

Creation Date 14-Sep-2009

Revision Date 14-Sep-2009

Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name n-Heptane
Cat No. 411250000; 411255000
Synonyms Normal heptane.; n-Heptane
Recommended Use Laboratory chemicals

Company Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Emergency Telephone Number For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

2. HAZARDS IDENTIFICATION

The preparation is classified as dangerous in accordance with Directive 1999/45/EC.



R -phrase(s)

R11 - Highly flammable
R38 - Irritating to skin
R65 - Harmful: may cause lung damage if swallowed
R67 - Vapors may cause drowsiness and dizziness
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	Weight %	EC No.	Classification
-----------	----------	--------	----------------

n-Heptane

Revision Date 14-Sep-2009

Heptane (n-) 142-82-5	>95	EEC No. 205-563-8	F;R11 Xn;R65 Xi;R38 R67 N;R50/53
--------------------------	-----	-------------------	--

For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

Flash Point	-4°C / 24.8°F
Method	No information available.
Autoignition Temperature	215°C / 419°F
Explosion Limits	
Lower	1 vol%
Upper	7 vol%

n-Heptane

Revision Date 14-Sep-2009

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions

Should not be released into the environment.

Methods for Containment and Clean Up

Soak up with inert absorbent material Keep in suitable and closed containers for disposal
Remove all sources of ignition Use spark-proof tools and explosion-proof equipment

7. HANDLING AND STORAGE

Handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use explosion-proof equipment. Take precautionary measures against static discharges.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat and sources of ignition.

Specific use(s)

No information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Component	European Union	The United Kingdom	France	Spain	Germany
Heptane (n-)			VME: 1668 mg/m ³ VME: 400 ppm VLCT: 2085 mg/m ³ VLCT: 500 ppm	VLA-ED: 2085 mg/m ³ VLA-ED: 500 ppm	

Component	Italy	Portugal	The Netherlands	Finland	Austria
Heptane (n-)	TWA: 500 ppm TWA: 2085 mg/m ³	STEL: 500 ppm TWA: 400 ppm	STEL: 1600 mg/m ³ TWA: 1200 mg/m ³	TWA: 300 ppm TWA: 1200 mg/m ³ STEL: 2100 mg/m ³ STEL: 500 ppm	STEL: 2000 ppm STEL: 8000 mg/m ³ MAK: 500 ppm MAK: 2000 mg/m ³

Component	Switzerland	Poland	Norway	Ireland	Denmark	Australia
Heptane (n-)	STEL: 1600 mg/m ³ STEL: 400 ppm MAK: 1600 mg/m ³ MAK: 400 ppm	NDSch: 2000 mg/m ³ NDS: 1200 mg/m ³	TWA: 200 ppm TWA: 800 mg/m ³	TWA: 400 ppm TWA: 1600 mg/m ³	TWA: 820 mg/m ³ TWA: 200 ppm	STEL: 2050 mg/m ³ STEL: 500 ppm TWA: 400 ppm TWA: 1640 mg/m ³

n-Heptane

Revision Date 14-Sep-2009

Occupational exposure controls

Engineering Measures

Use only under a chemical fume hood Ensure that eyewash stations and safety showers are close to the workstation location Use explosion-proof electrical/ventilating/lighting/equipment

Personal Protective Equipment

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Eye Protection

Tightly fitting safety goggles

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Hand Protection

Protective gloves

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

Appearance

Colorless

Odor

Petroleum distillates

pH

No information available.

Vapor Pressure

48 mbar @ 20 °C

Vapor Density

3.5 (Air = 1.0)

Viscosity

0.4 mPa s at 20 °C

Boiling Point/Range

98°C / 208.4°F

Melting Point/Range

-91°C / -131.8°F

Flash Point

-4°C / 24.8°F

Explosion Limits

Lower

1 vol%

Upper

7 vol%

Evaporation Rate

2.8 (Butyl Acetate = 1.0)

Water Solubility

practically insoluble

Specific Gravity

0.683

Molecular Formula

C7 H16

Molecular Weight

100.2

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Conditions to Avoid

Incompatible products. Excess heat.

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products

Carbon monoxide (CO), Carbon dioxide (CO₂)

n-Heptane

Revision Date 14-Sep-2009

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions . None under normal processing..

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Heptane (n-)	5000 mg/kg (Mouse)	3000 mg/kg (Rabbit)	103 g/m ³ (Rat) 4 h

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization No information available.

Neurological Effects No information available.

Mutagenic Effects No information available.

Reproductive Effects No information available.

Developmental Effects No information available.

Target Organs Central nervous system (CNS), Skin, Respiratory system.

Other Adverse Effects See actual entry in RTECS for complete information.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Heptane (n-)				EC50: >10 mg/L/24h

Persistence and Degradability No information available

Bioaccumulative Potential No information available.

Mobility No information available.

n-Heptane

Revision Date 14-Sep-2009

Component	log Pow
Heptane (n-)	4.66

13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	UN1206
Hazard Class	3
Packing Group	II
Proper Shipping Name	Heptanes

ADR

UN-No	UN1206
Hazard Class	3
Packing Group	II
Proper Shipping Name	Heptanes

IATA

UN-No	UN1206
Hazard Class	3
Packing Group	II
Proper Shipping Name	Heptanes

15. REGULATORY INFORMATION

The preparation is classified as dangerous in accordance with Directive 1999/45/EC

Labelling

Xn



n-Heptane

Revision Date 14-Sep-2009



R -phrase(s)

R11 - Highly flammable

R38 - Irritating to skin

R65 - Harmful: may cause lung damage if swallowed

R67 - Vapors may cause drowsiness and dizziness

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S -phrase(s)

S 9 - Keep container in a well-ventilated place

S16 - Keep away from sources of ignition. No smoking

S29 - Do not empty into drains

S33 - Take precautionary measures against static discharges

S60 - This material and its container must be disposed of as hazardous waste

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets

S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Heptane (n-)	205-563-8	-		T	X	-	X	X	X	X	KE-18271 X

16. OTHER INFORMATION

Text of R phrases mentioned in Section 2-3

R11 - Highly flammable

R38 - Irritating to skin

R65 - Harmful: may cause lung damage if swallowed

R67 - Vapors may cause drowsiness and dizziness

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Prepared By

Regulatory Affairs

Creation Date

14-Sep-2009

Revision Date

14-Sep-2009

n-Heptane**Revision Date 14-Sep-2009**

Revision Summary	****, and red text indicates revision
Restrictions on use	No information available.
Training advice	No information available.
Literary reference	No information available.

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet