LIMIT VALUES AND MONITORING

Contains no substances subject to reporting requirements.

8.2 Exposure controls

EXPOSURE SCENARIOS

See enclosed exposure scenarios for further information.

APPROPRIATE ENGINEERING CONTROLS

Wear the personal protective equipment specified below. See also section 7.1.

EYE PROTECTION

Wear safety goggles if there is a risk of eye splash. Eye protection must conform to EN 166.

SKIN PROTECTION

In case of direct skin contact, wear protective gloves of e.g. nitrile rubber. Penetration time: >4 hours. Gloves must conform to EN 374.

HAND PROTECTION

In case of direct skin contact, wear protective gloves of e.g. nitrile rubber. Penetration time: >4 hours. Gloves must conform to EN 374.

RESPIRATORY PROTECTION

Light use (small volume, shortterm contact (below 10 min.)):

Not required. Medium use (medium volume, medium contact (1-2 hours)):

In case of insufficient ventilation, wear respiratory protective equipment with filter A. Heavy use (high volume, longterm contact (more than 2 hours)):

In case of insufficient ventilation, wear respiratory protective equipment with filter A. Respiratory protection must conform to one of the following standards: EN 136/140/145.

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LIMITATION OF ENVIRONMENTAL EXPOSURE

Ensure compliance with local regulations for emissions.

9 Physical and chemical Properties

9.1 Information on basic physical and chemical properties

PHYSICAL STATE	Liquid
COLOUR	Colourless
ODOUR	Characteristic
SOLUBILITY	N/A
EXPLOSIVE PROPERTIES	N/A
OXIDISING PROPERTIES	Non-oxidising.

Parameter	Value/unit	Method/reference	Observation
pH concentrate	No data	N/A	
pH in solution	No data	N/A	
Melting point	< -20 °C		
Freezing point	No data		
Initial boiling point and boiling range	150 - 290 °C		
Flash point	45 - 51 °C		
Evaporation rate	No data	N/A	
Flammability (solid, gas)	No data	Flammable	
Flammability limits	No data	N/A	
Explosion limits	No data	N/A	
Vapour pressure	1 - 21 kPa	(37,8 °C)	
Vapour density	No data	N/A	
Relative density	0,75 - 0,86	(15 °C)	
Partition coefficient	No data	N/A	
Auto-ignition temperature	> 220 °C		
Decomposition temperature	No data	N/A	
Viscosity	1 - 2,50 cSt	(40 °C)	

9.2 Other safety information

Parameter	Value/unit	Method/reference	Observation
Odour threshold	N/A		
Viscosity:	2,9-12 cSt (-20 °C)		

Note no.	Comments
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OTHER INFORMATION

None.

10 Stability and Reactivity

10.1 Reactivity

Not reactive.

10.2 Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3 Possibility of hazardous reactions

None known.

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10.4 Conditions to avoid

Avoid heating and contact with ignition sources. Prevent vapour accumulation.

10.5 Incompatible materials

Avoid contact with strong oxidising agents. Avoid contact with strong reducing agents.

10.6 Hazardous decomposition products:

Product decomposes in fire conditions or when heated to high temperatures, and toxic gases such as carbonmonoxide may be released.

11 Toxicological information

11.1 Toxicological effects

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Route of exposure	Exposure time	Value/unit	Species	Source
LC50 (Dermal)		> 2000 mg/kg	Rabbit	
LC50 (Inhalation)	4 h	> 5200 g/m ³	Rat	Vapour
LD50 (Oral)		> 5000 mg/kg	Rat	

Ingestion of large quantities may cause discomfort. The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

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Irritating to skin & may cause reddening.

8008-20-6: Rabbit: Irritating (EPA Guidelines ind FR Vol. 44, No. 145, pgs 44054-44093)

May cause eye irritation. The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

8008-20-6: Rabbit: Corneal opacity: 0 (EPA OTS 798.4500)

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

8008-20-6: Guinea pig: Non-sensitising (OECD 406)

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

8008-20-6: No mutagenic effects observed in tests with micro organisms, mammalian cells, and in vivo tests.

The product does not have to be classified. Test data are not unequivocal.

8008-20-6: Mouse: Neoplastic effects observed.

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

8008-20-6: Rat, >=1000mg/m³: NOAEC (inhalation)

Inhalation of vapours may cause irritation to the upper airways. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. Test data are not available.

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Prolonged or repeated inhalation of vapours may cause damage to the central nervous system. The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

8008-20-6: Rat, 24mg/m3: NOAEC (inhalation) (OECD 412)

May cause chemical pneumonia if ingested or vomited. Test data are not available.

None known.

12 Ecological information

12.1 Toxicity

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Test	Exposure time	Value/unit	Species	Source
EC50 (Acute Daphnia)	21 d	0,89 mg/l	Daphnia magna	
EC50 (Acute Daphnia)	48 h	1,4 mg/l	Daphnia magna	
EC50 (Acute algae)	72 h	1 - 3 mg/l		
LC50 (Acute fish)		0,098 mg/l	Oncorhynchus mykiss	
LC50 (Acute fish)	96 h	2 - 5 mg/l	Oncorhynchus mykiss	

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Readily biodegradable.

8008-20-6: Readily biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation can be expected. Test data are not available.

12.4 Mobility in soil

The product is predicted to have low mobility in soil and sediment.

12.5 Results of PBT and vPvB assessment

The substance does not meet the criteria for PBT or vPvB.

12.6 Other adverse effects

None known.

13 Disposal considerations

13.1 Waste treatment methods

GENERAL REGULATIONS

Avoid discharge to drain or surface water. Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

CATEGORY OF WASTE

EWC code: Depends on line of business and use, for instance 13 07 03 other fuels (including mixtures) Absorbent/cloth contaminated with the product:

EWC code: 15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

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14 Transport information

Classified as Dangerous Goods: Yes

Land transport (ADR/RID)

14.1 UN-No.	1223	14.4 Packing group	III
14.2 Proper Shipping Name	KEROSENE	14.5 Environmental hazards	The product must be labelled as an environmental hazard (symbol: fish and tree) in packaging sizes of more than 5 kg/l.
14.3 Class(es)	3		
Hazard label(s)			
Hazard ID:		Tunnel restriction code	D/E

Inland water ways transport (ADN)

14.1 UN-No.	1223	14.4 Packing group	III
14.2 Proper Shipping Name	KEROSENE	14.5 Environmental hazards	yes
14.3 Class(es)	3		
Environmentally hazardous in tank-vessels	N2+F		

Sea transport (IMDG)

14.1 UN-No.	1223	14.4 Packing group	III
14.2 Proper Shipping Name	KEROSENE	14.5 Environmental hazards	The product must be labelled as a Marine Pollutant (MP) in packaging sizes of more than 5 kg/l.
14.3 Class(es)	III		
Sub Risk:			
IMDG Code			
segregation group			
Marine pollutant			
EMS:			

Air transport (ICAO-TI / IATA-DGR)

14.1 UN-No.	III	14.4 Packing group	III
14.2 Proper Shipping Name	KEROSENE	14.5 Environmental hazards	
14.3 Class(es)	III		
Hazard label(s)			

14.6 SPECIAL PRECAUTIONS FOR USER

None.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 AND THE IBC CODE

Not included.

15 Regulatory information

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

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PROVISIONS

None.

15.2 Chemical Safety Assessment

OTHER INFORMATION

Chemical safety assessments have been performed for the following substances:

8008-20-6 / 232-366-4 Kerosine (petroleum)

16 Other information

ABBREVIATIONS

PBT: Persistent, Bioaccumulative and Toxic

vPvB: Very Persistent and Very Bioaccumulative

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

STOT: Specific Target Organ Toxicity

CLASSIFICATION METHOD

Test data

LIST OF RELEVANT R-PHRASES

R10 Flammable.

R38 Irritating to skin.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

LIST OF RELEVANT H-STATEMENTS

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

TRAINING ADVICE

A thorough knowledge of this safety data sheet should be a prerequisite condition.

OTHER INFORMATION

Other information: Exposure scenarios are enclosed as appendicies. Version: 01.00/GBR