

Safety Data Sheet

POLYTHERM

Safety Data Sheet dated: 06/10/2021 - version 3

Date of first edition: 03/09/2020



1. Identification

Product identifier

Mixture identification:

Trade name: POLYTHERM

Other means of identification

Trade code: PLY0005

Recommended use and restrictions on use

Recommended use: Polyisocyanurate Insulation

Restrictions on use: N.A.

Supplier's details

Company: Polyglass U.S.A. Inc.

1111 West Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Emergency phone number

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887

Emergency Transport CANUTEC (Canada) 1-613-996-6666

2. Hazard identification

Classification of the product

No specific hazards are encountered under normal product use.

Label elements

Precautionary statements:

- P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves and eye protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with applicable regulations.

Other hazards

None

Ingredient(s) with unknown acute toxicity

None

3. Composition/information on ingredients

Substances

N.A.

Mixtures

Hazardous components within the meaning of WHMIS 2015 and related classification:

List of components

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
1-2.5 %	PENTANE	CAS:109-66-0	Flam. Liq. 2, H225; STOT SE 3, H336; Asp. Tox. 1, H304; Aquatic Chronic 2, H411	
0.49-1 %	CARBON BLACK	CAS:1333-86-4	Comb. Dust, CANH003	
0.1-0.25 %	Silica Sand	CAS:14808-60-7	STOT RE 1, H372; Carc. 1A, H350	

The actual concentration of the components listed above is withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

N.A.

Indication of immediate medical attention and special treatment needed, if necessary

Treatment: N.A.

(see paragraph 4.1)

5. Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the hazardous product

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

Methods and material for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations

Scoop into containers and seal for disposal.

Retain contaminated washing water and dispose it.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. Exposure controls/personal protection

Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
PENTANE	MAK	GERMANY		3000	1000				
	OSHA			2950	1000				
	ACGIH					1000			narcosis and respiratory tract irritation (listed under Pentane, all isomers)
	EU			3000	1000			Indicative	
	MAK	AUSTRIA		1800	600	3600	1200		
	MAK	SWITZERLAND		1800	600				
CARBON BLACK	OSHA			3,5					
	ACGIH			3					A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans;bronchitis;
	ACGIH			3					A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans;bronchitis
	ACGIH			0,025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;

Appropriate engineering controls

N.A.

Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

N.A.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Solid

Appearance and colour: No data available

Odour: none

Odour threshold: No data available

pH: No data available

Melting point / freezing point: 121 °C (250 °F)

Initial boiling point and boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Upper/lower flammability or explosive limits: No data available

Vapour density: No data available

Vapour pressure: No data available

Relative density: No data available

Solubility in water: Insoluble

Solubility in oil: No data available

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Solid/gas flammability: No data available

Other information

Substance Groups relevant properties No data available
Miscibility: No data available
Fat Solubility: No data available
Conductivity: No data available

10. Stability and reactivity

Reactivity

Stable under normal conditions

Chemical stability

Data not available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. Toxicological information

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

PENTANE	a) acute toxicity	LD50 Skin Rabbit = 3000 mg/kg LC50 Inhalation Rat = 364 g/m ³ 4h LD50 Oral Rat > 2000 mg/kg
CARBON BLACK	a) acute toxicity	LD50 Oral Rat > 15400,00000 mg/kg LD50 Skin Rabbit > 3,00000 g/kg LD50 Oral Rat > 15400 mg/kg
Silica Sand	a) acute toxicity	LD50 Oral Rat = 500 mg/kg

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
Toxicological kinetics, metabolism
and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

CARBON BLACK Group 2B
Silica Sand Group 1

Substance(s) listed as OSHA Carcinogen(s):

CARBON BLACK
Silica Sand

Substance(s) listed as NIOSH Carcinogen(s):

CARBON BLACK
Silica Sand

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

12. Ecological information

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
PENTANE	CAS: 109-66-0	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 9,87 mg/L 96h a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 11,59 mg/L 96h a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 9,99 mg/L 96h a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 9,74 mg/L 48h IUCLID
CARBON BLACK	CAS: 1333-86-4	a) Aquatic acute toxicity : EC50 Daphnia Magna > 5600,00000 mg/L 1333-86-4 - 24hr
Silica Sand	CAS: 14808-60-7	a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. Disposal considerations

Safe handling and methods for disposal

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

UN number

TDG-UN number: N.A.
ADR-UN number: N.A.
DOT-UN Number: N.A.
IATA-Un number: N.A.
IMDG-Un number: N.A.

UN proper shipping name

TDG-Shipping Name: N.A.
ADR-Shipping Name: N.A.
DOT-Proper Shipping Name: N.A.
IATA-Technical name: N.A.
IMDG-Technical name: N.A.

Transport hazard class(es)

TDG-Class: N.A.
ADR-Class: N.A.
DOT-Hazard Class: N.A.
IATA-Class: N.A.
IMDG-Class: N.A.

Packing group

TDG-Packing Group: N.A.
ADR-Packing Group: N.A.
DOT Packing Group: N.A.
IATA-Packing group: N.A.
IMDG-Packing group: N.A.

Environmental hazards

Marine pollutant: No
Environmental Pollutant: N.A.

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

N.A.

Special precautions in connection with transport or conveyance

TDG:

TDG Special provisions: N/A

Department of Transportation (DOT):

N.A.

Road and Rail (ADR-RID) :

N.A.

Air (IATA) :

N.A.

Sea (IMDG) :

N.A.

15. Regulatory information**Canada - Federal regulations****DSL - Domestic Substances List****DSL Inventory:**

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List**NDSL Inventory:**

No substances listed

NPRI - National Pollutant Release Inventory**Substances listed in NPRI:**

No substances listed

USA - Federal regulations**TSCA - Toxic Substances Control Act****TSCA inventory:**

All the components are listed on the TSCA inventory

TSCA listed substances:

PENTANE is listed in TSCA Section 8b Section 8a - PAIR

CARBON BLACK is listed in TSCA Section 8b

Silica Sand is listed in TSCA Section 8b

SARA - Superfund Amendments and Reauthorization Act
Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

No substances listed

Section 313 - Toxic chemical list:

No substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
Substance(s) listed under CERCLA:

No substances listed

CAA - Clean Air Act

CAA listed substances:

No substances listed

CWA - Clean Water Act

CWA listed substances:

No substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

CARBON BLACK	Listed as carcinogen
Silica Sand	Listed as carcinogen

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

PENTANE
CARBON BLACK
Silica Sand

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

PENTANE
CARBON BLACK
Silica Sand

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

PENTANE
CARBON BLACK
Silica Sand

16. Other information

Safety Data Sheet dated: 6/10/2021 - version 3

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Code	Description
CANH003	May form combustible dust concentrations in air.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IMDG: International Maritime Code for Dangerous Goods.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation 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 Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 6. ACCIDENTAL RELEASE MEASURES
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION