

According to Regulation (EC) No. 1907/2006 as amended by (ED) No. 1272/2008

## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

**1.1** **Product Code:** 51-0015-01  
**Product Name:** Ink, Food Grade Red

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

**1.3** **Details of the Supplier of the Safety Data Sheet**

<b>Company Name</b>	BestCode		
<b>Address</b>	3034 SE Loop 820 Fort Worth, Texas, 76140		
<b>Website</b>	www.bestcode.co	<b>Email</b>	info@bestcode.co
<b>Phone</b>	817-349-8555	<b>Fax</b>	817-349-8480

**1.4** **Emergency Telephone Number**  
**Emergency Contact** Chemtel **Toll Free:** 1-800-255-3924  
**International:** 01-813-248-0585

## Section 2. Hazards Identification

**2.1** **Classification of the Substance or Mixture:**

**2.1.1** **Classification according to Regulation (EC) No 1272/2008 [CLP]:**

Flammable Liquids, Category 2  
Serious Eye Damage/Eye Irritation, Category 2A  
Specific Target Organ Toxicity (single exposure), Category 3

**2.2** **Label Elements:**

**2.2.1** **Labeling according to Regulation (EC) No 1272/2008 [CLP]:**



**GHS Signal Word:** **Danger**

**GHS Hazard Phrases:**

H225 - Highly flammable liquid and vapor.  
H301 - Moderately toxic if swallowed  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation.  
H333 - May be harmful if inhaled  
H336 - May cause drowsiness and dizziness  
H351 - Suspected of Causing Cancer  
H360 - May cause damage fertility or the unborn child  
H402 - Harmful to aquatic life

**GHS Precaution Phrases:**

P233 - Keep container tightly closed.  
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.  
P243 - Take precautionary measures against static discharge.  
P242 - Use only non-sparking tools.  
P264 - Wash hands thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.

# Safety Data Sheet

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P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

#### GHS Response Phrases:

P370+378 - In case of fire, use ... to extinguish.

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313 - If eye irritation persists, get medical advice/attention.

P309+311 - Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

#### GHS Storage and Disposal Phrases:

P403+235 - Store in cool/well-ventilated place.

P501 - Dispose of contents/container to ....

P405 - Store locked up.

P403+233 - Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous atmosphere.

## 2.3 Adverse Human Health Effects and Symptoms:

WARNING! FLAMMABLE LIQUID AND VAPOR. HARMFUL. Keep away from flame, heat, and static discharge sources. Irritant and central nervous system depressant. Avoid inhalation of vapors and contact with eyes and skin. May be fatal or cause blindness if swallowed. If inhaled remove to fresh air. If splashed in eyes, flush with water for more than 15 minutes. If in contact with skin, flush with water and mild soap. In medical emergency call the Poison Control Center (USA 1 303 623 5716) and a physician. Read MSDS before using.

### 2.3.1 Inhalation:

Irritating to respiratory system

### 2.3.2 Skin Contact:

Harmful to skin. Repeated exposure may cause skin dryness or cracking.

### 2.3.3 Eye Contact:

Irritating to eyes

### 2.3.4 Ingestion:

Poison may be fatal or cause blindness if swallowed. Vapor harmful. Cannot be made non-poisonous.

If SWALLOWED: Immediately call a Poison Control Center and a physician. Get medical attention. Keep container tightly closed. Store in a well-ventilated place.

## Section 3. Composition/Information on Ingredients

CAS #	Hazard components (Chemical Name)/ Reach Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
64-17-5	Ethanol	<55.0%	200-578-6 603-002-00-5	Flammable Liquids: Category 2 Serious Eye damage/ Irritation: Category 2A F;R11
67-64-1	Acetone	<5.0%	200-662-2 606-001-00-8	Flammable Liquids Category 2 Serious Eye damage/ Irritation Category 2A Specific Target Organ Toxicity (Single Exposure, Narcotic effects) Category 3 F;R11 Xi;R36 R66 R67

## Section 4. First Aid Measures

### 4.1 Description of First Aid Measures:

<b>In Case of Inhalation:</b>	Remove to fresh air. Restore breathing, Get medical attention.
<b>In Case of Skin Contact:</b>	Wash with soap and water. Remove contaminated clothes. Consult a physician if irritation persists. Do not re-use clothing until cleaned.
<b>In Case of Eye Contact:</b>	Flush immediately with water for 15 minutes. Get medical attention.
<b>In Case of Ingestion:</b>	Do not give liquids if victim is unconscious or drowsy. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and get medical attention immediately. Call a Poison Control Center or Physician.

### 4.2 Important Symptoms and Effects, Both Acute and Delayed:

Note for the Doctor:

## Section 5. Fire Fighting Measures

<b>5.1 Suitable Extinguishing Media:</b>	Alcohol foam, CO <sub>2</sub> , dry chemical, water fog. DO NOT use a direct stream of water. Product will float and can be re-ignited on surface of water		
<b>5.2 Flammable Properties and Hazards:</b>			
<b>Flash Point:</b>	-4°F / -20°C	<b>Method Used:</b>	Estimate
<b>Explosive Limits:</b>	The Flash Point for the ink is expected to be elevated by the presence of Ethanol.		
<b>Autoignition Point:</b>	LEL: 365.00 °C	UEL: 2.0%	19.0%
<b>5.3 Fire Fighting Instructions:</b>	Clear fire of unprotected personnel. Do not enter confined fire space without using contaminated breathing apparatus and protective clothing. Keep run-off water out of sewers and water sources. If risk of water pollution occurs, notify appropriate authorities. Container exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup that could result in container rupture; Vapors are heavier than air and may spread near ground to sources of ignition. May explode when heated or when exposed to flames or sparks. May form explosive or toxic mixtures with air. Fire creates toxic gases/vapors/fumes of carbon monoxide (CO). Carbon Dioxide (CO <sub>2</sub> )		

## Section 6. Accidental Release Measures

<b>6.1 Protective Precautions, Protective Equipment and Emergency Procedures:</b>	Avoid eye or skin contact.
<b>6.2 Environmental Precautions:</b>	Avoid run-off into storm sewers and ditches that lead to natural waterways. All cleanup and disposal should be carried out in accordance with federal, state and local regulations. If required, state and local authorities should be notified.
<b>6.3 Methods and Material for Containment and Cleaning Up:</b>	Place leaking containers in well-ventilated area. Eliminate ignition sources. If fire potential exists, blanket spill with foam or use water spray to disperse vapors. Contain spill to minimize contaminated area and facilitate salvage disposal. To clean spill, flush area sparingly with water or use an absorbent. All cleanup and disposal should be carried out in accordance with federal, state and local regulations. If required, state and local authorities should be notified. Recovered liquids may be sent to a licensed reclaimer or incineration facility. Contaminated materials must be disposed of in a permitted waste management facility. Consult federal, State, or local disposal authorities for approved procedures.

## Section 7. Handling and Storage

- 7.1 Precautions to be taken when Handling:**
- Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids); observe all warnings and precautions listed for the product. Do not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, and weld, Braze, solder, drill, grind, or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.
- Keep liquid away from heat, sparks, and open flames. Surfaces that are sufficiently hot may ignite even liquid Product in the absence of spark or flame. Extinguish pilot lights, cigarettes, and turns off other sources of Ignition prior to use and until all vapors are gone. Vapors may accumulate and travel to ignition sources distant from handling point flash fire can result.
- Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer high temperatures.
- Wash with soap and water before eating, drinking, smoking. Or using toilet facilities. Launder contaminated clothing before re-use.
- 7.2 Precautions to be Taken in Storing:**
- Protected against physical damage. Store in a cool, dry well-ventilated location, away from anywhere the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatible materials. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use should be no Smoking areas. Keep containers tightly closed when not in use, use adequate ventilation. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld, or perform similar operations on or Near the containers.

## Section 8. Exposure Controls/Personal Protection

### 8.1 Exposure Parameters

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
64-17-5	Ethanol	TWA: 1920 mg/m <sup>3</sup> (1000 ppm) STEL: ()	TWA: 1900 mg/m <sup>3</sup> (1000 ppm) STEL: 9500 mg/m <sup>3</sup> (5000ppm)	
67-64-1	Acetone	TWA: 1210 mg/m <sup>3</sup> (500 ppm) STEL: 3620 mg/m <sup>3</sup> (1500 ppm)	TWA: 1210 mg/m <sup>3</sup> (500 ppm) STEL: 2420 mg/m <sup>3</sup> (1000 ppm)	TWA: 1210 mg/m <sup>3</sup>

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
64-17-5	Ethyl alcohol	PEL: 1000 ppm	TLV: 1000 ppm	
67-64-1	Acetone	PEL: 1000 ppm	TLV: 500 ppm STEL: 750 ppm	

### 8.2 Exposure Controls

- 8.2.1 Engineering Controls: (Ventilation etc.):**
- Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- 8.2.2 Personal Protection Equipment:**
- Eye Protection:**  
Eye bath, safety shower  
Use approved safety goggles or splash shields when exposed to liquid splashes, mists, gases or dust.
- Protective Gloves:**  
Wear chemical resistant, impervious gloves when handling chemical products.
- Other Protective Clothing:**  
Wear appropriate protective clothing to prevent skin exposure.
- Respiratory Equipment (Specify Type):**  
Use an air purifying or air fed respirator if exposure will result in exposure in excess of allowable limits. Ensure that the respirator's safe working rating exceed the expected exposure.
- Hygienic Practices:**  
Wash hands, forearms, and face thoroughly after handling chemical products and before eating. Remove contaminated clothing before reusing. Place eyewash stations and safety showers close to the location of chemical storage and use.

## Section 9. Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

Physical States:	<input type="checkbox"/> Gas	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Solid
Appearance and Odor:	Red Liquid, Alcohol Odor		
Melting Point:	-114.10 °C		
Boiling Point:	78°C		
Flash Pt:	9° C	Method Used:	Estimate
Evaporation Rate:	5.7 (n.Bu.Acet.=1)		
Explosive Limits:	LEL: 3.3%		UEL: 24.5%
Vapor Pressure (vs. Air or mm Hg):	45 mmHg @ 20°C		
VOC	295 grams / liter		
Vapor Density (vs. Air = 1):	2.5		
Specific Gravity (Water = 1):	0.785		
Density:	7.3LB/GA		
Solubility in Water:	Negligible in Water		
Autoignition Pt:	365.00 °C		

\*Acetone is an Exempt VOC Solvent

### 9.2 Other Information

Percent Volatile:

## Section 10. Stability and Reactivity

### 10.1 Reactivity

10.2 Stability Unstable ☐ Stable ☒

### 10.3 Conditions To Avoid -

#### Hazardous Reactions:

Possibility of Hazardous Reactions: Will occur ☐ Will not occur ☒

10.4 Conditions to Avoid - Heat, flames, and sparks

### 10.5 Incompatibility – Materials to Avoid

10.6 Hazardouts Hazardous decomposition products should not be produced under normal conditions. Fire creates toxic  
 Decomposition or Gases and vapors of Carbon Monoxide (CO) & Carbon Dioxide CO2).  
 Byproducts:

## Section 11. Toxicological Information

### 11.1 Information of Toxicological Effects:

#### Acute Data:

Chemical Name	Result	Species	Dose	Exposure
Ethanol	LC50 Inhalation Gas	Rat	20000 ppm	10 hours
	LD50 Oral	Rabbit	6300 mg/kg	-
	LD50 Oral	Rat	7060mg/kg	-
Acetone	LC50 Inhalation Vapor	Rat	50100mg/m3	8 hours
	LD50 Oral	Rat	5800 mg/kg	

#### Chronic Toxicological Effects:

Inhalation of vapors in high concentration may cause irritation of the respiratory system. Concentration above the permissible limits In the workplace may cause dizziness, mild intoxication, and headache. Symptoms include headache, dizziness, fatigue, muscular weakness, and drowsiness. In extreme cases loss of consciousness may occur.

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**Irritation / Corrosion:**

Skin: Causes mild irritation. Repeated exposure may cause skin cracking or dryness.  
Eyes: Causes serious eye damage.  
Respiratory: Not classified. No known significant effects or critical hazards.

**Sanitization:**

Skin: Not classified. No known significant effects or critical hazards.  
Eyes: Not classified. No known significant effects or critical hazards.

**Mutagenicity Data:**  
**Carcinogenicity:**

Not classified. No known significant effects or critical hazards.

Chemical Name	Result	Species	Does	Exposure
Ethanol	A3	Group 1	Known	Present
Acetone	Not Listed	Not Listed	Not Listed	Not Listed
ACGIH:	American Conference of Governmental Industrial Hygienists		A3	Animal Carcinogen
IARC	International Agency for Research on Cancer		Group 1	Carcinogenic to Humans
		Group 3		Not classified as carcinogenic to Humans
NTP: (NATIONAL TOXICITY PROGRAM)	Known		Known Carcinogen	
REPRODUCTIVE TOXICITY:	Not determined			
DEVELOPEMENTAL TOXICITY:	Not determined			
REPRODUCTIVE/TERATOLOGY DATA:	Not Determined			
TARGET ORGAN EFFECTS:	Blood, Central Nervous System, Eyes, Liver, Reproductive System, Respiratory System, Skin			

## Section 12. Ecological Information

**12.1 Toxicity:**

Chemical Name	Result	Species	Exposure
Ethanol	Acute EC50<10000 ppm Fresh Water	Algae-Heterosigma akashiwo	96 hours
	Acute LC50 3715000ug/L Fresh Water	Crustacians-Cerioaphnia	48 hours
		Dubia Neonate	
	Acute LC50 5680mg/L Fresh Water	Daphnia magna Neonate	48 hours
	Acute LC50>10000ug/L Fresh Water	<24h	96 hours
		Fish Pimephales Promelas	
Acetone		Juvenile (Fledging, hatching, weanling)	
	Chronic NOEC 0.375ul/L Fresh Water	0.2 to 0.5g	12 weeks
		Fish Gambusia Holbrooki	
		Larvae 3 days	
	Acute EC50 56X10 <sup>5</sup> to 10x10 <sup>6</sup> ug/L Fresh Water	Algae Selenastrum sp.	
		Alga Ulva pertusa	
	Acute EC50 20.565 mg/L Marine Water	Crustaceans Gammarus pulex	
	Acute LC50 6x10 <sup>6</sup> ug/L Fresh Water	Daphnia magna	
	Acute LC50 10000 ug/L Fresh Water	Fish Pimephales Promelas	
	Acute LC50 >100000 ug/L Fresh Water	Juvenile (Fledging, Hatching, Weanling) 0.2 to 0.5g	
		Daphnia Magna Neonate	6-24 hours
	Chronic NOEC 0.1 ml/L Fresh Water		

**12.2 Persistence and Degradability:**

**12.3 Bioaccumulative Potential:**

**12.4 Mobility in Soil:**

**12.5 Results of PBT and vPvB assessment:**

## Section 13. Disposal Considerations

- 13.1 Waste Disposal Method:** Dispose of the water according to local regulations. Waste should not be released into the environment. Waste can be incinerated or disposed of in a landfill when in accordance with local regulations. This material, as supplied, is a hazardous waste according to Federal regulations (40 CFR 261). Dispose of surplus and non-recyclable product via a licensed waste disposal contractor
- Contaminated Packaging:** Dispose of in accordance with local regulations. Empty containers should be taken for local recycling, recovery or waste disposal.
- SPECIAL PRECAUTIONS:** None

## Section 14. Transport Information

**GHS Classification** Flammable Liquids, Category 2 - Danger! Highly flammable liquid and vapor  
Serious Eye Damage/Eye Irritation, Category 2A - Warning! Causes serious eye irritation  
Specific Target Organ Toxicity (single exposure), Category 3 - Warning! May cause respiratory irritation, or may cause drowsiness and dizziness

### 14.1 LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]

**DOT Hazard Class:** 3 FLAMMABLE LIQUID

**UN/NA Number:** UN 1210 **Packing Group:** II

### 14.2 LAND TRANSPORT (Canadian TDG):

**UN Number:** 1210 **Packing Group:** II

**Hazard Class:** 3 – FLAMMABLE LIQUID **TDG Classification:**

### 14.3 LAND TRANSPORT (European ADR/RID):

**ADR/RID Shipping Name:**

**UN Number:** 1210 **Packing Group:** II

**Hazard Class:** 3 – FLAMMABLE LIQUID

### 14.4 AIR TRANSPORT (ICAO/IATA):

**ICAO/IATA Shipping Name:** Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]

## Section 15. Regulatory Information

### 15.1 International Inventories

**TSCA** United States Substances Control Act 8(b) Inventory Complies

**DSL/NDSL** Canadian Domestic Substances List/ Non Domestic Substances List

### 15.2 US Federal Regulations

**SARA 313** Section of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS Number
Acetone	67-64-1

### SARA 311/312 Hazard Categories

**Acute Health Hazard** NO

**Chronic Hazard** NO

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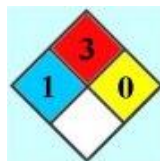
Fire Hazard YES  
Sudden Release of Pressure Hazard NO  
Reactive Hazard NO

**Clean Water Act** This product does not contain any substances regulated as pollutants to the Clean Water Act (40CFR 122)

**CERCLA** Comprehensive Environmental Response Compensation and Liability Act (CERCLA 40CFR 302) or the Superfund Amendments and Reauthorization Act (SARA 40CFR 355)  
Acetone 5000lb Final RQ; 2270 kg Final RQ

**15.3 National Fire Protection Association (USA)**

HEALTH 1  
FLAMMABILITY 3  
REACTIVITY 0



**15.4 Calibration Proposition 65**

This product contains the following proposition 65 chemicals:

Chemical Name	CAS Number	California Proposition 65
Acetone	64-64-1	Not Listed
Ethanol	64-17-5	Developmental

**15.5 U.S. State Right to Know Regulations**

Chemical Name	CA	MA	PA	MN	RI	NJ
Ethanol	X	X	X		X	X
Acetone	X	X	X	X		x

**15.6 International Regulations**

**Tariff Code Harmonized System**

3215.11 Printing Ink Red  
USA ...00.60  
EU ...00.00

**15.7 Canada**

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

**Section 16. Other Information**

**Revision Date:** 8/25/15

**Additional Information About this Product:**

**Company Policy or Disclaimer**

The information and recommendations contained herein are, to the best of BestCode's knowledge and belief, accurate and reliable as of the date issued. Because many factors may affect processing or application/use, BestCode recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the descriptions, designs, data and information furnished by BestCode hereunder are given gratis and BestCode assumes no obligation or liability for the description, designs, data and information given or results obtained. All such being given



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and accepted at your risk.