Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • **n-Pentane (1-600 ppm) in Air (Balance)**

Product Code • M-23361/E-1

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

Relevant identified use(s) • Calibration Gas

1.3 Details of the supplier of the safety data sheet

Manufacturer • Air Liquide

2700 Post Oak Blvd.
Houston, TX 77056
United States
www.us.airliquide.com
sds@airliquide.com

Telephone (Technical) • 713-896-2896

Telephone (Technical) • 800-819-1704

1.4 Emergency telephone number

Manufacturer • 800-424-9300 - CHEMTREC

Manufacturer • +1 703-527-3887 - Outside United States

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Compressed Gas - H280

DSD/DPD • Not classified

2.2 Label Elements

CLP

WARNING

Hazard statements • H280 - Contains gas under pressure; may explode if heated

Precautionary statements

Storage/Disposal • P403 - Store in a well-ventilated place.

DSD/DPD

Risk phrases
- No label element(s) required

2.3 Other Hazards

CLP
- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD
- According to European Directive 1999/45/EC this preparation is not considered dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012
- Compressed Gas - H280

2.2 Label elements

OSHA HCS 2012

WARNING

Hazard statements
- Contains gas under pressure; may explode if heated - H280

Precautionary statements

Storage/Disposal
- Store in a well-ventilated place. - P403

2.3 Other hazards

OSHA HCS 2012
- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS
- Compressed Gas - A

2.2 Label elements

WHMIS

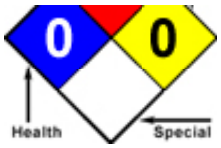
- Compressed Gas - A

2.3 Other hazards

WHMIS
- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information

NFPA



Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition				
Chemical Name	**Identifiers**	**%**	**LD50/LC50**	**Classifications According to Regulation/Directive**
n-Pentane	**CAS:**109-66-0 **EC Number:**203-692-4	1ppm TO 600ppm	Inhalation-Rat LC50 • 364 g/m³ 4 Hour(s) Ingestion/Oral-Rat LD50 • >2000 mg/kg	**EU DSD/DPD:** Annex VI, Table 3.2: F+; R12 N; R51-53 Xn; R65 R66 R67 **EU CLP:** Annex VI: Flam. Liq. 1, H224; Asp. Tox. 1, H304; STOT SE 3, H336; Aquatic Chronic 2, H411; EUH066 **OSHA HCS 2012:** Flam. Liq. 1; Asp. Tox. 1; Eye Irrit. 2A; Skin Irrit. 2; STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.
Air	**CAS:**132259-10-0	Balance	NDA	**EU DSD/DPD:** Not Classified **EU CLP:** Self Classified: Press. Gas - Comp., H280 **OSHA HCS 2012:** Press. Gas - Comp

See Section 11 for Toxicological Information. See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- Although exposure is unlikely, in case of contact immediately flush skin with running water. If skin irritation develops get medical advice/attention.

Eye

- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Get medical attention if symptoms occur. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.

Ingestion

- As this product is a gas, refer to the inhalation section. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

4.4 Other information

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. RESCUERS SHOULD NOT ATTEMPT TO

RETRIEVE VICTIMS OF EXPOSURE TO GASES WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media
- Use extinguishing agent suitable for type of surrounding fire.
SMALL FIRES: Dry chemical or CO2.
LARGE FIRES: Water spray or fog.

Unsuitable Extinguishing Media
- No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Containers may explode when heated.
Ruptured cylinders may rocket.

Hazardous Combustion Products
- No data available

5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear positive pressure self-contained breathing apparatus (SCBA).
Move containers from fire area if you can do it without risk.
FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.
FIRE INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
FIRE INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.
FIRE INVOLVING TANKS: Do not direct water at source of leak or safety devices; icing may occur.
FIRE INVOLVING TANKS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Ventilate the area before entry.

Emergency Procedures
- Keep unauthorized personnel away. Keep out of low areas. Stay upwind. Do not direct water at spill or source of leak. LARGE SPILL: Consider initial downwind evacuation for at least 500 meters (1/3 mile)

6.2 Environmental precautions

- No special environmental precautions necessary.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures
- Stop leak if you can do it without risk.
Do not direct water at spill or source of leak.
Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.

If possible, turn leaking containers so that gas escapes rather than liquid.
Isolate area until gas has dispersed.
Ventilate the area.
Allow substance to evaporate.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Use only with adequate ventilation. Cylinders should be firmly secured to prevent falling or being knocked-over. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool, dry, well-ventilated place. Protect cylinders against physical damage. Cylinders should be firmly secured to prevent falling or being knocked-over.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	**ACGIH**	**Canada Ontario**	**Canada Quebec**	**China**	**Europe**
n-Pentane (109-66-0)	TWAs	600 ppm TWA (listed under Pentane, all isomers)	600 ppm TWA	120 ppm TWAEV; 350 mg/m3 TWAEV	500 mg/m3 TWA (listed under Pentane (all isomers))	1000 ppm TWA; 3000 mg/m3 TWA
	STELs	Not established	Not established	Not established	1000 mg/m3 STEL (listed under Pentane (all isomers))	Not established

Exposure Limits/Guidelines (Con't.)						
	Result	**France**	**Germany DFG**	**Germany TRGS**	**Ireland**	**Israel**
n-Pentane (109-66-0)	TWAs	1000 ppm TWA [VME] (restrictive limit); 3000 mg/m3 TWA [VME] (restrictive limit)	Not established	1000 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 3000 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)	1000 ppm TWA; 3000 mg/m3 TWA	600 ppm TWA (listed under Pentane, all isomers)
	STELs	Not established	Not established	Not established	750 ppm STEL; 2250 mg/m3 STEL	Not established

	Ceilings	Not established	2000 ppm Peak (listed under Pentane); 6000 mg/m3 Peak (listed under Pentane)	Not established	Not established	Not established
	MAKs	Not established	1000 ppm TWA MAK; 3000 mg/m3 TWA MAK	Not established	Not established	Not established

Exposure Limits/Guidelines (Con't.)

	Result	Italy	NIOSH	OSHA	Portugal	Spain
n-Pentane (109-66-0)	TWAs	667 ppm TWA; 2000 mg/m3 TWA	120 ppm TWA; 350 mg/m3 TWA	1000 ppm TWA; 2950 mg/m3 TWA	600 ppm TWA [VLE-MP]	1000 ppm TWA [VLA-ED] (indicative limit value); 3000 mg/m3 TWA [VLA-ED] (indicative limit value)
	Ceilings	Not established	610 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)	Not established	Not established	Not established

Exposure Limits/Guidelines (Con't.)

	Result	Sweden
n-Pentane (109-66-0)	STELs	750 ppm STV; 2000 mg/m3 STV
	TWAs	600 ppm LLV; 1800 mg/m3 LLV

Exposure Control Notations

Germany DFG

•n-Pentane (109-66-0): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory
- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face
- Wear safety glasses.

Skin/Body
- Wear leather gloves when handling cylinders.

Environmental Exposure Controls
- Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

LLV = Limit Level Value is the exposure limit for 8-hour work day

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

TWAEV = Time-Weighted Average Exposure Value

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless gas with no odor.
Color	Colorless	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	Not relevant
Specific Gravity/Relative Density	Data lacking	Water Solubility	18.68 cm3/l
Viscosity	Data lacking	Explosive Properties	Not explosive.
Oxidizing Properties:	Not an oxidizing gas.		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	1 Air=1
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Not flammable.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Excess heat.

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- No data available

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
n-Pentane (1ppm TO 600ppm)	109-66-0	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • >2000 mg/kg; Inhalation-Rat LC50 • 364 g/m³ 4 Hour(s)

GHS Properties	Classification
Acute toxicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Aspiration Hazard	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Carcinogenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Germ Cell Mutagenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Skin corrosion/Irritation	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Skin sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
STOT-RE	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
STOT-SE	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Toxicity for Reproduction	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Respiratory sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Serious eye damage/Irritation	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met

Route(s) of entry/exposure
- Inhalation, Skin, Eye

Potential Health Effects

Inhalation

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- No data available

Skin

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- No data available

Eye

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- No data available

Ingestion

Acute (Immediate)
- Ingestion is not anticipated to be a likely route of exposure to this product.

Chronic (Delayed)
- No data available

Key to abbreviations

LC = Lethal Concentration
MLD = Mild
TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

- This gas mixture does not present a hazard of toxicity to the environment.

12.2 Persistence and degradability

- Not relevant.

12.3 Bioaccumulative potential

- Not relevant.

12.4 Mobility in Soil

- Not relevant.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No adverse ecological effects are expected.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1956	Compressed gas, n.o.s (Air)	2.2	NDA	NDA
TDG	UN1956	COMPRESSED GAS, N.O.S. (Air)	2.2	NDA	NDA
IMO/IMDG	UN1956	COMPRESSED GAS, N.O.S. (Air)	2.2	NDA	NDA
IATA/ICAO	UN1956	Compressed gas, n.o.s (Air)	2.2	NDA	NDA

14.6 Special precautions for user

- Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated during transportation.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Pressure(Sudden Release of)

State Right To Know				
Component	**CAS**	**MA**	**NJ**	**PA**
Air	132259-10-0	No	No	No
n-Pentane	109-66-0	Yes	Yes	Yes

Inventory						
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**China**	**EU EINECS**	**EU ELNICS**
Air	132259-10-0	No	No	Yes	No	No
n-Pentane	109-66-0	Yes	No	Yes	Yes	No

Inventory (Con't.)		
Component	**CAS**	**TSCA**
Air	132259-10-0	No
n-Pentane	109-66-0	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• n-Pentane	109-66-0	B2
• Air	132259-10-0	A

Canada - WHMIS - Ingredient Disclosure List

• n-Pentane	109-66-0	1 %
• Air	132259-10-0	Not Listed

Environment

Canada - 2004 NPRI (National Pollutant Release Inventory)

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Canada - 2005 NPRI (National Pollutant Release Inventory)

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Canada - CEPA - Priority Substances List

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Canada - DWQ (Drinking Water Quality) - IMACs

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Other

Canada - Accelerated Reduction/Elimination of Toxics (ARET)

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Canada New Brunswick

Environment

Canada - New Brunswick - Ozone Depleting Substances - Schedule A

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Canada - New Brunswick - Ozone Depleting Substances - Schedule B

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

China

Environment

China - Ozone Depleting Substances - First Schedule

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

China - Ozone Depleting Substances - Second Schedule

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

China - Ozone Depleting Substances - Third Schedule

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Other

China - Annex I & II - Controlled Chemicals Lists

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

China - Dangerous Goods List

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	(compressed or refrigerated liquid)

China - Export Control List - Part I Chemicals

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• n-Pentane	109-66-0	F+; R12 N; R51-53 Xn; R65 R66 R67
• Air	132259-10-0	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• n-Pentane	109-66-0	F+ Xn N R:12-51/53-65-66-67 S:(2)-9-16-29-33-61-62
• Air	132259-10-0	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• n-Pentane	109-66-0	C
• Air	132259-10-0	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• n-Pentane	109-66-0	S:(2)-9-16-29-33-61-62
• Air	132259-10-0	Not Listed

Germany

Environment

Germany - TA Luft - Types and Classes

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Germany - Water Classification (VwVwS) - Annex 1

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

• n-Pentane	109-66-0	ID Number 452, hazard class 2 - hazard to waters
• Air	132259-10-0	Not Listed

Germany - Water Classification (VwVwS) - Annex 3

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Other

Germany - Specifically Regulated Chemicals in TRGS

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Portugal

Other

Portugal - Prohibited Substances

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

United Kingdom

Environment

United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to Air

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

United Kingdom - Substances Contained in Dangerous Substances or Preparations

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Other

United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

United Kingdom - List of Dangerous Substances in Water

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• n-Pentane	109-66-0	Not Listed

• Air	132259-10-0	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• n-Pentane	109-66-0	Not Listed
• Air	132259-10-0	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H224 - Extremely flammable liquid and vapour
  H304 - May be fatal if swallowed and enters airways
  H336 - May cause drowsiness or dizziness
  H411 - Toxic to aquatic life with long lasting effects
  EUH066 - Repeated exposure may cause skin dryness or cracking.

  R12 - Extremely flammable.
  R51 - Toxic to aquatic organisms.
  R53 - May cause long-term adverse effects in the aquatic environment.
  R65 - Harmful: may cause lung damage if swallowed.
  R66 - Repeated exposure may cause skin dryness or cracking.
  R67 - Vapours may cause drowsiness and dizziness.

Last Revision Date
- 05/September/2014

Preparation Date
- 05/September/2014

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Key to abbreviations

NDA = No Data Available