

1 Identification

- **Product identifier**
- **Trade name:** Clear Reflections
- **Article number:** 385
- **Application of the substance / the mixture** Glass Cleaner
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
ITW Pro Brands
805 East Old 56 Highway
Olathe, Kansas 66061
Phone: 1-800-224-4860
- **Emergency telephone number:** Infotrac Emergency Hotline: 1-800-535-5053

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS04

- **Signal word** Warning
- **Hazard statements**
H280 Contains gas under pressure; may explode if heated.
- **Precautionary statements**
P410+P403 Protect from sunlight. Store in a well-ventilated place.
- **Hazard description:**
- **WHMIS-symbols:**
A - Compressed gas



- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

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- **HMIS-ratings (scale 0 - 4)**

| | | |
|------------|---|----------------|
| HEALTH | 0 | Health = 0 |
| FIRE | 0 | Fire = 0 |
| REACTIVITY | 0 | Reactivity = 0 |

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

| | | |
|----------|--|---------|
| 74-98-6 | propane <ul style="list-style-type: none"> ⚠ Flam. Gas 1, H220 ⚠ Press. Gas, H280 | 2.5-10% |
| 75-28-5 | Isobutane <ul style="list-style-type: none"> ⚠ Flam. Gas 1, H220 | ≤ 2.5% |
| 64-17-5 | ethanol <ul style="list-style-type: none"> ⚠ Flam. Liq. 2, H225 ⚠ Eye Irrit. 2A, H319 | ≤ 2.5% |
| 111-76-2 | 2-butoxyethanol <ul style="list-style-type: none"> ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319 Flam. Liq. 4, H227 | ≤ 2.5% |

4 First-aid measures

- **Description of first aid measures**
- **General information:** Take affected persons out into the fresh air.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation is experienced, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Unlikely route of exposure.
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.

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- **Most important symptoms and effects, both acute and delayed**
 - Headache
 - Breathing difficulty
 - Dizziness
 - Coughing
 - Nausea
 - Disorientation
- **Danger** Danger of impaired breathing.
- **Indication of any immediate medical attention and special treatment needed**
If necessary oxygen respiration treatment.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
Danger of receptacles bursting because of high vapor pressure if heated.
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** No further relevant information available.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
For large spills, wear protective clothing.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**
Keep away from heat and direct sunlight.
Use only in well ventilated areas.

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- Avoid splashes or spray in enclosed areas.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurized containers.
Provide ventilation for receptacles.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidizing agents.
- **Further information about storage conditions:**
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
Protect from frost.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:

74-98-6 propane

| | |
|---------------|--|
| PEL (USA) | Long-term value: 1800 mg/m ³ , 1000 ppm |
| REL (USA) | Long-term value: 1800 mg/m ³ , 1000 ppm |
| TLV (USA) | refer to Appendix F |
| EL (Canada) | Long-term value: 1000 ppm |
| EV (Canada) | Long-term value: 1.000 ppm |
| LMPE (Mexico) | Long-term value: 1000 ppm |

64-17-5 ethanol

| | |
|---------------|--|
| PEL (USA) | Long-term value: 1900 mg/m ³ , 1000 ppm |
| REL (USA) | Long-term value: 1900 mg/m ³ , 1000 ppm |
| TLV (USA) | Short-term value: 1880 mg/m ³ , 1000 ppm |
| EL (Canada) | Short-term value: 1000 ppm |
| EV (Canada) | Long-term value: 1.900 mg/m ³ , 1.000 ppm |
| LMPE (Mexico) | Long-term value: 1000 ppm |
| | A3 |

111-76-2 2-butoxyethanol

| | |
|-----------|---|
| PEL (USA) | Long-term value: 240 mg/m ³ , 50 ppm |
| | Skin |
| REL (USA) | Long-term value: 24 mg/m ³ , 5 ppm |
| | Skin |
| TLV (USA) | Long-term value: 97 mg/m ³ , 20 ppm |
| | BEI |

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| | |
|---------------|------------------------------------|
| EL (Canada) | Long-term value: 20 ppm |
| EV (Canada) | Long-term value: 20 ppm Skin |
| LMPE (Mexico) | Long-term value: 20 ppm A3, IBE |

| |
|--|
| · Ingredients with biological limit values: |
|--|

| |
|---------------------------------|
| 111-76-2 2-butoxyethanol |
|---------------------------------|

| | |
|-----------|--|
| BEI (USA) | 200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis |
|-----------|--|

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid close or long term contact with the skin.

Avoid contact with the eyes.

- **Breathing equipment:**

Not required under normal conditions of use.

For spills, respiratory protection may be advisable.

Use suitable respiratory protective device in case of insufficient ventilation.

- **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing

- **Limitation and supervision of exposure into the environment**

No further relevant information available.

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9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

- Form: Aerosol

- Color: Colorless

- Odor: Pleasant

- Odor threshold: Not determined.

- pH-value: 9.0 - 10.0

- Change in condition

- Melting point/Melting range: Not applicable, as aerosol.

- Boiling point/Boiling range: Not applicable, as aerosol.

- Flash point: Not applicable, as aerosol.

- Flammability (solid, gaseous): Not applicable.

- Auto-ignition temperature: Not determined.

- Decomposition temperature: Not determined.

- Auto igniting: Product is not self-igniting.

- Danger of explosion: Not determined.

- Explosion limits:

- Lower: Not determined.

- Upper: Not determined.

- Vapor pressure at 21 °C (70 °F): 125 psig

- Density at 20 °C (68 °F): 0.996 g/cm³ (8.312 lbs/gal)

- Relative density: Not determined.

- Vapour density: > 1 (Air=1)

- Evaporation rate: Not applicable.

- Solubility in / Miscibility with

- Water: Soluble.

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:

- Dynamic: Not determined.

- Kinematic: Not determined.

- Solvent content:

- VOC content: 7.38 %

- Other information: No further relevant information available.

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10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Toxic fumes may be released if heated above the decomposition point.
Reacts with strong acids and oxidizing agents.
- **Conditions to avoid** Keep away from heat and direct sunlight.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Possible in traces.
Carbon monoxide and carbon dioxide
Nitrogen oxides

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** See Section 15.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Contact waste processors for recycling information.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **Waste disposal key:** EPA RCRA Code (USA) : D001 .
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
 - **DOT, ADR, IMDG, IATA** UN1950
 - **UN proper shipping name**
-  Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).
- **DOT** Aerosols
 - **ADR** 1950 AEROSOLS
 - **IMDG** AEROSOLS
 - **IATA** Aerosols, non-flammable
 - **Transport hazard class(es)**

- **DOT**



- **Class** 2 Gases
- **Label** 2.2

- **ADR**



- **Class** 2 5A Gases

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· Label 2.2

· IMDG



· Class 2 Gases
· Label 2.2

· IATA



· Class 2.2
· Label 2.2
· Packing group
· DOT, ADR, IMDG, IATA Not Regulated
· Environmental hazards:
· Marine pollutant: No
· Special precautions for user Warning: Gases
· Danger code (Kemler): -
· EMS Number: F-D,S-U
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· DOT
· Quantity limitations On passenger aircraft/rail: 75kg
On cargo aircraft only: 150kg

· ADR
· Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

· IMDG
· Limited quantities (LQ) 1L
· Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

· UN "Model Regulation": UN1950, Aerosols, 2.2

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

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- **Section 313 (Specific toxic chemical listings):**

| | |
|----------|-----------------|
| 111-76-2 | 2-butoxyethanol |
|----------|-----------------|

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65 (California)**

- **Chemicals known to cause cancer:**

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

| | |
|---------|---------|
| 64-17-5 | ethanol |
|---------|---------|

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

| | |
|---------|---------|
| 64-17-5 | ethanol |
|---------|---------|

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

| | | |
|----------|-----------------|----|
| 111-76-2 | 2-butoxyethanol | NL |
|----------|-----------------|----|

- **IARC (International Agency for Research on Cancer)**

| | | |
|---------|---------|---|
| 64-17-5 | ethanol | 1 |
|---------|---------|---|

| | | |
|----------|-----------------|---|
| 111-76-2 | 2-butoxyethanol | 3 |
|----------|-----------------|---|

- **TLV (Threshold Limit Value established by ACGIH)**

| | | |
|---------|---------|----|
| 64-17-5 | ethanol | A3 |
|---------|---------|----|

| | | |
|----------|-----------------|----|
| 111-76-2 | 2-butoxyethanol | A3 |
|----------|-----------------|----|

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **State Right to Know Listings**

None of the ingredients is listed.

- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

| | |
|---------|---------|
| 64-17-5 | ethanol |
|---------|---------|

- **Canadian Ingredient Disclosure list (limit 1%)**

| | |
|----------|-----------------|
| 111-76-2 | 2-butoxyethanol |
|----------|-----------------|

- **Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

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- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 01/06/2015 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

VOC: Volatile Organic Compounds (USA, EU)

Flam. Gas 1: Flammable gases, Hazard Category 1

Press. Gas: Gases under pressure: Compressed gas

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

- **Sources**

SDS Prepared by:

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