# SAFETY DATA SHEET

**The information in this Safety Data Sheet is required pursuant to Hazardous Product Regulations 2015.**

**Date of issue/Date of revision** 7 December 2019
**Version** 8

## Section 1. Identification

**Product name** : CLEAN RED
**Product code** : P994-8943
**Other means of identification** : Not available.
**Product type** : Liquid.

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

**Product use** : Industrial applications.
**Use of the substance/ mixture** : Coating.
**Uses advised against** : Not applicable.

**Supplier** :
PPG Canada Inc.
2301 Royal Windsor Drive
Mississauga, ON L5J 1K5
Canada
+1 888-310-4762

PPG Industries, Inc.
One PPG Place,
Pittsburgh, PA 15272

**Emergency telephone number** : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 or + 52 55 5559 1588 (Mexico)

**Technical Phone Number** : 1-800-647-6050

## Section 2. Hazard identification

**Classification of the substance or mixture** : Not classified.

**GHS label elements**

**Signal word** : No signal word.
**Hazard statements** : No known significant effects or critical hazards.

**Precautionary statements**

**Prevention** : Not applicable.
**Response** : Not applicable.
**Storage** : Not applicable.
**Disposal** : Not applicable.

# Section 2. Hazard identification

**Supplemental label elements** : Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Emits toxic fumes when heated. DANGER - RAGS, STEEL WOOL OR WASTE SOAKED WITH THIS PRODUCT MAY SPONTANEOUSLY CATCH FIRE IF IMPROPERLY DISCARDED. IMMEDIATELY AFTER EACH USE, PLACE RAGS, STEEL WOOL OR WASTE IN A SEALED WATER-FILLED METAL CONTAINER.
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 1% (Oral), 3.8% (Dermal), 1% (Inhalation)

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture
**Product name** : CLEAN RED
**Other means of identification** : Not available.

## CAS number/other identifiers

| Ingredient name | Synonyms | % (w/w) | CAS number |
|---|---|---|---|
| 2-butoxyethanol | Not available. | 5 - 10* | 111-76-2 |
| diiron trioxide | Not available. | 1 - 5* | 1309-37-1 |

*Any concentration shown as a range is to protect confidentiality.

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

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First-aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

## Description of necessary first aid measures

**Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

**Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

**Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

**Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

# Section 4. First-aid measures

## Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

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

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

## Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

# Section 6. Accidental release measures

## Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8).

**Special precautions** : Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

# Section 8. Exposure controls/personal protection

| Ingredient name | Exposure limits |
|---|---|
| 2-butoxyethanol | **CA Alberta Provincial (Canada, 6/2018). Skin sensitizer.**<br>8 hrs OEL: 97 mg/m³ 8 hours.<br>8 hrs OEL: 20 ppm 8 hours.<br>**CA British Columbia Provincial (Canada, 5/2019).**<br>TWA: 20 ppm 8 hours.<br>**CA Ontario Provincial (Canada, 1/2018). Absorbed through skin.**<br>TWA: 20 ppm 8 hours.<br>**CA Quebec Provincial (Canada, 1/2014).**<br>TWAEV: 97 mg/m³ 8 hours.<br>TWAEV: 20 ppm 8 hours.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 30 ppm 15 minutes.<br>TWA: 20 ppm 8 hours. |
| diiron trioxide | **CA British Columbia Provincial (Canada, 5/2019).**<br>TWA: 5 mg/m³, (as Fe) 8 hours. Form: Dust<br>STEL: 10 mg/m³, (as Fe) 15 minutes. Form: Fume<br>TWA: 5 mg/m³, (as Fe) 8 hours. Form: Fume<br>TWA: 3 mg/m³ 8 hours. Form: Respirable dust<br>TWA: 10 mg/m³ 8 hours. Form: Total dust<br>**CA Alberta Provincial (Canada, 6/2018).**<br>8 hrs OEL: 5 mg/m³, (as Fe) 8 hours. Form: Respirable<br>**CA Ontario Provincial (Canada, 1/2018).**<br>TWA: 5 mg/m³ 8 hours. Form: Respirable fraction.<br>**CA Quebec Provincial (Canada, 1/2014).**<br>TWAEV: 5 mg/m³, (as Fe) 8 hours. Form: dust and fume<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 10 mg/m³, (measured as Fe) 15 minutes. Form: dust and fume<br>TWA: 5 mg/m³, (measured as Fe) 8 hours. Form: dust and fume |

**Consult local authorities for acceptable exposure limits.**

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

# Section 8. Exposure controls/personal protection

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety glasses with side shields.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: butyl rubber

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

# Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Liquid.
**Color** : Red.
**Odor** : Not available.
**Odor threshold** : Not available.
**pH** : Not available.
**Melting point** : Not available.
**Boiling point** : >37.78°C (>100°F)
**Flash point** : Closed cup: 93.33°C (200°F)
**Auto-ignition temperature** : Not available.
**Decomposition temperature** : Not available.
**Flammability (solid, gas)** : Not available.
**Lower and upper explosive (flammable) limits** : Not available.

# Section 9. Physical and chemical properties

**Evaporation rate** : Not available.
**Vapor pressure** : Not available.
**Vapor density** : Not available.
**Relative density** : 1.01
**Density ( lbs / gal )** : 8.43
**Bulk Density (g/cm³)** : 0
**Solubility** : Partially soluble in the following materials: cold water.
**Partition coefficient: n-octanol/water** : Not available.
**Viscosity** : Kinematic (40°C (104°F)): >0.21 $cm^2/s$ (>21 cSt)
**Volatility** : 81% (v/v), 79.087% (w/w)
**% Solid. (w/w)** : 20.913

# Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
Refer to protective measures listed in sections 7 and 8.

**Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

**Hazardous decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| 2-butoxyethanol | LD50 Dermal | Rabbit | 1060 mg/kg | - |
| | LD50 Oral | Rat - Male | 1480 mg/kg | - |
| diiron trioxide | LC50 Inhalation Dusts and mists | Rat | >5 mg/l | 4 hours |
| | LD50 Oral | Rat | 10 g/kg | - |

**Conclusion/Summary** : There are no data available on the mixture itself.

### Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| 2-butoxyethanol | Skin - Moderate irritant | Rabbit | - | 4 hours | 28 days |
| | Eyes - Irritant | Rabbit | - | 24 hours | 21 days |

### Conclusion/Summary

# Section 11. Toxicological information

**Skin** : There are no data available on the mixture itself.
**Eyes** : There are no data available on the mixture itself.
**Respiratory** : There are no data available on the mixture itself.

## Sensitization

**Skin** : There are no data available on the mixture itself.
**Respiratory** : There are no data available on the mixture itself.

## Mutagenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

## Carcinogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

## Classification

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| 2-butoxyethanol | - | 3 | - |
| diiron trioxide | - | 3 | - |

**Carcinogen Classification code:**

**IARC: 1, 2A, 2B, 3, 4**
**NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen**
**OSHA: +**
**Not listed/not regulated: -**

## Reproductive toxicity

**Conclusion/Summary** : There are no data available on the mixture itself.

## Teratogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

## Specific target organ toxicity (single exposure)

Not available.

## Specific target organ toxicity (repeated exposure)

Not available.

**Target organs** : Contains material which causes damage to the following organs: brain.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, spleen, lymphatic system, upper respiratory tract, skin, bone marrow, central nervous system (CNS), eye, lens or cornea.

## Aspiration hazard

Not available.

## Information on the likely routes of exposure

## Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.
**Inhalation** : No known significant effects or critical hazards.
**Skin contact** : No known significant effects or critical hazards.
**Ingestion** : No known significant effects or critical hazards.

## Over-exposure signs/symptoms

**Eye contact** : No specific data.

# Section 11. Toxicological information

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

**Conclusion/Summary** : There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### Short term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Long term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Potential chronic health effects

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| CLEAN RED | 16071.4 | 11510.6 | N/A | 119.4 | 16.3 |
| 2-butoxyethanol | 1480 | 1060 | N/A | 11 | 1.5 |
| diiron trioxide | 10000 | N/A | N/A | N/A | N/A |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| 2-butoxyethanol | Acute LC50 1474 mg/l<br>Chronic NOEC >100 mg/l | Fish<br>Fish | 96 hours<br>21 days |
| diiron trioxide | Acute EC50 >100 mg/l | Daphnia | 48 hours |

## Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| 2-butoxyethanol | - | - | Readily |

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| 2-butoxyethanol | 0.81 | - | low |

## Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions 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 non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Disposal should be in accordance with applicable regional, national and local laws and regulations.**

**Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures**

# Section 14. Transport information

| | TDG | IMDG | IATA |
|---|---|---|---|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class (es) | - | - | - |
| Packing group | - | - | - |
| | | | |

## Section 14. Transport information

| | | | |
|---|---|---|---|
| **Environmental hazards** | No. | No. | No. |
| **Marine pollutant substances** | Not applicable. | Not applicable. | Not applicable. |

**Additional information**

**TDG** : None identified.

**IMDG** : None identified.

**IATA** : None identified.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

**National Inventory List**

**Canada inventory ( DSL )** : At least one component is not listed.

## Section 16. Other information

**Hazardous Material Information System (U.S.A.)**

**Health** : 2 * **Flammability** : 1 **Physical hazards** : 0

( * ) - Chronic effects

**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.**

**The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.**

**National Fire Protection Association (U.S.A.)**

**Health** : 2 **Flammability** : 1 **Instability** : 0

**Date of issue/Date of revision** **7 December 2019**

**Organization that prepared the MSDS** : EHS

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

**Indicates information that has changed from previously issued version.**

**Disclaimer**

## Section 16. Other information

*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*