Material Safety Data Sheet

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METAL PREP 90

This product appears in the following stock number(s):

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: **METAL PREP 90**

General use: Metal primer to improve bonding.

Chemical family: Organic Solvent

MANUFACTURER

ITW Devcon 30 Endicott St. Danvers, MA 01923

EMERGENCY INFORMATION

Emergency telephone number (800) 424-9300 (CHEMTREC):

Other Calls: (978) 777-1100

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS CONSTITUENTS

Exposure limits

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
phosphate ester		TRADE SECRET	1-10	n/e	n/e	n/e
Isopropanol	IPA	67630	> 90	400 ppm	400 ppm	400 ppm (Canada)
Cobalt Compound		*	< 1	n/e	n/e	n/e

[&]quot;TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit."n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance, form, odor: red liquid with solvent odor.

WARNING! Flammable.	Eye, skin and respiratory irritant.	May cause central nervous system effects.

Potential health effects

	Primary routes of exposure:	Skin contact	Skin absorption	Eye contact	Inhalation	Ingestion
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Symptoms of acute overexposure:

Skin: Irritating to the skin. May cause allergic reactions upon skin contact (dryness, itching, redness, rash).

Eyes: Moderate irritant (stinging, burning sensation, tearing, redness, swelling).

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National Toxicology Program: No

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Inhalation:

May cause mild irritation to the nose, throat and respiratory tract (coughing, shortness of breath) and may result in central nervous system depression (headache, dizziness, giddiness, nausea).

Ingestion:

Irritating to the gastrointestinal tract, causing abdominal pain and vomitting, sometimes bloody. Ingestion may cause CNS depression, low blood pressure, rapid heart beat and liver damage.

Effects of chronic overexposure:

May cause dermatitis (dryness, itching, redness, rash).

Carcinogenicity -- OSHA regulated: No ACGIH: No

International Agency for Research on Cancer:No

Cancer-suspect constituent(s): NONE

Medical conditions which may be aggravated by exposure:

Existing eye, skin and respiratory disorders.

Other effects:

See Section 11.

4. FIRST AID MEASURES

First aid for eyes:

Flush eye with clean water for at least 15 minutes while gently holding eyelids open. Get immediate medical attention.

First aid for skin:

Immediately remove contaminated clothing and excess contaminant. Flush skin with water. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if symptoms persist.

First aid for ingestion:

Do NOT induce vomiting. Rinse mouth out with water, then sip 2 glasses of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips (if sitting) or to the side (if lying down) to prevent aspiration. Get medical attention.

Note to physician:

If symptoms such as a loss of gag reflux, convulsions or unconsciousness occur before vomiting, gastric lavage with cuffed endotracheal tube should be considered. Metabolism ofisopropanol forms acetone, which may be detected in the urine and expired air. Hemodialysis should be considered in severe acute intoxications.

5. FIRE FIGHTING MEASURES

General fire and explosion characteristics:

Flammable liquid class IB. Vapors can form a flammable / explosive mixture with air.

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Extinguishing media:						
Water	Carbon dioxide	Dry chemical	Foam	Alcohol foam		

Flash Point (°F): 53 Method: TCC

Explosive limits in air (percent) -- Lower: 2 Upper: 12

Special firefighting procedures:

Do not enter confined space without full bunker gear. Firefighters should wear self-contained breathing apparatus and protective clothing. Cool fire exposed containers with water.

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Unusual fire and explosion hazards:

Containers exposed to intense heat from fires could rupture from vapor pressure buildup. Vapors are heavier than air and may travel to an ignition source and flash back. Burning liquid may float on water. Personnel in vicinity and downwind should be evacuated.

Hazardous products of combustion:

Carbon monoxide, carbon dioxide, phosphoric compounds and other unknown organic compounds.

6. ACCIDENTAL RELEASE MEASURES

Spill control:

Avoid personal contact. Evacuate area. Eliminate ignition sources. Ventilate area.

Containment:

Dike, contain and absorb with clay, sand or other suitable material.

Cleanup:

Wear appropriate respirator and protective clothing. For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly. Flush area with water to remove trace residue. Small spills- take up with an absorbent material and place in appropriate containers for disposal.

Special procedures:

Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Collect run-off water and transfer to drums or tanks for later disposal. Notify local health authorities and other appropriate agencies if such contamination occurs. Use bonding/grounding lines and non-sparking tools.

7. HANDLING AND STORAGE

Handling precautions:

Do not breathe vapor or mist. Do not get in eyes, on skin or clothing. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities.

Air dry and then launder contaminated clothing and protective gear before reuse. Close container after each use. Ground/bond container when pouring. Keep away from heat, flame or sparks. Use non-sparking tools.

Storage:

Keep in a cool place, without direct exposure to sunlight. Keep container tightly closed and otherwise in accordance with NFPA and NEC codes. Maintain air space in storage containers. Do not allow to freeze.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Ventilation:

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.

Other engineering controls:

Have emergency eye wash and safety shower present.

Personal protective equipment

Eye and face protection:

Wear safety glasses. Wear coverall chemical splash goggles and face shield when eye and face contact is possible.

Skin protection:

Chemical-resistant gloves (i.e. butyl) and other gear as required to prevent skin contact.

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Respiratory protection:

A NIOSH/MSHA air purifying respirator with an organic vapor cartridge may be permissible as exposure levels dictate. However use a positive pressure air supplied respirator if there is any potential for uncontrolled release, or unknown exposure levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

0.81 180 Specific gravity: Boiling point (°F): Melting point (°F): n/d Vapor density (air = 1): > 1 n/d at 68 °F Vapor pressure (mmHg): Evaporation rate (butyl acetate = 1): n/d 778 > 90 % VOC (grams/liter): Solubility in water: Percent volatile by volume: > 90 pH (5% solution or slurry in water): n/d

Percent solids by weight: < 10

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid:

Avoid heat, open flames, temperatures above 120 degrees F, and ignition sources. Material may attack some forms of rubber, plastics and coatings.

Incompatible materials:

Strong oxidizing agents, peroxides, heavy metals, aluminum metals, NITROFORM, acids.

Hazardous products of decomposition:

Oxides of carbon, phosphoric compounds, acids, and unidentified organic combustion products.

Conditions under which hazardous polymerization may occur:

None known.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): No data available.

Acute dermal effects: LD50 (rabbit): No data available.

Acute inhalation effects: LC50 (rat): No data available. Exposure: hours.

Eye irritation:

No data available.

Subchronic effects:

Exposure may enhance the toxicity of other materials.

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Carcinogenicity, teratogenicity, and mutagenicity:

IPA caused fetoxicity in animals at doses which are maternally toxic.

Other chronic effects:

Kidney: caused kidney effects in male rats which are not considered relevant to humans.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
phosphate ester	n/d	n/d	n/d
Isopropanol	5045 mg/kg	12.8 g/kg	22627 ppm
Cobalt Compound	> 10 g/kg	n/d	n/d

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION

Ecotoxicity:

No data available.

Mobility and persistence:

No data available.

Environmental fate:

No data available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:

If this product becomes a waste, it would be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations. Do not dispose of in a landfill. Incineration is the preferred method of disposal. Empty containers still contain hazardous product residue (vapors and/or liquid). Follow all MSDS and label warnings even after container is emptied. Residual vapors in empty containers may explode on ignition - DO NOT cut, drill, grind, or weld on or near container.

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14. TRANSPORT INFORMATION

Proper shipping name: Isopropanol solution *

Technical name: N/A
Hazard class: 3
UN number: 1219
Packing group: II

Emergency Response Guide no.: 129

IMDG page number: N/A

Other:

*Depending upon the size and type of container, this material may be reclassified as "Consumer Commodity, ORM-D" for shipments within the United States, or "Limited Quantity" elsewhere. Refer to the appropriate regulation.

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste: D001

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
phosphate ester	No	No	0.0	Not required
Isopropanol	No	Yes	100.0	Required
Cobalt Compound	No	Yes	0.0	Not required

^{*}Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard -- Fire hazard --

Canadian regulations

WHMIS hazard class(es): B2; D2B

All components of this product are on the Domestic Substances List.

^{**}Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

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16. OTHER INFORMATION

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The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.