

acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

SECTION 1: Identification

1.1 Product identifier

Trade name ZAR® Interior Oil Base Gold Liquid Leaf Paint

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Paint

Wood paint

1.3 Details of the supplier of the safety data sheet

United Gilsonite Laboratories, Inc. 1396 Jefferson Avenue Dunmore PA 18509 United States

Telephone: +1 (570) 344-1202 Telefax: (570) 969-7634 e-mail: sales@ugl.com

Website: http://www.ugl.com/

e-mail (competent person) mark.fortese@ugl.com (Mark Fortese)

1.4 Emergency telephone number

Emergency information service 1-800-424-9300 Chemtrec (NORTH AMERICA)

This number is only available during the following office hours: Mon-Fri 08:00 AM - 05:00 PM

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and cat- egory	Hazard state- ment
A.5	germ cell mutagenicity	1B	Muta. 1B	H340
A.6	carcinogenicity	1A	Carc. 1A	H350
A.10	aspiration hazard	1	Asp. Tox. 1	H304
B.6	flammable liquid	1	Flam. Liq. 1	H224
B.9	pyrophoric liquid	1	Pyr. Liq. 1	H250
B.12	substance and mixture which, in contact with water, emits flammable gas	1	Water-react. 1	H260

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources. Catches fire spontaneously if exposed to air. In contact with water releases flammable gases which may ignite spontaneously.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

United States: en Page: 1 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

GHS02, GHS08



- Hazard statements

H224 Extremely flammable liquid and vapor. H250 Catches fire spontaneously if exposed to air.

H260 In contact with water releases flammable gases, which may ignite spontaneously.

H304 May be fatal if swallowed and enters airways.

H340 May cause genetic defects.

H350 May cause cancer.

- Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P201 Obtain special instructions before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P222 Do not allow contact with air.
P223 Do not allow contact with water.

P231+P232 Handle under inert gas. Protect from moisture.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/eye protection/face protection.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P302+P334 If on skin: Immerse in cool water/wrap with wet bandages.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/

shower.

P308+P313 If exposed or concerned: Get medical advice/attention.

P331 Do NOT induce vomiting.

P335+P334 Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.

P402+P404 Store in a dry place. Store in a closed container. P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P422 Store contents under inert gas.

P501 Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling

Solvent naphtha (petroleum), light arom., 1,2,4-trimethylbenzene, xylene, Cumene

2.3 Other hazards

Hazards not otherwise classified

May be harmful in contact with skin (GHS category 5: acutely toxic - dermal).

Toxic to aquatic life with long lasting effects (GHS category 2: aquatic toxicity - acute and/or chronic).

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

United States: en Page: 2 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Solvent naphtha (petro- leum), light arom.	CAS No 64742-95-6	50 - < 75	Muta. 1B / H340 Carc. 1A / H350 Asp. Tox. 1 / H304 Flam. Liq. 1 / H224	
zinc powder-zinc dust (pyro- phoric)	CAS No 7440-66-6	5 – < 10	Pyr. Sol. 1 / H250 Water-react. 1 / H260	&
1,2,4-trimethylbenzene	CAS No 95-63-6	1-<5	Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	
xylene	CAS No 1330-20-7	1-<5	Acute Tox. 4 / H312 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	
Cumene	CAS No 98-82-8	<1	Carc. 2 / H351 STOT SE 3 / H335 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	⋄ ♦

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first- aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

United States: en Page: 3 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

D-Powder, Carbon dioxide (CO2), Dry sand

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Product may release hydrogen gas. Increased storage temperatures will accelerate this process. Catches fire spontaneously if exposed to air. Water-reactive (in contact with water releases flammable gases).

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

United States: en Page: 4 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Incompatible substances or mixtures

Do not allow contact with air. Do not allow contact with water.

- Evaporative conditions

Keep container tightly closed and in a well-ventilated place.

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Coun- try	Name of agent	CAS No	Identi- fier		TWA [mg/m³]	STEL [ppm]		Ceiling-C [mg/m³]	Source
US	xylene, mixture of isomers	1330-20-7	TLV®	100		150			ACGIH® 2019
US	xylene, mixture of isomers	1330-20-7	PEL	100	435				29 CFR 1910.10 00

United States: en Page: 5 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Occupational exposure limit values (Workplace Exposure Limits)

Coun- try	Name of agent	CAS No	Identi- fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Nota- tion	Source
US	xylene (dimethyl- benzene)	1330-20-7	PEL (CA)	100	435	150	655	300			Cal/ OSHA PEL
US	copper	7440-50-8	PEL		1					Cu, dm	29 CFR 1910.10 00
US	copper	7440-50-8	PEL		0.1					Cu, fume	29 CFR 1910.10 00
US	copper	7440-50-8	REL		1 (10 h)					dm, Cu	NIOSH REL
US	copper	7440-50-8	TLV®		1					dm, Cu	ACGIH® 2019
US	copper	7440-50-8	REL		0.1 (10 h)					fume	NIOSH REL
US	copper	7440-50-8	PEL (CA)		0.1					fume, Cu	Cal/ OSHA PEL
US	copper	7440-50-8	TLV®		0.2					fume, Cu	ACGIH® 2019
US	1,2,4-trimethyl- benzene	95-63-6	REL	25 (10 h)	125 (10 h)						NIOSH REL
US	C9-C15 aromatics	95-63-6	TLV®		100						ACGIH® 2019
US	cumene	98-82-8	REL	50 (10 h)	245 (10 h)						NIOSH REL
US	cumene	98-82-8	TLV®	50							ACGIH® 2019
US	cumene	98-82-8	PEL	50	245						29 CFR 1910.10 00
US	cumene (isopro- pylbenzene)	98-82-8	PEL (CA)	50	245						Cal/ OSHA PEL

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

Cu calculated as Cu (copper) dm as dusts and mists

fume

as fume short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified STEL

TWA

Biological limit values

Country	Name of agent	Parameter	Notation	Identifier	Value	Source
US	xylene, mixture of isomers	methylhippuric acids	crea	BEI®	1.5 g/g	ACGIH® 2019

Notation

creatinine crea

United States: en Page: 6 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
zinc powder-zinc dust (pyrophoric)	7440-66-6	DNEL	5 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
zinc powder-zinc dust (pyrophoric)	7440-66-6	DNEL	83 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects
1,2,4-trimethylbenzene	95-63-6	DNEL	100 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
1,2,4-trimethylbenzene	95-63-6	DNEL	100 mg/m ³	human, inhalatory	worker (industry)	acute - systemic ef- fects
1,2,4-trimethylbenzene	95-63-6	DNEL	100 mg/m ³	human, inhalatory	worker (industry)	chronic - local ef- fects
1,2,4-trimethylbenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	acute - local effects
1,2,4-trimethylbenzene	95-63-6	DNEL	16,171 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
xylene	1330-20-7	DNEL	221 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
xylene	1330-20-7	DNEL	442 mg/m³	human, inhalatory	worker (industry)	acute - systemic ef- fects
xylene	1330-20-7	DNEL	221 mg/m ³	human, inhalatory	worker (industry)	chronic - local ef- fects
xylene	1330-20-7	DNEL	442 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
xylene	1330-20-7	DNEL	212 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Cumene	98-82-8	DNEL	100 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Cumene	98-82-8	DNEL	250 mg/m³	human, inhalatory	worker (industry)	acute - local effects
Cumene	98-82-8	DNEL	15.4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
zinc powder-zinc dust (pyrophoric)	7440-66-6	PNEC	20.6 ^{µg} / _l	aquatic organisms	freshwater	short-term (single instance)
zinc powder-zinc dust (pyrophoric)	7440-66-6	PNEC	6.1 ^{µg} / _l	aquatic organisms	marine water	short-term (single instance)
zinc powder-zinc dust (pyrophoric)	7440-66-6	PNEC	100 ^{µg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
zinc powder-zinc dust (pyrophoric)	7440-66-6	PNEC	235.6 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
zinc powder-zinc dust (pyrophoric)	7440-66-6	PNEC	121 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
zinc powder-zinc dust (pyrophoric)	7440-66-6	PNEC	106.8 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	0.12 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)

United States: en Page: 7 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
1,2,4-trimethylbenzene	95-63-6	PNEC	0.12 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	2.41 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	13.56 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	13.56 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	2.34 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)
xylene	1330-20-7	PNEC	0.327 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
xylene	1330-20-7	PNEC	0.327 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
xylene	1330-20-7	PNEC	6.58 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
xylene	1330-20-7	PNEC	12.46 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
xylene	1330-20-7	PNEC	12.46 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
xylene	1330-20-7	PNEC	2.31 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)
Cumene	98-82-8	PNEC	0.035 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
Cumene	98-82-8	PNEC	0.004 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
Cumene	98-82-8	PNEC	200 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Cumene	98-82-8	PNEC	3.22 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
Cumene	98-82-8	PNEC	0.322 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
Cumene	98-82-8	PNEC	0.624 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

United States: en Page: 8 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	various
Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	≥-20 °C at 101.3 kPa
Flash point	<-40 °C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid) mixture which, in contact with water, emits flammable gases (in accordance with GHS criteria)

Explosive limits

- Lower explosion limit (LEL)	1.1 vol%
- Upper explosion limit (UEL)	7.6 vol%

United States: en Page: 9 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Vapor pressure	≤240 kPa at 37.8 °C
Density	not determined
Vapor density	this information is not available
Relative density	information on this property is not available
Solubility(ies)	not determined

Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	≥280 °C (auto-ignition temperature (liquids and gases))
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

9.2 Other information

Solvent content	56.23 %
Solid content	43.78 %
Temperature class (USA, acc. to NEC 500)	T2B (maximum permissible surface temperature on the equipment: 260°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition. Pyrophoric property. Water reactivity.

If heated:

Risk of ignition

If exposed to air:

Risk of ignition.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Catches fire spontaneously if exposed to air. Material reacts vigorously with water emitting flammable gases.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

United States: en Page: 10 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

10.5 Incompatible materials

Water, Air, Oxidizers

Release of flammable materials with:

Water, Air

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful in contact with skin.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
1,2,4-trimethylbenzene	95-63-6	inhalation: vapor	11 ^{mg} / _l /4h
xylene	1330-20-7	dermal	1,100 ^{mg} / _{kg}
xylene	1330-20-7	inhalation: vapor	11 ^{mg} / _l /4h

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Name of substance	CAS No	Classification	Number
Cumene	98-82-8	2B	
xylene	1330-20-7	3	

Legend

2B Possibly carcinogenic to humans

Not classifiable as to carcinogenicity in humans

United States: en Page: 11 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

National Toxicology Program (United States): Report on Carcinogens

Name of substance	CAS No	Classification	Number
Cumene	98-82-8	Reasonably anticip- ated to be a human carcinogen	13th Report on Carcinogens

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Solvent naphtha (petro- leum), light arom.	64742-95-6	LL50	8.2 ^{mg} / _l	fish	96 h
Solvent naphtha (petro- leum), light arom.	64742-95-6	EL50	4.5 ^{mg} / _l	aquatic invertebrates	48 h
zinc powder-zinc dust (pyrophoric)	7440-66-6	LC50	315 ^{µg} / _l	fish	96 h
zinc powder-zinc dust (pyrophoric)	7440-66-6	EC50	860 ^{µg} / _l	aquatic invertebrates	48 h
1,2,4-trimethylbenzene	95-63-6	LC50	7.72 ^{mg} / _l	fish	96 h
1,2,4-trimethylbenzene	95-63-6	EC50	2.356 ^{mg} / _l	algae	96 h
xylene	1330-20-7	LC50	8.4 ^{mg} / _l	fish	96 h
xylene	1330-20-7	EC50	4.9 ^{mg} / _l	algae	72 h
xylene	1330-20-7	ErC50	4.7 ^{mg} / _l	algae	72 h
Cumene	98-82-8	LC50	4.7 ^{mg} / _l	fish	96 h
Cumene	98-82-8	EC50	2.14 ^{mg} / _l	aquatic invertebrates	48 h
Cumene	98-82-8	ErC50	2.01 ^{mg} / _l	algae	72 h

United States: en Page: 12 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Solvent naphtha (petro- leum), light arom.	64742-95-6	EL50	10 ^{mg} / _l	fish	21 d
Solvent naphtha (petro- leum), light arom.	64742-95-6	EC50	15.41 ^{mg} / _l	microorganisms	40 h
zinc powder-zinc dust (pyrophoric)	7440-66-6	LC50	330 ^{µg} / _l	fish	95 h
zinc powder-zinc dust (pyrophoric)	7440-66-6	EC50	5.2 ^{mg} / _l	microorganisms	3 h
xylene	1330-20-7	EL50	2.9 ^{mg} / _l	aquatic invertebrates	21 d
xylene	1330-20-7	ErC50	4.36 ^{mg} / _l	algae	73 h
xylene	1330-20-7	EC50	2.2 ^{mg} / _l	algae	73 h
Cumene	98-82-8	EC50	1.5 ^{mg} / _l	aquatic invertebrates	21 d
Cumene	98-82-8	LC50	>3 ^{mg} / _I	aquatic invertebrates	21 d

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

United States: en Page: 13 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

not assigned

SECTION 14: Transport information

14.1UN numbernot assigned14.2UN proper shipping namenot assigned14.3Transport hazard class(es)not assigned

14.5 Environmental hazards hazardous to the aquatic environment

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT)

not assigned

14.4 Packing group

International Maritime Dangerous Goods Code (IMDG)

not assigned

International Civil Aviation Organization (ICAO-IATA/DGR)

not assigned

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question National regulations (United States)

Toxic Substance Control Act (TSCA) all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name acc. to inventory	CAS No	Remarks	Effective date
zinc	7440-66-6	fume or dust	1986-12-31
cumene	98-82-8		1986-12-31
1,2,4-trimethylbenzene	95-63-6		1986-12-31
xylene, mixture of isomers	1330-20-7		1986-12-31

United States: en Page: 14 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
zinc powder-zinc dust (pyrophoric)	7440-66-6	[4]	2	1000 (454)
Cumene	98-82-8		3 4	5000 (2270)
xylene	1330-20-7		1 3 4	100 (45,4)

Legend

- "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act
- "2" indicates that the source is section 307(a) of the Clean Water Act
- 3 "3" indicates that the source is section 112 of the Clean Air Act
 "4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA)
- No reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers (0.004 inches). [4]

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
zinc powder-zinc dust (pyrophoric)	7440-66-6		F3 R1
Cumene	98-82-8		F3 R1
1,2,4-trimethylbenzene	95-63-6		F2
xylene	1330-20-7		F3

Legend

Flammable - Second Degree F3 Flammable - Third Degree Reactive - First Degree

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and **Toxic Enforcement Act of 1987**

Proposition 65 List of chemicals

Name acc. to inventory	CAS No	Remarks	Type of the toxicity
cumene	98-82-8		cancer

VOC content

Regulated Volatile Organic Compounds (VOC-EPA): Regulated Volatile Organic Compounds (VOC-Cal ARB):

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

United States: en Page: 15 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	0	no significant risk to health
Flammability	4	material that rapidly or completely vaporizes at atmospheric pressure and normal ambient temperature or that is readily dispersed in air and burn readily
Physical hazard	2	materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	4	material that rapidly or completely vaporizes at atmospheric pressure and normal ambient temperature or that is readily dispersed in air and burn readily
Health	0	material that, under emergency conditions, would offer no hazard beyond that of or- dinary combustible material
Instability	2	material that readily undergos violent chemical change at elevated temperatures and pressures
Special hazard	₩	material that can form potentially explosive mixtures with water

National inventories

Country	Inventory	Status
US	TSCA	all ingredients are listed

Legend

TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH® 2019	From ACGIH®, 2019 TLVs® and BEIs® Book. Copyright 2019. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
Cal ARB	California Air Resources Board

United States: en Page: 16 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Abbr.	Descriptions of used abbreviations
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
Muta.	Germ cell mutagenicity
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Pyr. Sol.	Pyrophoric solid
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit

United States: en Page: 17 / 18



acc. to 29 CFR 1910.1200 App D

ZAR® Interior Oil Base Gold Liquid Leaf Paint

Version number: REV 1.0 Date of compilation: 2020-01-17

Abbr.	Descriptions of used abbreviations
STOT SE	Specific target organ toxicity - single exposure
TLV®	Threshold Limit Values
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
Water-react.	Material which, in contact with water, emits flammable gases

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H224	Extremely flammable liquid and vapor.
H226	Flammable liquid and vapor.
H250	Catches fire spontaneously if exposed to air.
H260	In contact with water releases flammable gases, which may ignite spontaneously.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

End of safety data sheet

United States: en Page: 18 / 18