



Tri-Art Oils - Cobalt Drier

MSDS Preparation Date (mm/dd/yyyy): 07/19/2012

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MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier : **Tri-Art Oils - Cobalt Drier**

Product Code(s) : Not available.

Product Use : Used to accelerate drying time of oil paints and mediums.

Chemical Family : Mixture.

Supplier's name and address:
Tri-Art Manufacturing Inc.
4 Harvey Street
Kingston, ON, Canada
K7K 5B9

Information Telephone # : (613) 541-0299 (9:00 AM to 5:PM EST)

24 Hr. Emergency Tel # : Not available.

SECTION 2 - HAZARDS IDENTIFICATION

Classification : WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR).
WHMIS classification:
Class B3 (Combustible Liquids);
Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material);
Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).
Hazardous classification:
Combustible liquid;
Acute Health Hazard;
Chronic Health Hazard.

Emergency Overview : Reddish purple liquid. Hydrocarbon odour.
Warning! Combustible liquid and vapour. May be harmful or fatal if swallowed. Material is an aspiration hazard. Can enter the lungs and cause damage. May be harmful if inhaled. May cause respiratory irritation. May cause headache, nausea, dizziness and other symptoms of central nervous system depression. May cause eye and skin irritation. May cause allergic skin reaction. Possible cancer hazard - contains material which may cause cancer.

POTENTIAL HEALTH EFFECTS:

Signs and symptoms of short-term (acute) exposure

Inhalation : May cause irritation to the nose, throat and upper respiratory tract. Symptoms may include coughing, chest pain and shortness of breath. In extremely high concentrations, may also cause nausea, vomiting, dizziness, drowsiness and other symptoms of central nervous system depression.

Skin : May cause mild to moderate irritation. Product may be absorbed.

Eyes : May cause mild to moderate irritation.

Ingestion : May cause irritation of mouth, throat, and stomach. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Material is an aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

Effects of long-term (chronic) exposure

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Carcinogenic status : Possible cancer hazard. See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards : Possible sensitizer. See TOXICOLOGICAL INFORMATION, Section 11.



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Potential environmental effects

: See ECOLOGICAL INFORMATION, Section 12.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt.%
Naphtha (petroleum), hydrotreated heavy	64742-48-9	60.00 - 100.00
cobalt neodecanoate	27253-31-2	5.00 - 10.00
Cobalt 2-ethylhexanoate	136-52-7	5.00 - 10.00
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	3.00 - 7.00

SECTION 4 - FIRST AID MEASURES

- Inhalation** : Immediately remove person to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Get medical attention.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Wash exposed area thoroughly with soap and water for at least 15 minutes. Get medical attention. Wash contaminated clothing before reuse.
- Eye contact** : Immediately flush eyes with running water for at least 15 minutes. If irritation persists, seek prompt medical attention.
- Ingestion** : Call a physician or poison control centre immediately. Do not induce vomiting. Never give anything by mouth if victim is unconscious. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.
- Notes For Physician** : Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability

- : Combustible liquid and vapor. This material may be ignited by heat, sparks and direct flame. Vapours are heavier than air and collect in confined and low-lying areas. Product may float, and be re-ignited at the water's surface. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.1200)

- : Class II Combustible Liquid.

Oxidizing properties

- : None known.

Explosion data: Sensitivity to mechanical impact / static discharge

- : May be sensitive to static discharge. Not expected to be sensitive to mechanical impact.

Suitable extinguishing media

- : Use water fog or fine spray, foams, carbon dioxide or dry chemical. Do not use water jet, as this may spread burning material.

Special fire-fighting procedures/equipment

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Use water to cool fire-exposed containers.

Hazardous combustion products

- : Carbon oxides; Aldehydes; Metal oxides; Reactive hydrocarbons; Other unidentified organic compounds.

NFPA Rating

- | | | | |
|------------------|------------------------|-----------------------|------------------------------|
| 0 - Minimal | 1 - Slight | 2 - Moderate | 3 - Serious |
| <hr/> | | | |
| <i>Health:</i> 2 | <i>Flammability:</i> 2 | <i>Instability:</i> 0 | <i>Special Hazards:</i> None |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions

- : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Refer to protective measures listed in sections 7 and 8.



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- Environmental precautions** : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.
- Spill response/cleanup** : Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Use only non-sparking tools and equipment in the clean-up process. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.
- Prohibited materials** : Do not use combustible absorbents, such as sawdust.
- Special spill response procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
 US CERCLA Reportable quantity (RQ): None reported.

SECTION 7 - HANDLING AND STORAGE

- Safe Handling procedures** : Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. Wear chemically resistant protective equipment during handling. Use only in well-ventilated areas. Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep away from heat, sparks, and open flames. Ground all equipment during handling. Keep away from incompatibles. Keep containers tightly closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.
- Storage requirements** : Store in a cool, dry, well ventilated area. Keep away from incompatibles. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area. Do not freeze.
- Incompatible materials** : Oxidizing agents; Reducing agents.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

<u>Ingredients</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Naphtha (petroleum), hydrotreated heavy	N/Av	N/Av	N/Av	N/Av
cobalt neodecanoate	0.02 mg/m ³ (as 'Cobalt')	N/Av	0.1 mg/m ³ 0.2 (as 'Cobalt')	N/Av
Cobalt 2-ethylhexanoate	0.02 mg/m ³ (as 'Cobalt')	N/Av	0.1 mg/m ³ 0.2 (as 'Cobalt')	N/Av
Solvent naphtha (petroleum), medium aliphatic	N/Av	N/Av	500 ppm (as petroleum distillates, naphtha)	N/Av

- Ventilation and engineering measures** : Use only in well-ventilated areas. Use local exhaust if mist or spray is generated.
- Respiratory protection** : Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Seek advice from respiratory protection specialists. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02.
- Skin protection** : Wear impervious gloves, such as butyl rubber. Advice should be sought from glove suppliers.



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Eye / face protection : Safety goggles or glasses as appropriate for the job.

Other protective equipment : Wear resistant clothing and boots. An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

: Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid	Appearance	: Reddish purple liquid.
Odour	: Hydrocarbon odour.	Odour threshold	: N/Av
pH	: N/Av		
Boiling point	: 156 - 199°C (312 - 390°F) (Mineral)	Specific gravity	: 1.04 @ 25°C (77°F)
Melting/Freezing point	: N/Av	Coefficient of water/oil distribution	: N/Av
Vapour pressure (mmHg @ 20° C / 68° F)	: 2 (Mineral spirits)	Solubility in water	: slightly soluble
Vapour density (Air = 1)	: > 1	Evaporation rate (n-Butyl acetate = 1)	: < 1
Volatile organic Compounds (VOC's)	: N/Av	Volatiles (% by weight)	: 34%
Flash point	: 48°C (118.4°F)		
Flash point Method	: Pensky Martens Closed Cup	Auto-ignition temperature	: 229°C (444.2°F) (Mineral spirits)
Lower flammable limit (% by vol.)	: 0.7% (Mineral spirits)	Upper flammable limit (% by vol.)	: 8.9% (Mineral spirits)
Flame Projection Length	: N/Av	Flashback observed	: N/Av

Section 10: Stability And Reactivity

Stability and reactivity	: Stable under the recommended storage and handling conditions prescribed.
Hazardous polymerization	: Will not occur.
Conditions to avoid	: Avoid heat and open flame. Keep away from incompatibles. Keep container tightly closed when not in use.
Materials To Avoid And Incompatibility	: Incompatible materials (see Section 7).
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

Target organs	: Eyes, skin, respiratory system and digestive system.
Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : YES <i>Skin & Eyes</i> : YES <i>Ingestion</i> : YES
Toxicological data	: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

Ingredients	LC₅₀(4hr)	LD₅₀	
	inh, rat	(Oral, rat)	(Rabbit, dermal)
Naphtha (petroleum), hydrotreated heavy	8500 mg/m ³	> 6000 mg/kg	> 3160 mg/kg
cobalt neodecanoate	N/Av	N/Av	N/Av
Cobalt 2-ethylhexanoate	> 5000 mg/m ³	1220 mg/kg	> 5000 mg/kg
Solvent naphtha (petroleum), medium aliphatic	> 5500 mg/m ³	> 5000 mg/kg	> 3000 mg/kg



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- Carcinogenic status** : Contains cobalt compounds. Cobalt compounds are classified as possibly carcinogenic to humans by IARC (Group 2B).
- Reproductive effects** : Not expected to have other reproductive effects.
- Teratogenicity** : Not expected to be a teratogen.
- Mutagenicity** : Not expected to be mutagenic in humans.
- Epidemiology** : Not available.
- Sensitization to material** : May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema. No data available to indicate product or components may be respiratory sensitizers. Some cobalt compounds can cause allergic respiratory reactions, however, for Cobalt neodecanoate and Cobalt 2-ethylhexanoate, no firm conclusions can be drawn from these studies and how they relate to occupational exposure.

- Synergistic materials** : Not available.
- Irritancy** : Moderate skin irritant. Moderate eye irritant.
- other important hazards** : CNS depression may result from extreme exposures.
- Conditions aggravated by overexposure** : Pre-existing skin and respiratory disorders.

SECTION 12 - ECOLOGICAL INFORMATION

- Ecotoxicity** : No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. Other ingredients which may be harmful: Naphtha (petroleum), hydrotreated heavy.

The acute toxicity of Naphtha (petroleum), hydrotreated heavy is (IUCLID):
Toxicity to fish - LC50/96h/Fathead minnows = 2200 mg/L
- Mobility** : No data is available on the product itself.
- Persistence** : No data is available on the product itself. Contains: Naphtha (petroleum), hydrotreated heavy. Naphtha (petroleum), hydrotreated heavy is not considered readily biodegradable.

- Bioaccumulation potential** : No data is available on the product itself.
- Other Adverse Environmental effects** : No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

- Handling for Disposal** : Handle waste according to recommendations in Section 7. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not cut, weld, drill or grind on or near this container.
- Methods of Disposal** : Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

- RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14: TRANSPORT INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	UN1263	PAINT RELATED MATERIAL	3	III	
TDG Additional information	This material may be shipped as non-regulated material when in small means of containment (<450 Litres), provided the requirements of TDG section 1.33 are met. Section 1.33 of the Regulations is an exemption permitting the transportation of this product in small means of containment as not regulated.				



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49CFR/DOT	UN1263	Paint related material	3	III	
49CFR/DOT Additional information	This material may be reclassified as a 'Combustible liquid', when shipping by ground within the United States only. Combustible liquids may be shipped as non-hazardous material when shipped in non-bulk containers (450 L / 119 Gallons or less). Refer to 49 CFR Section 173.150.				

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Immediate (Acute) health hazard; Chronic Health Hazard; Fire Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

US State Right to Know Laws:

California Proposition 65: This product contains chemicals known to the State of California to cause cancer and/or reproductive harm. This product contains trace amounts of: benzene; Toluene.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Solvent naphtha (petroleum), medium aliphatic (NJ).

International Information:

Canadian WHMIS Classification: Refer to Section 2 for a WHMIS Classification for this product.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16 - OTHER INFORMATION

HMIS Rating : * - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious
*Health: *2 Flammability: 2 Reactivity: 0*

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
 AIHA: American Industrial Hygiene Association
 CAS: Chemical Abstract Services
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
 CFR: Code of Federal Regulations
 CNS: Central Nervous System
 DOT: Department of Transportation
 EPA: Environmental Protection Agency
 EST: Eastern Standard Time
 HMIS: Hazardous Materials Identification System
 HSDB: Hazardous Substances Data Bank
 IARC: International Agency for Research on Cancer
 Inh: Inhalation
 IUCLID: International Uniform Chemical Information Database



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LC: Lethal Concentration
LD: Lethal Dose
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
WEEL: Workplace Environmental Exposure Level
WHMIS: Workplace Hazardous Materials Identification System

References

- : 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2011.
2. International Agency for Research on Cancer Monographs, searched 2011.
3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2011 (Chempendium, HSDB, RTECs).
4. Material Safety Data Sheet from manufacturer.
5. US EPA Title III List of Lists - October 2006 version.
6. California Proposition 65 List - May 20, 2011 version.

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