SAFETY DATA SHEET
B-SIDE COMPONENT (134a)
CLOSED CELL FORMULATION

SECTION 1- IDENTIFICATION

1.1 Product Identifier

Product Name: EZ FLO 205
Pur Fill 1G 205 EZ FLO 605

ID SDS: 2PEZ01, 2PGF01, 2PE2605 REACH Registration:

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

General Use Low pressure polyurethane foam, Side-B Component, for PROFESSIONAL USE ONLY Uses advised against
No further information available **1.3 Details of the supplier and of the safety data sheet:**

Manufacturer TODOL Products
25 Washington Avenue
Natick, MA 01760
1-800-252-3818

1.4 Emergency telephone numbers:

In the U.S.A CHEMTREC (24 hours) 1-800-424-9300
International CHEMTREC (24 hours) 1-703-527-3887

SECTION 2- HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Mixture

Classification: Gases Under Pressure- Compressed Gas
Skin Irritation- Category 2
Eye Irritation- Category 2A

2.2 Label elements

Labeling (Regulation (EC) No 1272/2008) Hazard Symbols:



Signal Word: WARNING **Hazard Statements:**

H280 Contains gas under pressure; may explode if heated
H315 Causes skin irritation
H319 Causes serious eye irritation

Prevention:

P102 Keep Out of Reach of Children
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood P251 Pressurized container: Do not pierce or burn, even after use.
P264 Wash hands and other skin areas exposed to material thoroughly after handling
P271 Use outdoors or in a well-ventilated area
P280 Wear protective gloves, protective clothing and eye protection

Response:

P302 +P352 IF ON SKIN: Wash with plenty of soap and 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.
P321 Specific treatment: Seek immediate medical advice. Refer to product label and Section 4 of this SDS

P333 + P313 If skin irritation or rash occurs: Get medical attention

P337+P313 If eye irritation persists: Get medical attention

P362 Take off contaminated clothing and wash before reuse.

Storage:

P405 Store locked up

P410+P403 Protect from sunlight. Store in a well-ventilated place.

Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SECTION 3-COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances 3.2 Mixtures

Not applicable

Chemical characterization (preparation):

% by Weight	Ingredient	CAS No.
30-60	Proprietary Polyol Blend	
15-45	Tris (1-chloro-2-propyl) Phosphate	13674-84-5
10-30	1,1,1,2- Tetrafluoroethane	811-97-2
1-5	Pentamethyldiethylenetriamine	3030-47-5
0.5 – 1.5	Diethylene Glycol	111-46-6

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

SECTION 4- FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product vapors causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen. If respiratory arrest occurs, start artificial respiration by a trained individual. Loosen tight fitting clothing such as a jacket or tie. Seek medical attention immediately.

Eye: Immediately flush eyes with large amounts of water for at least 15 minutes, holding the eyes open with fingers and occasionally lifting the upper and lower lids. Use lukewarm water if possible. If present and easy to do, remove contact lenses. If irritation persists, get medical attention.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Gently wipe product from skin with a damp cloth and continue rinsing for 15 minutes. Wash clothing before reuse. Call a physician if irritation persists.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Mist or vapor may cause irritation of the nose, throat and respiratory tract. Symptoms may include sore throat, coughing, headache, nausea and shortness of breath. Inhalation of propellant may cause lightheadedness, headache and lethargy.

Eye: May cause eye irritation. Symptoms may include redness, swelling, stinging, and tearing. May cause temporary corneal injury. Product vapor may cause eye irritation with symptoms of burning and tearing.

Skin: May cause mild skin irritation. Symptoms may include localized redness and discomfort.

Ingestion: May cause gastrointestinal irritation: stomach distress, nausea, or vomiting. Repeated ingestion may be harmful.

Chronic: Pre-existing disorders of the skin and respiratory system may be aggravated by exposure to this product. Diethylene glycol has caused reproductive and developmental effects in some laboratory animal's tests.

4.3 Notes to the physician

If case of an accident or if you feel unwell, seek medical advice immediately (show label or SDS if possible).

SECTION 5- FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Use dry chemical, carbon dioxide, alcohol resistant foams and water spray **Unsuitable methods of extinction**: None

5.2 Special hazards arising from the substance or mixture

Cans, cylinders, or refillable tanks may explode due to the buildup of pressure when exposed to extreme heat. Highly toxic gases may be generated by thermal decomposition or combustion. Overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed.

5.3 Advice for firefighters

Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fireexposed containers cool.

SECTION 6- ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ventilate the area.

6.2 Environmental precautions

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Cover spilled material with a large quantity of inert absorbent. Collect material and place into an approved, open-head metal container. Clean contaminated area with soap and water.

6.4 Reference to other sections

For indications about waste treatment, see Section 13

SECTION 7- HANDLING AND STORAGE

7.1 Precautions for safe handling

Observe label precautions. Wear all appropriate protective equipment specified in Section 8. Keep containers closed when not in use.

Advice on protection against fire and explosion

Contents under pressure. Exposure to high temperatures can cause containers to rupture or explode.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry, well-ventilated area and away from incompatible materials (see Section 10.5). Storage temperature is 60-90□F (16-32□C). Products stored below 60□F (16□C) or above 90□F (32□C) must be given adequate time to warm up/cool down. Do not expose the tanks/kits to open flame or temperatures above 122□F (50□C); storage at elevated temperatures can cause the container to rupture. Excessive heat can cause premature aging of components resulting in a shorter shelf life. Protect unused product from freezing. Storage below 60□F

(16□C) may affect foam quality if chemicals are not warmed to room temperature before using. Protect containers from physical abuse. Always store the containers in the upright position. **KEEP OUT OF REACH OF CHILDREN.**

SECTION 8- EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control Parameters

Ingredient	CAS Number	OSHA-PEL	ACGIH-TLV	Other
Diethylene Glycol	111-46-6			WEEL 10 mg/kg
1,1,1,2 Tetrafluoroethane	811-97-2			WEEL 1,000 ppm

8.2 Exposure controls:

Engineering Controls: Use local and general exhaust ventilation to control levels of exposure.
Eye/face Protection: Wear protective goggles or safety glasses with side shields.
Hand Protection: Use chemically resistant gloves (i.e. Nitrile gloves). Nitrile/butadiene rubber, butyl rubber, polyethylene, PVC (vinyl), or neoprene gloves are also effective. Glove selection should take into account potential body reactions to certain materials and manufacturer's instructions for use. Break through time of selected gloves must be greater than the intended use period.
Other Protective Equipment: Use clothing that protects against dermal exposure. Appropriate protective clothing varies depending on the potential for exposure. To ensure proper skin protection, wear PPE in such a manner that no skin is exposed.
Respiratory Protection: Atmospheric levels should be maintained below the exposure guidelines. Use products only in a well-ventilated area. Engineering and administrative (work practices) controls should be implemented to protect the workers. If atmospheric levels are expected to exceed the exposure levels, use a NIOSH approved air purifying respirator equipped with an organic vapor cartridge and a particulate filter. If atmospheric levels exceed 10 times the TLV or PEL level for which an air-purifying respirator is effective, use a powered air purifying respirator (PAPR). The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). The odor and irritancy of this material is inadequate to warn of excessive exposure.
Hygiene Measures: An eye wash station or portable eye wash station should be in the area. Wash hands thoroughly after use, before eating, drinking or using the lavatory. Employees/Users should be educated and trained in the safe use and handling of this product.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
General Physical Form	Amber to dark brown liquid. Forms an off-white to yellowish froth when released from the container
Odor	Slight fluorocarbon and amine odor
Odor Threshold	No data available
pH	No data available
Melting Point/Freezing Point	No data available
Initial Boiling Point and Boiling Range	Propellant -26□C (-15□F); >93□C (200□F), liquid phase
Flash Point	Estimated >392□F (>200□C).
Evaporation Rate	No data available
Flammability	No applicable
Lower Flammability/Explosive Limit	Not available
Upper Flammability/Explosive Limit	Not available
Vapor Pressure in Container	Contents under pressure have a vapor pressure >50 psi (>345kPa)
Vapor Pressure of Liquid	Liquid phase vapor pressure: <1 mm Hg @ 40□C
Vapor Density	No data available
Relative Density/Specific Gravity	~ 1.2 @ 25□C (Water = 1)
Solubility	Water: partly soluble, does not react
Partition coefficient: n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Oxidizing Properties	Not available
VOC Content (calculated minus exempt compounds)	Calculated at around 25 g/L

SECTION 10- STABILITY AND REACTIVITY

10.1 Reactivity 10.2 Chemical stability 10.3 Possibility of hazardous reactions 10.4 Conditions to avoid 10.5 Incompatible materials 10.6 Hazardous decomposition products

No dangerous reaction known under conditions of normal use.
Stable under normal conditions of use and recommended storage conditions. See Section 7 for storage recommendations.
Exposure to elevated temperatures can cause containers to rupture or explode. Contents are under pressure.
Temperatures below 60°F (16°C) or temperatures above 90°F (32°C). Avoid heat and flames.

Alcohols, strong bases, amines, metal compounds, ammonia, and strong oxidizers.
May include, and are not limited to: oxides of carbon, oxides of nitrogen, hydrogen fluoride and traces of hydrogen cyanide.

SECTION 11- TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity
Expected to have low acute oral toxicity
Acute inhalation toxicity
Expected to have low acute inhalation toxicity
Acute dermal toxicity
Expected to have a low acute dermal toxicity
Skin irritation
May cause mild skin irritation
Eye irritation
Causes eye irritation **Sensitization**
No data available
Genotoxicity
No data available
Mutagenicity
No data available
Specific organ toxicity- single exposure No data available
Specific organ toxicity- repeated exposure
No data available
Aspiration hazard
No data available

11.2 Further information

None of the components of this product are listed as carcinogens by IARC, ACGIH, NTP or OSHA. No data is available regarding the mutagenicity or teratogenicity of this product, nor is there any available data that indicates that it causes adverse or fertility effects. Chronic toxicity from prolonged and repeated exposure to Diethylene glycol (DEG) is associated with kidney, and to a lesser degree liver effects. Available data indicates that DEG is negative in in-vitro genotoxicity tests. Some positive results were obtained in in-vivo genotoxicity studies, however, only at high toxic doses of DEG. Overall, DEG is considered non-genotoxic. Several animal reproductive toxicity studies indicate that human data or case reports on reproductive and developmental effects of DEG are available.

Handle in accordance with good industrial hygiene and safe practices.

SECTION 12- ECOLOGICAL INFORMATION

12.1 Ecotoxicity

The ecotoxicity of this product has not been experimentally determined. However, it is expected to have low acute aquatic toxicity based on the acute aquatic toxicity of the individual components and their concentrations in this composition.
12.2 Persistence and degradability Product is readily biodegradable.
12.3 Bioaccumulation potential
Product is not expected to bioaccumulate
12.4 Mobility
No data available
12.5 Results of PBT and vPvB assessment
No data available
12.6 Other adverse effects
Additional ecological information: Do not allow material to run into surface waters, wastewater, or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

SECTION 13- DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Always wear proper protective equipment as you would while spraying the two-component foam in a well-ventilated area.

Procedure for handling empty or partially used disposable cylinders:

1. DO NOT INCINERATE TANKS
2. Dispense the foam into a waste container like a cardboard box or plastic bag. Depressurize the used cylinders using the dispensing unit with a new nozzle attached. Spray the foam until one of the components/cylinders no longer sprays chemical.
3. Remove the nozzle and then continue to depressurize by dispensing the chemicals into a waste container (a box lined with a plastic bag) that has adequate industrial liquid absorbing medium in the bottom. Dispense the residual chemicals until the pressure is down to a minimum or there are just large bubbles in the hose.
4. Close the cylinder valves completely, and then operate the dispensing unit again to empty and depressurize the hoses. Use a 9/16" wrench and remove the hoses from the cylinders. Use caution in case there is some residual chemical and/or pressure in the hoses.
5. Invert the cylinder and point away from face. Slowly open the cylinder over the waste container to catch any residual spray.
6. Return the cylinder to an upright position. Shake the container; there should not be any sloshing of liquid. Make sure to leave valves OPEN-do not close.
7. DISPOSE OF EMPTY CYLINDERS ACCORDING TO APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. CHECK WITH YOUR LOCAL WASTE DISPOSAL SERVICE FOR GUIDANCE.

NOTE: After dispensing if one cylinder has chemical left in it; treat as hazardous material.

SECTION 14- TRANSPORTATION

Note: Transportation information is for reference only. Customer is urged to consult 49 CFR 100-177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

	Containers Greater Than 1000 cu. cm. (1 liter)
Ground	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-Flammable Gas Label)
Air	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-flammable Gas Label) Packing Instruction (Cargo & Passenger) 200
Water	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen 2.2 (Non-flammable Gas Label)

SECTION 15- REGULATORY

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

U.S. Federal Regulations:

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This product is not subject to TSCA 12(b) Export Notification.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: Acute Health Hazard, Sudden Release of Pressure Hazard

SARA 313 Information: No components of the product are subject to reporting levels established by Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: No components of the product exceed the threshold (de minimis) reporting levels established by these sections of the Title III of SARA.

SARA 302/304 Emergency Planning & Notification: No components of the product exceed the threshold (de minimis) report levels established by these sections of the Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): None of the substances in this product are contained in levels that exceed the threshold (de minimis) reporting levels established by CERCLA

Clean Air Act (CAA) – This product does not have any components listed as a Hazardous Air Pollutant (HAP) designated in CAA Section 112 (b). This product does not contain any Class 1 or Class 2 Ozone depletors.
Clean Water Act (CWA) – This products does not have any components listed as a Hazardous Substance under the CWA. None of the chemicals in these products are listed as Priority Pollutants under the CWA. None of the chemicals listed in these products are listed as Toxic Pollutants under the CWA.

U.S. State Regulations:
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains trace amount of substances known to the State of California to cause cancer or other reproductive harm. **Other U.S. State Inventories:**
Diethylene glycol (CAS#111-46-6) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/air Pollutants lists: MN, PA
1,1,1,2- Tetrafluoroethane (CAS #811-97-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: ME, WI
Canada
WHMIS Hazard Symbol and Classification:



A- Compressed Gas

Canada Controlled Product Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation, and the SDS contains all the information required by the Controlled Products Regulations.

Canadian Ingredient Disclosure List (IDL): None of the substances in this product are listed on the IDL.

Canadian National Pollutant Release Inventory (NPRI): None of the components of this product are listed on the NPRI

Global Chemical Inventory Lists:
United States: Toxic Substance Control Act (TSCA)- Yes
Canada: Domestic Substances List (DSL)- Yes
Canada: Non-Domestic Substances List (NDSL)- No
15.2 Chemical safety assessment: For this product a chemical safety assessment was not carried out

SECTION 16- OTHER

NFPA: Health Hazard 2; Flammability 1; Reactivity 1
HMIS: Health Hazard 2; Flammability 1; Physical Hazard 1
Hazard Rating: 0=minimal, 1= slight, 2=moderate, 3=severe, 4= extreme

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