

2090 – Thermoplastic Primer

1. PRODUCT AND COMPANY INFORMATION

Trade name	Thermoplastic Primer
Product codes	ZB2090, B2090, 2090, Thermoplastic Primer
Chemical family	Resin solution
Intended use	Traffic marking

Company	SWARCO Colorado Paint Company 4747 Holly Street Denver, CO 80216; U. S. A.
Telephone	+1 303-388-9265
Web site	www.swarco.com/americas
Emergency (Chemtrec; 24 h)	1-800-424-9300 (U. S. A. and Canada)

2. HAZARD IDENTIFICATION

Emergency Overview

OSHA Hazards

Flammable Liquid, Target Organ Effect, Irritant.

Target Organs

Liver, Kidney.

GHS Classification

Flammable liquids (Category 2)

Skin irritation (Category 3)

Eye irritation (Category 2A)

Specific target organ toxicity - single exposure (Category 3)

GHS Label elements, including precautionary statements



Pictograms:

Signal word: Danger

Hazard statements

H225 Highly flammable liquid and vapour.

H316 Causes mild skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements

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

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS and NFPA Classification:

	HMIS	NFPA Hazard
Health	2*	2
Flammability	3	3
Reactivity	—	0
Physical hazard	0	—

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Vapours may cause drowsiness and dizziness.

Skin: Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

2090 – Thermoplastic Primer**3. COMPOSITION**

Name	CAS	EINECS	Index	Concentration	Notes
Acrylic polymer	Proprietary	n/a	n/a	20-50%	Not classified as hazardous
Acetone	67-64-1	200-662-2	606-001-00-8	30-90%	Highly flammable
Aliphatic ester	Proprietary	n/a	n/a	1-5%	Not classified as hazardous

4. FIRST AID MEASURES**General advice**

Consult a physician. Show this Material Safety Data Sheet to the attending doctor.

If inhaled

Move person to fresh air. If not breathing, give artificial respiration. Obtain proper medical attention.

If on skin

Wash off with soap and water. Consult a physician if needed.

In case of an eye contact

Rinse thoroughly with plenty of water for at least 15 minutes. Seek medical attention.

If swallowed

Do not induce vomiting. Rinse mouth with water. Seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

5. FIRE FIGHTING MEASURES**Suitable extinguishing media**

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide.

For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for fire fighters

Wear self-contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions: Carbon oxides.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate unnecessary personnel to safe areas. Beware of vapors accumulation to form explosive concentrations.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with electrically protected equipment and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Beware of vapours accumulating in low areas to form explosive concentrations. Highly flammable - keep away from sources of ignition – NO SMOKING.

Take measures to prevent the build up of electrostatic charge. Use proper grounding protocols.

Conditions for safe storage

Keep container tightly closed in a dry, cool, and well-ventilated place, away from sources of heat, fire, or sparks.

Recommended storage temperature: below 30 °C.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational exposure limits for the product as delivered have not been established.

Information below is provided for individual ingredients, where available. No occupational exposure limits have been established for other ingredients, which does not imply that they might not be harmful or toxic. Unknown hazards may exist and/or the materials may have not been fully tested. The user is required to follow all of the good industrial hygiene practices

2090 – Thermoplastic Primer**Occupational exposure limits**

Acetone (CAS 67-64-1):

Registry of Toxic Effects (RTECS) Identification Number: AL3150000

OSHA Permissible Exposure Limit (PEL) for General Industry: 29 CFR 1910.1000 Table Z-1, for Construction Industry: 29 CFR 1926.55 Appendix A, and for Maritime: 29 CFR 1915.1000 Table Z-Shipyards: 1000 ppm, 2400 mg/m³ TWA;American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV): 500 ppm, 1187 mg/m³ TWA; STEL: 750 ppm, 1780 mg/m³.National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit (REL): 250 ppm (590 mg/m³) TWA. NIOSH Immediately Dangerous To Life or Health Concentration (IDLH): 2,500 ppm (5,900 mg/m³).

Potential symptoms: Irritation of eyes, nose, throat; sore throat, cough; headache, dizziness, drowsiness, confusion, CNS depression, unconsciousness; eye redness, pain, blurred vision, dermatitis. Ingestion acute symptoms: Nausea, vomiting.

Health Effects: Irritation-Eye, nose, throat, skin – mild (HE16); Nervous system disturbances – narcosis (HE8).

Affected organs: Eyes, skin, respiratory system, CNS.

Ventilation

Use only where appropriate ventilation is available. Prevent static discharge. Keep away from any sources of flame or sparks. This product is designed for outdoor use.

Personal protective equipment**Respiratory protection**

When used as designed, outdoors in a well-ventilated area, exceeding of the exposure limits is unlikely unless caused by misuse. When the occupational limits are exceeded, wear a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls.

Hand protection

Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable regulations and good work hygiene practices. The selected protective gloves have to satisfy the specifications of the standard EN 374.

Eye protection

Safety glasses with side shields are required. Face shield is recommended. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection

Wear impervious, flame retardant antistatic protective clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash your hands thoroughly. Never intentionally inhale the contents. Use only for the intended purpose.

9. PHYSICAL PROPERTIES

Physical state	Liquid
Color	Clear
Odor	Characteristic of acetone
Boiling point	56 °C (solvent data)
Freezing point	Not available
Flash point	-17 °C (solvent data)
Upper explosion limit	13 vol% (solvent data)
Lower explosion limit	2 vol% (solvent data)
Solubility in water	Solvent is miscible with water
Vapor pressure	245 hPa at 20.0 °C (solvent data)
Density	0.8-1.0 g·cm ⁻³ at 25 °C
Viscosity	10-30 seconds at Zahn 2 cup
pH	Not applicable

10. STABILITY AND REACTIVITY DATA**Chemical stability**

Stable under recommended storage conditions.

Possibility of hazardous reactions

Vapours may form explosive mixture with air.

Conditions to avoid

Heat, flames, and sparks.

Materials to avoid

Bases, Oxidizing agents, Reducing agents, Phosphorus Oxychloride.

2090 – Thermoplastic Primer**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions: Carbon oxides.

Other decomposition products: No data available

11. TOXICOLOGICAL DATA

Information for the entire preparation as delivered, a mixture, is not available. Data is provided for individual ingredients, where available.

Acute toxicityOral LD₅₀ (rat): 5800 mg/kg (Behavioural: altered sleep, tremors)Acetone Inhalation LC₅₀ (rat): 50100 mg/m³ – 8 hDermal LD₅₀ (guinea pig): 7426 mg/kg**Prolonged Exposure**

Name	Skin corrosion / irritation	Serious eye damage / irritation	Respiratory or skin sensitization
Acetone	Rabbit: Mild irritation (24 h)	Rabbit: Eye irritation (24 h)	May cause drowsiness or dizziness.

Germ cell mutagenicity

No data available.

Reproductive toxicity

No data available.

Teratogenicity

No data available.

Carcinogenicity

None of the ingredients are classifiable as to carcinogenicity based on IARC, ACGIH, NTP, or EPA guidelines.

Specific target organ toxicity - single exposure (Globally Harmonized System)

Acetone May cause drowsiness or dizziness.

All other ingredients No data available.

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available.

Aspiration hazard

No data available

Potential health effects**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation. Vapours may cause drowsiness and dizziness.**Ingestion:** May be harmful if swallowed.**Skin:** Causes skin irritation.**Eyes:** Causes eye irritation.**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties of this product (a mixture) have not been thoroughly investigated.

Synergistic effects

No data available.

12. ECOLOGICAL DATA**Toxicity (where data is available)**

Acetone	Fish: <i>Oncorhynchus mykiss</i> (rainbow trout): 5,540 mg/dm ³ - 96 h (LC ₅₀) Daphnia and other marine invertebrates: <i>Daphnia magna</i> (water flea): 13,500 mg/dm ³ - 48 h (EC ₅₀)
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Bioaccumulative potential

No data available.

Persistence and degradability

No data available.

Mobility in soil

No data available.

PBT and vPvB assessment

No data available.

Other adverse effects

Data for the entire preparation (a mixture) is not available.

2090 – Thermoplastic Primer**13. DISPOSAL CONSIDERATIONS****Unused or spoiled product**

The user must determine if it meets applicable definitions of a hazardous waste per 40 CFR §261 and other regulations. Dispose according to the environmental laws. Contact a licensed professional waste disposal service to arrange for appropriate removal. Burn the material in a chemical incinerator equipped with an afterburner and scrubber. Do not incinerate closed containers.

Container

Empty packaging may contain product residue and should not be reused. Dispose as of unused product.

14. TRANSPORTATION INFORMATION

Regulated for transportation. Information provided for guidance purpose only, not meant to be inclusive. Packaging must be reviewed for suitability and compliance with the applicable regulations prior to shipment.

DOT (U. S. A.); IMDG; IATA

UN1263; Class 3; Packing Group II; (ERG 128)

Proper shipping name

Paint, n.o.s. (Solventborne paint-related material).

DOT Hazardous Substances and Reportable Quantities

Proper Shipping Name	Marine pollutant	CAS	Amount	Reportable Quantity
Acetone	no	67-64-1	30-90%	2,267 kg (5,000 lb)

15. REGULATORY INFORMATION**TSCA and DSL**

Listed or exempt.

OSHA Hazards

Flammable Liquid, Target Organ Effect, Irritant, Reproductive hazard.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

SARA 302

No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 302.

SARA 302, SARA 304, SARA 313

To the best of our knowledge, no chemicals in this product are subject to the reporting requirements of SARA Title III, Section 302 (40 CFR 355.30), Section 304 (40 CFR 355 and 40 CFR 302), or Section 313 (40 CFR 372.65C).

California Proposition 65

None of the ingredients are known to the State of California to cause cancer or reproductive harm.

Volatile Organic Compounds

0 g/l (calculated per 40 CFR 59.406).

16. ADDITIONAL INFORMATION

This safety data sheet complies with 29 CFR 1910.1200 and with EC 1907/2006, as amended.

Last modified: Tuesday, 20 January 2015 14:04 (Modified formulation, removed toxic materials.)

Disclaimer

All information and data appearing on this Safety Data Sheet are believed to be reliable and accurate to the best of our knowledge at the date of publication. None of the provided information is to be considered a warranty or quality specification or all-inclusive and is given only as guidance. It is the user's responsibility to determine the safety of use, handling, storage, transportation, disposal, and suitability for the intended utilisation of the product. Unless otherwise specified, the data provided herein is valid only for the described material and may be not applicable for the product used in combination with any other materials or processes. Colorado Paint Company / Swarco shall not be liable for any damage resulting from handling, contact, use, or inability to use of this product. No guarantee, expressed or implied, is made by Colorado Paint Company / Swarco and the user assumes all risk and responsibility.