

Section 1. Identification

Product name : IRWIN Lumber Crayon

Material uses : Permanent Marking Stick

Manufacturer : 8935 NorthPointe Executive Park Dr.
Huntersville, NC 28078
Telephone (704) 987-4555
www.irwin.com

Emergency telephone number (with hours of operation) : CHEMTREC (U.S. and Canada) 1-800-424-9300
CHEMTREC (Outside the U.S.) +1-703-527-0585

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 : SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 22%

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes serious eye irritation.
Causes skin irritation.
May cause respiratory irritation.

Precautionary statements

General : Read label before use. If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Wear eye or face protection. Use only outdoors or in a well-ventilated area. Avoid breathing dust. Wash hands thoroughly after handling.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 2. Hazards identification

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Paraffin waxes and Hydrocarbon waxes	20 - 40	8002-74-2
calcium carbonate	20 - 40	471-34-1
titanium dioxide	10 - 20	13463-67-7
stearic acid	2 - 5	57-11-4
2,6-di-tert-butyl-p-cresol	0.1 - 2	128-37-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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** : 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. Get medical attention.
- Inhalation** : 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. Get medical attention. If necessary, call a poison center or physician. 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** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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-aiders** : 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 an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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 : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
halogenated compounds
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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised 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".

Section 6. Accidental release measures

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** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. 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). Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 : 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. Store locked up. 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

Ingredient name	Exposure limits
Paraffin waxes and Hydrocarbon waxes	ACGIH TLV (United States, 3/2015). TWA: 2 mg/m ³ 8 hours. Form: Fume NIOSH REL (United States, 10/2013). TWA: 2 mg/m ³ 10 hours. Form: Fume OSHA PEL 1989 (United States, 3/1989). TWA: 2 mg/m ³ 8 hours.
calcium carbonate	OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust
titanium dioxide	ACGIH TLV (United States, 3/2015). TWA: 10 mg/m ³ 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m ³ 8 hours. Form: Total dust OSHA PEL (United States, 2/2013). TWA: 15 mg/m ³ 8 hours. Form: Total dust
2,6-di-tert-butyl-p-cresol	OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m ³ 8 hours.

Section 8. Exposure controls/personal protection

NIOSH REL (United States, 10/2013).

TWA: 10 mg/m³ 10 hours.

ACGIH TLV (United States, 3/2015).

TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction and vapor

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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 eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

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 : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid.
Color : Not available.
Odor : Various
Odor threshold : Not available.
pH : Not available.
Melting point : Not available.
Boiling point : Not available.
Flash point : Not available.
Burning time : Not available.
Burning rate : Not available.

Section 9. Physical and chemical properties

Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Upper: 230 to 270%
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.2
Solubility	: Insoluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 270°C (518°F)
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Not available.

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	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
calcium carbonate	LD50 Oral	Rat	6450 mg/kg	-
stearic acid	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	4600 mg/kg	-
2,6-di-tert-butyl-p-cresol	LD50 Oral	Rat	890 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Paraffin waxes and Hydrocarbon waxes	Eyes - Mild irritant	Rabbit	-	50 Percent	-
	Eyes - Mild irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
calcium carbonate	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-

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titanium dioxide	Skin - Mild irritant	Human	-	milligrams 72 hours 300	-
stearic acid	Skin - Mild irritant	Human	-	Micrograms Intermittent 72 hours 75	-
	Skin - Moderate irritant	Rabbit	-	milligrams Intermittent 24 hours 500	-
2,6-di-tert-butyl-p-cresol	Eyes - Moderate irritant	Rabbit	-	milligrams 24 hours 100	-
	Skin - Mild irritant	Human	-	milligrams 48 hours 500	-
	Skin - Moderate irritant	Rabbit	-	milligrams 48 hours 500	-

Sensitization

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
2,6-di-tert-butyl-p-cresol	-	3	-

Reproductive toxicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Paraffin waxes and Hydrocarbon waxes	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

No known significant effects or critical hazards.

Information on the likely routes of exposure : Not available.

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

Short term exposure

Potential immediate effects : Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

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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

Route	ATE value
Oral	38822.4 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
calcium carbonate	Acute LC50 >56000 ppm Fresh water Chronic NOEC 61 mg/g Fresh water	Fish - Gambusia affinis - Adult Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours 28 days
titanium dioxide	Acute LC50 3 mg/l Fresh water Acute LC50 6.5 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate Daphnia - Daphnia pulex - Neonate	48 hours 48 hours
2,6-di-tert-butyl-p-cresol	Acute LC50 >1000000 µg/l Marine water Acute EC50 1440 µg/l Fresh water	Fish - Fundulus heteroclitus Daphnia - Daphnia pulex - Neonate	96 hours 48 hours

Persistence and degradability

No known significant effects or critical hazards.

Bioaccumulative potential











Product/ingredient name	LogP _{ow}	BCF	Potential
titanium dioxide	-	352	low
stearic acid	8.23	238 to 288	low
2,6-di-tert-butyl-p-cresol	5.1	330 to 1800	high

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN3077	UN3077	UN3077	UN3077	UN3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (titanium dioxide, 2, 6-di-tert-butyl-p-cresol). Marine pollutant	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (titanium dioxide, 2,6-di-tert-butyl-p-cresol). Marine pollutant (titanium dioxide, 2,6-di-tert-butyl-p-cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (titanium dioxide, 2, 6-di-tert-butyl-p-cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (titanium dioxide, 2,6-di-tert-butyl-p-cresol). Marine pollutant (titanium dioxide, 2,6-di-tert-butyl-p-cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (titanium dioxide, 2,6-di-tert-butyl-p-cresol)
Transport hazard class(es)	9  	9  	9  	9  	9  
Packing group	III	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes.	Yes.
Additional information	Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

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 : **United States inventory (TSCA 8b):** All components are listed or exempted.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Paraffin waxes and Hydrocarbon waxes	20 - 40	No.	No.	No.	Yes.	No.
calcium carbonate	20 - 40	No.	No.	No.	Yes.	No.
titanium dioxide	10 - 20	No.	No.	No.	Yes.	No.
stearic acid	2 - 5	Yes.	No.	No.	Yes.	No.
2,6-di-tert-butyl-p-cresol	0.1 - 2	No.	No.	No.	Yes.	No.

California Prop. 65

This product does not contain Chemicals known to State of California to cause cancer, birth defects, or reproductive harm.

Canada

WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI : The following components are listed: Copper (and its compounds); 2,6-Di-t-butyl-4-methylphenol

CEPA Toxic substances : None of the components are listed.

Canada inventory : Not determined.

Section 16. Other information

History

Date of issue/Date of revision : 12/22/2015

Date of previous issue : No previous validation

Version : 1

Prepared by : Product Safety.

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
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 UN = United Nations

▣ Indicates information that has changed from previously issued version.

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.