

Copying and/or downloading of this information for the purpose of properly utilizing Mosstype Corporation product is allowed provided that (1) the information is copied in full with no changes unless prior agreement is obtained from Mosstype Corporation product, & (2) neither the copy nor the original is resold or otherwise distributed with intention of earning profit thereon.

Safety Data Sheet

Page 1 of 11

Proofing Ink Red (7640 0404 28)

Section I Identification

Manufacturer

Mosstype Corporation
150 Franklin Turnpike
Waldwick, NJ 07463
201-444-8000

Emergency Telephone Number

1-800-255-3924 (Chem-Tel)

Technical & SDS Information

201-444-8000

Preparation Date

05/31/2024

Recommended use: Proofing Print Plates

Product Name:

Proofing Ink - Red

Product Identification

7640 0404 28

Section 2 Hazards Identification

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (oral) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
SKIN SENSITIZATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) Category 2
Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 8.6%

GHS Label elements**Hazard pictograms**

Signal Word : Danger
Hazard statements : Combustible liquid.
Harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention:** Wear protective gloves, protective clothing and eye or face protection. Keep away from flames and hot surfaces. No smoking. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
- Response:** IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Storage:** Store in a well-ventilated place. Keep cool.
- Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified :**

Section 3 Composition/ Information on Ingredients

Substance/mixture: Mixture

Ingredient name	%	CAS Number
2,2'-oxybisethanol	≥25 -≤ 50	111-46-6
2,2'-oxybisethanol	≥ 10-≤ 25	111-46-6
2-aminoethanol	<5	141-43-5

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**Description of necessary first aid measures**

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. 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. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in a recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed**Potential acute health effects**

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following: pain, watering, redness.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following: pain or irritation redness, blistering may occur.
- Ingestion** : Adverse symptoms may include the following: stomach pains.

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

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

Protection of first raiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear appropriate

mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5 **Fire-Fighting Measures**

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Combustible liquid. Runoff to the sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, metal oxides/oxides, sulfur 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product. 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). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignitions source. Use explosion-proof electrical (ventilating, lightning and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse containers.

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

: Storage temperature 5 to 35 deg. C (41 to 95 deg 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. Eliminate all ignition sources. Separate from oxidizing materials. 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. See Section 10 for incompatible materials before handling or use.

Section 8 **Exposure Controls/ Personal Protection**

Control parameters

Occupational exposure limits

Ingredient name

Exposure limits

2,2' - oxybisethanol

OARS WEEL (United States, 4/2022).TWA: 10 mg/m³ 8 hours.

2,2'- oxybisethanol

OARS WEEL (United States, 4/2022).TWA: 10 mg/m³ 8 hours.

2-aminoethanol

ACGIH TLV (United States, 7/2023).STEL: 15 mg/m³ 15 minutes

STEL: 6 ppm 15 minutes

TWA: 7.5 mg/m³ 8 hours

TWA: 3 ppm 8 hours

NIOSH REL (United States, 10/2020).STEL: 15mg/m³ 15 minutes

STEL: 6 ppm 15 minutes

TWA: 8 mg/m³ 10 hours

TWA: 3 ppm 10 hours

OSHA PEL (United States, 5/2018).TWA: 6 mg/m³ 8 hours

TWA: 3 ppm 8 hours

OSHA PEL 1989 (United States, 3/1989).STEL: 15 mg/m³ 15 minutes

STEL: 6 ppm 15 minutes

TWA: 8 mg/m³ 8 hours

TWA: 3 ppm 8 hours

CAL OSHA PEL (United States, 5/2018)STEL: 15mg/m³ 15 minutes

STEL: 6 ppm 15 minutes

TWA: 8 mg/m³ 8 hours

TWA: 3 ppm 8 hours

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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 eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gasses or dusts. If contact is possible, the

following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9**Physical and Chemical Properties****Appearance****Physical state**

: Liquid

Color

: Red

Odor

: Not available

Odor threshold

: Not available

pH

: 8 to 8

Melt point/Freeze point

: Not available

Boiling point

: Not available

Flash point

: Between 61 Deg C (142 deg F) and 93.3 deg C (200 deg F)

Evaporation rate

: Not available

Flammability (solid, gas)

: Not available

Lower & upper explosive (flammable) limits

: Not available

Vapor pressure

: Not available

Vapor density

: Not available

Relative density

: Not available

Solubility

: Not available

Partition coefficient:

: Not available

n-octanol/water**Auto-ignition temperature**

: Not available

Decomposition temperature

: Not available

Viscosity

: Not available

Density

: 10.383 lbs/gal

VOC data

VOC % by weight : 48.75
 VOC % by volume : 52.04
 VOC lbs/gallon : 5.06
 VOC lbs/gal less water : 5.07

Section 10 Reactivity and Stability

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 : Avoid all possible sources of ignitions (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological Information

Information on toxicological effects

Acute toxicity

Ingredient name	Result	Species	Dose	Exposure
2,2'-oxybisethanol	LD50 Dermal	Rabbit	11890 mg/kg	-
	LD50 Oral	Rat	12000 mg/kg	-
2,2'-oxybisethanol	LC50 Inhalation dusts & mists	Rat	>4.6 mg/l	4 hours
	LD50 Dermal	Rabbit	11890 mg/kg	-
2-aminoethanol	LD50 Oral	Rat	12000 mg/kg	-
	LD50 Oral	Rat	1720 mg/kg	-

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
2-aminoethanol	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
2,2'-oxybisethanol	Category 2	Inhalation	-
2,2'-oxybisethanol	Category 2	-	-

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

Inhalation : pain, watering, redness
 : No specific data.
Skin contact : Adverse symptoms may include the following:
 pain or irritation, redness, blistering may occur
Ingestion : Adverse symptoms may include the following:
 stomach pains

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

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available

General : May cause damage to organs through prolonged or repeated exposure.
 Once sensitized, a severe allergic reaction may occur when subsequently
 exposed to very low levels.

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

Reproductive toxicity

Numerical measures of toxicity

Acute toxicity estimates

Ingredient name	Oral(mg/kg)	Dermal (mg/kg)	Inhalation (gasses) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dust & mists) (mg/l)
N/A	1083.2	30530.	N/A	N/A	N/A
2,2'-oxybisethanol	500	11890	N/A	N/A	N/A
2,2'-oxybisethanol	500	11890	N/A	N/A	N/A
2-aminoethanol	1720	1100	N/A	N/A	N/A

Section 12 Ecological Information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Not available.

Other adverse effects : No known significant effects or critical hazards.

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14 Transportation Information

	DOT Classification	TDG Classification	IMDG	IATA
UN Number	NA1993	Not applicable	Not applicable	Not applicable
UN proper shipping name	combustible liquid, n.o.s.(Resin acids & Rosin acids, calcium salts)			
Transport hazard Class(es)	combustible liquid			
Packing group	III			
Environmental hazards	No.			
Additional information	Non-bulk packages(less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials. Limited quantity Yes. Packaging instruction Exceptions:150. Non-bulk: 203, Bulk: 241. Quantity limitation Passenger aircraft/rail: 60L. Cargo aircraft: 220 L.			
Special provisions:	148,IB3, T1, TP1			
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

U.S. Federal regulations	: All components of this product are listed as active or exempt from the TSCA chemical inventory.
SARA 311/312 Classification	: FLAMMABLE LIQUIDS -Category 4 ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

	Product Name	CAS Number	%
Form R- Reporting Requirements	ferrate(4-), hexakis(cyano-C)- Et 2- [6-(ethylamino) -3-(ethylimino)-2,7-dimethyl-3H-xanthen-9-yl] benzoate copper(2+) salts	12237-63-7	≤10
Supplier notification	ferrate(4-), hexakis(cyano-C), Et 2-[6-(ethylamino) -3-(ethylimino)-2,7-dimethyl-3H-xanthen-9-yl] benzoate copper(2+) salts	12237-63-7	≤10

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the DS subsequently redistributed.

California Prop. 65

This product can expose you to Titanium Dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

International Regulations

Canadian lists

Canadian NPRI	: The following components are listed: copper (and its compounds)
CEPA Toxic Substances	: None of the components are listed.
Canada Inventory	: At least one component is not listed.

Section 16

Other Information

Every reasonable effort has been made to ensure that the safety information on this sheet is accurate. But because Mosstype has no control over the conditions under which the product will be used, liability is limited exclusively to replacement or refund of the purchase price of this product. Except as stated herein, there are no expressed or implied warranties of merchantability or fitness for a particular purpose. Mosstype assumes no liability for injury or incidental or consequential damages arising out of the storage handling, or use of this product. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

Procedure used to derive the classification

<u>Classification</u>	<u>Justification</u>
FLAMMABLE LIQUIDS - Category 4	On basis of test data
ACUTE TOXICITY(oral) - Category 4	Calculation method
SKIN CORROSION/IRRITATION- Category 2	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY(REPEATED EXPOSURE) Category 2	Calculation method

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labeling 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