SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Revision Date 31-Aug-2026 **Version** 3

1. Identification

Product identifier

Product Name Optimum Red 3 oz Tube

Other means of identification

Product Code 27038

Synonyms CAN Item Number 59423

Recommended use of the chemical and restrictions on use

Recommended Use Sealant

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address
ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

May Also Be Distributed by:
ITW Permatex Canada
101-2360 Bristol Circle
Oakville, ON Canada L6H 6M5
Telephone: (800) 924-6994

E-mail address mail@permatex.com

Emergency telephone number

Company Phone Number 866-732-9502

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

24-hour emergency phone number No information available

2. Hazard(s) identification

Classification

Skin sensitization	Category 1

Label elements

Contains Tetra(methylethylketoxime)Silane; DIMETHYLTIN NEODECANOATE



Warning

Hazard statements
May cause an allergic skin reaction.

Precautionary Statements - Prevention
Avoid breathing dust, fume, gas, mist, vapors and spray.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves, protective clothing, eye protection and face protection.
Precautionary Statements - Response
Specific treatment (see supplemental first aid instructions on this label).
Skin
If skin irritation or rash occurs: Get medical advice and attention.
Take off contaminated clothing and wash it before reuse.
IF ON SKIN: Wash with plenty of water and soap.

Precautionary Statements - Disposal
Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

6.9725 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
36.23 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
99.5425 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
99.5425 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
99.5425 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information
Causes mild skin irritation.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms CAN Item Number 59423.

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
IRON OXIDE	1309-37-1	10-30%	-	-
Vinyltrismethylethylketoximesilane	2224-33-1	3-7%	-	-
Tetra(methylethylketoxime)Silane	34206-40-1	0.1-1%	-	-
DIMETHYLTIN NEODECANOATE	68928-76-7	0.1-1%	-	-

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. Prolonged contact may cause redness and irritation.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire In case of fire, use water spray, foam, dry chemical, or CO2.
Large Fire In case of fire, use water spray, foam, dry chemical, or CO2.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous combustion products No information available.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control Parameters
Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
IRON OXIDE 1309-37-1	TWA: 5 mg/m³ respirable particulate matter	TWA: 10 mg/m³ fume TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 10 mg/m³ fume and total dust Iron oxide (vacated) TWA: 5 mg/m³ respirable fraction regulated under Rouge	TWA: 5 mg/m³; Fe dust and fume IDLH: 2500 mg/m³ Fe dust and fume
DIMETHYLTIN NEODECANOATE 68928-76-7	TWA: 0.1 mg/m³ Sn STEL: 0.2 mg/m³ Sn pSk	TWA: 0.1 mg/m³ Sn (vacated) TWA: 0.1 mg/m³ Sn Sdv	TWA: 0.1 mg/m³; except Cyhexatin Sn IDLH: 25 mg/m³ Sn

Chemical name	Alberta	British Columbia	Ontario	Quebec
IRON OXIDE 1309-37-1	TWA: 5 mg/m³; respirable	TWA: 10 mg/m³; total particulate TWA: 3 mg/m³; respirable particulate TWA: 5 mg/m³; dust and fume STEL: 10 mg/m³; fume	TWA: 5 mg/m³; respirable particulate matter	TWAEV: 5 mg/m³; dust and fume
DIMETHYLTIN NEODECANOATE 68928-76-7	TWA: 0.1 mg/m³; STEL: 0.2 mg/m³; pSk	TWA: 0.1 mg/m³; STEL: 0.2 mg/m³; Sk	TWA: 0.1 mg/m³; STEL: 0.2 mg/m³; dSk	-

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
IRON OXIDE	TWA: 5 mg/m³; respirable particulate matter	TWA: 5 mg/m³; respirable fraction	TWA: 5 mg/m³; respirable particulate matter	TWA: 5 mg/m³; respirable particulate matter

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
IRON OXIDE	TWA: 5 mg/m³; dust and fume	TWA: 5 mg/m³; respirable particulate	TWA: 5 mg/m³; dust and fume	TWA: 5 mg/m³; fume TWA: 30 mppcf;

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
	TWA: 10 mg/m³; STEL: 10 mg/m³; dust and fume STEL: 20 mg/m³;	matter	TWA: 10 mg/m³; STEL: 10 mg/m³; dust and fume STEL: 20 mg/m³;	TWA: 10 mg/m³; STEL: 10 mg/m³; fume STEL: 20 mg/m³;

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection Use appropriate respiratory protection. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Thermal hazards No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Paste / Gel Liquid
Appearance	Paste
Color	Red
Odor	Mild
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	
Flash point	No data available	
Evaporation rate	Not applicable	
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	
Vapor density	No data available	
Relative density	1.16	
Water solubility	No Data Available	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity		
Dynamic viscosity	No data available	
Particle characteristics		
Particle Size	No data available	

Particle Size Distribution	No data available

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	< 1%
Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	No information available.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes mild skin irritation.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.

Acute toxicity .

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	13,650.90 mg/kg
ATEmix (dermal)	9,106.80 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	99,999.00 mg/L
ATEmix (inhalation-dust/mist)	99,999.00 mg/L

6.9725 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
36.23 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
99.5425 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
99.5425 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

99.5425 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
IRON OXIDE 1309-37-1	> 10000 mg/kg (Rat)	-	-
Vinyltrismethylethylketoximesilane 2224-33-1	-	> 2009 mg/kg (Rat)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes mild skin irritation.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
IRON OXIDE 1309-37-1	A4 - Not Classifiable as a Human Carcinogen	Group 3 - Unclassifiable as to carcinogenicity in humans	-	-
DIMETHYLTIN NEODECANOATE 68928-76-7	A4 - Not Classifiable as a Human Carcinogen	-	-	-

Legend

IARC (International Agency for Research on Cancer)
Group 3 - Not classifiable as to its carcinogenicity to humans

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

Neurological effects No information available.

12. Ecological information

Ecotoxicity Based on available data, the classification criteria are not met.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
IRON OXIDE 1309-37-1	-	LC50: =100000mg/L (96h, Danio rerio)	-	-

Persistence and degradability No information available.

Bioaccumulative potential

Component Information

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number Waste designations and classifications should be determined by the end user based on the application for which the product was used.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

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

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECI	Not determined
PICCS	Complies
AICS	Complies
NZIoC	Not Determined

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
IRON OXIDE 1309-37-1	X	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards** 2	**Flammability** 0	**Instability** 0	**Special hazards** -
HMIS	**Health hazards** 2	**Flammability** 0	**Physical hazards** 0	**Personal protection** X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend
SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Key literature references and sources for data used to compile the SDS

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. Environmental Protection Agency
U.S. EPA Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
U.S. Hazardous Substance Data Bank (HSDB)
International Uniform Chemical Information Database (IUCLID)
Japan National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
U.S. National Institute for Occupational Safety and Health (NIOSH)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

Revision Date 31-Aug-2026

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.