Safety Data Sheet
POLYPUF 2.7 HFO PART B
Safety Data Sheet dated: 02/27/2023 - version 2
Date of first edition: 10/20/2022

1. Identification

Product identifier

Mixture identification:

Trade name: POLYPUF 2.7 HFO PART B

Trade code: PLY0107

Recommended use and restrictions on use

Recommended use: Polyurethane foam

Restrictions on use: Not available

Supplier's details

Company: Polyglass U.S.A. Inc.
1111 West Newport Center Drive
33442 - Deerfield Beach - FL - USA
Phone: +1 866-222-9782

Responsable: info@polyglass.com

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

Acute toxicity (oral), Category 4	Harmful if swallowed.
Eye irritation, Category 2A	Causes serious eye irritation.
Skin irritation, Category 2	Causes skin irritation.
Specific target organ toxicity following repeated exposure, Category 2	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

Label elements

Pictograms and Signal Words

Warning

Hazard statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

Precautionary statements

P260	Do not breathe mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see supplementary instructions on this label)

P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
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

Not Relevant

Mixtures

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

List of components

Qty	Name	Ident. Numb.	Classification	Registration Number
10-20 %	diethylene glycol; 2,2'-oxydiethanol	CAS:111-46-6 EC:203-872-2 Index:603-140-00-6	Acute Tox. 4, H302	
5-10 %	(1e)-1-chloro-3,3,3-trifluoroprop-1-ene; trans-1-chloro-3,3,3-trifluoropropene	CAS:102687-65-0	Aquatic Chronic 3, H412; Compr. Gas, H280	
1-2.5 %	trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans-	CAS:156-60-5 EC:205-860-2 Index:602-026-00-3	Flam. Liq. 2, H225; Acute Tox. 4, H332; Aquatic Chronic 3, H412	
1-2.5 %	n,n-dicyclohexylmethylamine; methyldicyclohexylamine	CAS:7560-83-0 EC:231-453-4	Acute Tox. 4, H302; Skin Corr. 1B, H314	
0.1-0.25 %	ethylene glycol; ethane-1,2-diol	CAS:107-21-1 EC:203-473-3 Index:603-027-00-1	Acute Tox. 4, H302; STOT RE 2, H373	

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:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

Remove contact lenses, if present and easy to do. Continue rinsing.

In case of Ingestion:

Give nothing to eat or drink.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:

(see paragraph 4.1)

5. Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

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: Not available

Explosive properties: Not Relevant

Oxidizing properties: Not Relevant

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.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

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

Suitable material for taking up: absorbing material, organic, sand

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.

Use localized ventilation system.

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.

Wash skin thoroughly after handling.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature: Not available

8. Exposure controls/personal protection

Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
diethylene glycol; 2,2'-oxydiethanol CAS: 111-46-6	MAK	GERMANY	Long Term: 44 mg/m3 - 10 ppm

	MAK	AUSTRIA	Long Term: 44 mg/m3 - 10 ppm; Short Term: 176 mg/m3 - 40 ppm
	MAK	SWITZERLAND	Long Term: 44 mg/m3 - 10 ppm
trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans- CAS: 156-60-5	MAK	GERMANY	Long Term: 800 mg/m3 - 200 ppm
	ACGIH		Long Term: 200 ppm CNS impairment;eye irritation
	MAK	AUSTRIA	Long Term: 790 mg/m3 - 200 ppm; Short Term: 3160 mg/m3 - 800 ppm
	MAK	SWITZERLAND	Long Term: 790 mg/m3 - 200 ppm
ethylene glycol; ethane-1,2-diol CAS: 107-21-1	ACGIH		A4 - Not Classifiable as a Human Carcinogen;eye and upper respiratory tract irritation;
	ACGIH		Ceiling - Short Term: 100 mg/m3
	EU		Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Behaviour Indicative Possibility of significant uptake through the skin;
	MAK	GERMANY	Long Term: 26 mg/m3 - 10 ppm
	ACGIH		Long Term: 25 ppm; Short Term: 10 mg/m3 - 50 ppm A4 - Not Classifiable as a Human Carcinogen;upper respiratory tract irritation
	MAK	AUSTRIA	Long Term: 26 mg/m3 - 10 ppm; Short Term: 52 mg/m3 - 20 ppm
	MAK	SWITZERLAND	Long Term: 26 mg/m3 - 10 ppm
	EU		Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Behaviour Indicative Possibility of significant uptake through the skin

Appropriate engineering controls

Not available

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 >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

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.

Use adequate protective respiratory equipment.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: Not Relevant

Odour: Like: Ether

Odour threshold: Not Relevant

pH: Not Relevant

Melting point / freezing point: Not Relevant

Initial boiling point and boiling range: 19 °C (66 °F)

Flash point: 149 °C (300 °F)

Evaporation rate: Not Relevant Slower than ether

Upper/lower flammability or explosive limits: Not Relevant

Vapour density: Not Relevant
Vapour pressure: Not Relevant
Relative density: 1.20 g/cm3
Solubility in water: Not Relevant
Solubility in oil: Not Relevant
Partition coefficient (n-octanol/water): Not Relevant
Auto-ignition temperature: Not Relevant
Decomposition temperature: Not Relevant
Viscosity: Not Relevant
Explosive properties: Not Relevant
Oxidizing properties: Not Relevant
Solid/gas flammability: Not Relevant

Other information

Substance Groups relevant properties Not Relevant
Miscibility: Not Relevant
Fat Solubility: Not Relevant
Conductivity: Not Relevant

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

Likely routes of exposure:

Skin contact, skin absorption, eye contact, inhalation and ingestion.

Toxicological Information of the Preparation

a) acute toxicity	The product is classified: Acute toxicity (oral), Category 4(H302)
b) skin corrosion/irritation	The product is classified: Skin irritation, Category 2(H315)
c) serious eye damage/irritation	The product is classified: Eye irritation, Category 2A(H319)
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	The product is classified: Specific target organ toxicity following repeated exposure, Category 2(H373)
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

diethylene glycol; 2,2'-oxydiethanol	a) acute toxicity	LD50 Skin Rabbit = 11890 mg/kg

		LD50 Oral Rat = 12565 mg/kg
		LD50 Skin Rabbit = 11890 mg/kg
		LC50 Inhalation Rat > 4600 mg/m3 4h
trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans-	a) acute toxicity	LD50 Skin Rabbit = 5000 mg/kg
		LC50 Inhalation Rat = 24100 ppm 4h
		LD50 Oral Rat = 1235 mg/kg
		LD50 Skin Rabbit > 5000 mg/kg
n,n-dicyclohexylmethylamine; methyldicyclohexylamine	a) acute toxicity	LD50 Oral Rat = 446 mg/kg
ethylene glycol; ethane-1,2-diol	a) acute toxicity	LD50 Oral Rat = 4000 mg/kg
		LD50 Skin Rat = 10600 mg/kg
		LD50 Oral Rat = 4700 mg/kg
		LC50 Inhalation Rat > 2.5 mg/l 6h

Substance(s) listed on the IARC Monographs:

None

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

None

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

None

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

None

12. Ecological information

Ecotoxicity

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

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
diethylene glycol; 2,2'-oxydiethanol	CAS: 111-46-6 - EINECS: 203-872-2 - INDEX: 603-140-00-6	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 75200 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 84000 mg/L 48h IUCLID
trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans-	CAS: 156-60-5 - EINECS: 205-860-2 - INDEX: 602-026-00-3	a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 135 mg/L 96h
ethylene glycol; ethane-1,2-diol	CAS: 107-21-1 - EINECS: 203-473-3 - INDEX: 603-027-00-1	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 41000 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 14 mL/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 27540 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 40000 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 16000 mg/L 96h IUCLID

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 46300 mg/L 48h IUCLID

a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 6500 mg/L 96h IUCLID

a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 40761 mg/L 96h IUCLID

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: Not Applicable

ADR-UN number: Not Applicable

DOT-UN Number: Not Applicable

IATA-Un number: Not Applicable

IMDG-Un number: Not Applicable

UN proper shipping name

TDG-Shipping Name: Not Applicable

ADR-Shipping Name: Not Applicable

DOT-Proper Shipping Name: Not Applicable

IATA-Technical name: Not Applicable

IMDG-Technical name: Not Applicable

Transport hazard class(es)

TDG-Class: Not Applicable

ADR-Class: Not Applicable

DOT-Hazard Class: Not Applicable

IATA-Class: Not Applicable

IMDG-Class: Not Applicable

Packing group

TDG-Packing Group: Not Applicable

ADR-Packing Group: Not Applicable

DOT Packing Group: Not Applicable

IATA-Packing group: Not Applicable

IMDG-Packing group: Not Applicable

Environmental hazards

Marine pollutant: No

Environmental Pollutant: Not Applicable

DOT-RQ: Not Applicable

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

Not Applicable

Special precautions in connection with transport or conveyance

TDG:

Not Applicable

Department of Transportation (DOT):

Not Applicable

Road and Rail (ADR-RID):

Not Applicable

Air (IATA):

Not Applicable

Sea (IMDG):

Not Applicable

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15. Regulatory information

Canada - Federal regulations

DSL - Domestic Substances List

DSL (Domestic Substances List)

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

NDSL (Non Domestic Substances List)

No substances listed

NPRI - National Pollutant Release Inventory

NPRI (National Pollutant Release Inventory) - List of substances listed.

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:

diethylene glycol; 2,2'-oxydiethanol	is listed in TSCA	Section 8b Section 5
(1e)-1-chloro-3,3,3-trifluoroprop-1-ene; trans-1-chloro-3,3,3-trifluoropropene	is listed in TSCA	Section 8b
trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans-	is listed in TSCA	Section 8b Section 12b
n,n-dicyclohexylmethylamine; methyldicyclohexylamine	is listed in TSCA	Section 8b
ethylene glycol; ethane-1,2-diol	is listed in TSCA	Section 8b Section 5

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans-

ethylene glycol; ethane-1,2-diol

Section 313 - Toxic chemical list:

diethylene glycol; 2,2'-oxydiethanol

ethylene glycol; ethane-1,2-diol

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans-	Reportable quantity:	1000	pounds
ethylene glycol; ethane-1,2-diol	Reportable quantity:	5000	pounds

CAA - Clean Air Act

CAA listed substances:

diethylene glycol; 2,2'-oxydiethanol	is listed in CAA	Section 112(b) - HON
ethylene glycol; ethane-1,2-diol	is listed in CAA	Section 112(b) - HAP Section 112(b) - HON

CWA - Clean Water Act

CWA listed substances:

No substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

ethylene glycol; ethane-1,2-diol	Listed as reproductive toxicant

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans-

ethylene glycol; ethane-1,2-diol

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

diethylene glycol; 2,2'-oxydiethanol

trans-1,2-dichloroethylene; Ethylene, 1,2-dichloro-, trans-

ethylene glycol; ethane-1,2-diol

New Jersey Right to know

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

ethylene glycol; ethane-1,2-diol

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16. Other information

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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
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
A.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
A.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
A.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
A.9/2	STOT RE 2	Specific target organ toxicity following repeated exposure, Category 2

B.5/C	Compr. Gas	Gases under pressure (Compressed gas)
B.6/2	Flam. Liq. 2	Flammable Liquids — Category 2
CAN-HAE/C3	Aquatic Chronic 3	Chronic (long-term) aquatic hazard - Category 3

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:

- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 15. REGULATORY INFORMATION