AQUADRA FORSPEC PVT. LTD.

2 - A, Tower A, Viceroy Park,
Kandivli (E), Mumbai–400101
Tel.: 9820393292/9820990182

SAFETY DATA SHEET

PRODUCT NAME HP Primer-120

1. Product and Company Identification

Product Name	**HP Primer-120**
Other means of Identification	**None**
Chemical Family	Epoxy Based High Solids Primer
Recommend Use	Inter coat Primer for Metals and Non-metals
Restrictions	None Known

Manufacturer/Importer/Supplier/Distributor/information
Supplier

Company Name	AQUADRA FORSPEC PVT. LTD.
Address	2-A, Tower A, Viceroy Park, Kandivli (E), Mumbai – 400 101, Maharashtra, INDIA
Email	aquadraforspec@gmail.com
Transportation Emergency	+91-9820393292.

2. Hazards Identification

This product is classified as dangerous as per Directive1999/45/EC

Physical Hazards: Not Classified

Label Elements

Risk &Safety Phrases		
	Xn, R20/22	Harmful by inhalation and if swallowed.
	C,R34	Causes burns.
	R20	Harmful by inhalation
	R36/37/38	Irritating to eyes, respiratory system and skin
	R42/43/Xi	May cause sensitization by inhalation and skin contact
	S23	Do not breathe spray or vapor
	S24	Avoid Contact with skin
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
	S45	In case of accident or if you feel unwell, seek medical advice immediately

POTENTIAL HEALTH EFFECTS

Primary Routes of Entry	Inhalation, Skin contact, Eye contact, Ingestion
Medical Conditions aggravated by Exposure.	Skin disorders, Respiratory disorders, Eye disorders

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation	Vapors are unlikely due to physical properties.
Skin Contact	May cause skin sensitization, an allergic reaction, which becomes evident on repeated exposure to this material.
Eye Contact	May cause slight transient (temporary) eye irritation
Ingestion	No hazard in normal industrial use.

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3. Composition /Information on Ingredients

Compositional details

Components	CAS Number	Weight %	OSHA PEL	ACGIH TLV	MFG TLV	Vapor pressure
Bisphenol A Epichlorhydrin epoxy resin </ =700 MW	25068-38-6	50-95	N/A	N/A	N/A	N/A
Bisphenol F epoxy resin	9003-36-5	20-85	N/A	N/A	N/A	N/A
Oxirane C 12-C14 alkyloxy derivatives	68609-97-02	0 to 10	N/A	N/A	N/A	N/A
Benzyl Alcohol	100-51-6	0-20	N/A	N/A	N/A	N/A
Polyamide Resin	32131-17-2	50-80	N/A	N/A	N/A	N/A
Proprietary Polymer	NA	20-40	N/A	N/A	N/A	N/A
Benzene 1,3-dimethylamine	1477-55-0	2-7	N/A	N/A	N/A	N/A
tris(dimethylaminomethyl) Phenol	90-72-2	3-5	N/A	N/A	N/A	N/A

4. First Aid Measures

1) Eye Contact

Immediately flush eyes with plenty of water, preferably lukewarm water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel.

2) Skin Contact

Wash material off the skin thoroughly with plenty of soap and water. If redness, itching or a sensation develops get medical attention. Wash contaminated clothing and decontaminate footwear before use.

3) Ingestion

Rinse mouth with water. Do not induce vomiting. Give 1 or 2 glasses of water to drink and refer person to medical personnel. Do not give anything by mouth to an unconscious person.

4) Inhalation

Move to an area free from risk of further exposure. Remove contaminated clothing and loosen remaining clothing. Administer oxygen or artificial respiration if needed. Seek medical attention.

5. Fire-Fighting Measures

Suitable Extinguish Media

Dry chemical, foam and carbon dioxide.

Special fire fighting procedures

Wear approved self-contained breathing apparatus in positive pressure mode with full face-piece. Boots gloves (neoprene), goggles and full protective clothing are also required. Excessive pressure or temperature may cause explosive rupture of containers.

Hazardous Combustion

Decomposed products may include CO_2, CO, halogenated compounds, Metal oxides

Unusual fire/explosion hazards

The bi-products produced are carbon dioxide, phenolic and water. Do not reseal contaminated containers as pressure build up may cause rupture of containers.

6. Accidental Release Measures

Personal precautions

Put on protective equipment. Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

Environmental precautions Do not flush into surface water or sanitary sewer system.

Methods for cleaning up Wear skin, eye and respiratory protection during cleaning. Soak the material with absorbent and shovel into a chemical waste container. Cover container, but do not seal & remove from work area.

7. Handling And Storage

Handling /Storage Precautions

Keep in cool, dry ventilated storage area, in closed containers and out of direct sunlight. Store in containers above ground and surrounded by dikes to contain spills or leaks. Keep containers closed when not in use. Check regularly for leakage.
Eating ,Drinking and smoking should be prevented in areas where the material is handled.Keep away from heat ,sparks, open flames or other ignition sources

Contain and collect spillage with noncombustible, absorbent materials like sand, earth, vermiculite and place in containers and dispose off according to local regulations.

8. Exposure Controls /Personal Protection

Occupational exposure limit

US. ACGIH Threshold Limit Values

Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	1 ppm
m-Phenylenebis(methylamine) (CAS 1477-55-0)	Ceiling	0.1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	4 mg/m3 1 ppm
m-Phenylenebis(methylamine (CAS 1477-55-0)	Ceiling	0.1 mg/m3

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Benzyl alcohol (CAS 100-51-6)	TWA	44.2 mg/m3 10 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure Guidelines

US - California OELs: Skin designation

Diethylenetriamine (CAS 111-40-0)	Can be absorbed through the skin.
m-Phenylenebis(methylamine) (CAS 1477-55-0)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Diethylenetriamine (CAS 111-40-0)	Skin designation applies.

US - Tennessee OELs: Skin designation

m-Phenylenebis(methylamine) (CAS 1477-55-0)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Diethylenetriamine (CAS 111-40-0)	Can be absorbed through the skin.
m-Phenylenebis(methylamine) (CAS 1477-55-0)	Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Diethylenetriamine (CAS 111-40-0)	Can be absorbed through the skin.
m-Phenylenebis(methylamine) (CAS 1477-55-0)	Can be absorbed through the skin

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Occupational exposure limit

INGREDIENT NAME	CAS NUMBER	ACGIH-TWA	ACGIH-STEL
Bisphenol A Epoxy Resin	25068-38-6	Not available	Not available

Biological limit values

No biological exposure limits noted for the ingredient(s).

Acute Toxicity

CHEMCIAL NAME	LC50 INHALATION	LD50 ORAL (RAT)	LD50 DERMAL (RABBIT)
Bisphenol A Epoxy Resin	Not available	>2000 mg/kg	>2000 mg/kg

CORROSION / IRRITATION / SENSITIZATION INFORMATION:
SKIN CORROSION/IRRITATION: Skin irritation – Category 2
SERIOUS EYE DAMAGE/IRRITATION: Eye irritation – Category 2
RESPIRATORY OR SKIN SENSITIZATION: Skin sensitization – Category 1

CARCINOGENICITY / MUTAGENICITY / REPRODUCTIVE TOXICOLOGY INFORMATION:
GERM CELL MUTAGENICITY: Information is not available.
CARCINOGENICITY: Information is not available.
REPRODUCTIVE TOXICITY: Information is not available.

SPECIFIC TARGET ORGAN TOXICITY (STOT):
STOT-SINGLE EXPOSURE: Information is not available.
STOT-REPEATED EXPOSRE: Information is not available.

Appropriate Engineering Controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Person Protection measure , **Such as personal protective equipment**

Eye / Face protection

Chemical respirator with organic vapor cartridge and full face piece.

Skin / Hand Protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Skin Protection Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory Protection

Chemical respirator with organic vapor cartridge and full face piece.

Protective Clothing

Where contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety goggles.

Thermal Hazards

Wear appropriate thermal protective clothing, when necessary.

General Hygiene Considerations:

Observe any medical surveillance requirements. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and Chemical Properties

Form Liquid

Color Clear / Straw

Odor Characteristic / Mild Ammonical

PH	Not applicable
Flash Point	> 100 °C
Specific Gravity	0.98 - 1.17 gms/c.c. @27 °C
Vapor Pressure	N/A
Vapor Density	<7
Evaporation Rate	Slower than ether
Solubility in Water	Partially soluble
Further Information	The indicated values do not necessarily correspond to the product specification. Please refer to the technical information sheet for specification data.

10. Stability and Reactivity

Stability	Stable under normal conditions.
Conditions to avoid	Excess heating above 60°C over long periods of time degrades resin. Avoid source of ignition.
Incompatibility (Materials to avoid):	Bases, acids, amines and oxidizing materials
Hazardous Decomposition Or By- Products	Carbon Dioxide, Carbon monoxide, nitrogen oxides, smoke and other toxic fumes.
Hazardous Polymerization	Will not occur under normal conditions.

11. Toxicological Information

Acute Effects

Inhalation: Harmful by Inhalation. Material may be irritant to mucous membranes and respiratory tract.

Skin Contact: The material is irritant and corrosive to skin. It is skin sensitizer. The possibility of allergic contact dermatitis and sensitization should be considered.

Eye Contact: Liquid and vapor can cause irritation on contact and at high concentrations.

Ingestion: Swallowing can result in nausea, vomiting, diarrhea, abdominal pain and chemical burns to the gastrotestinal tract.

Toxicological data for Bisphenol A , F Resin LD50: >5000 mg/kg o-rat

12. Ecological Information

Ecotoxicity	Do not allow to escape into water ways, waste water or soil Material is highly toxic to aquatic organisms on an acute basis under aerobic static laboratory conditions is below detectable limits.
Persistence & degradability	Not readily degradable .
Mobility	Insoluble in water

13.Disposal Considerations

Waste Disposal Method	Dispose off in compliance with all relevant local, state and federal laws and regulations regarding treatment.
Empty Container Precautions	Empty containers must be handled with care due to product residue. Decontaminate container prior to disposal.

14. Transportation Information

ADG/ADR/RID	UN :1760 Dangerous Goods Class : 8, Classification Code: C9 Packing Group : III Hazchem Code: 2R Emergency Response Guide No. 37, Label No: 8
Contains	Isophorone diamine
IMDG	Proper shipping name: UN Corrosive liquid, n.o.s.(contains CYCLOALIPHATIC AMINE) UN : 1760 Dangerous Goods Class : 8 Packing Group : III, Marine Pollutant:P Proper shipping name: UN Corrosive liquid, n.o.s.(contains CYCLOALIPHATIC AMINE)
IATA	UN : 1760 Dangerous Goods Class : 8 Packing Group : III, Label No:8 Proper shipping name: UN Corrosive liquid, n.o.s.(contains CYCLOALIPHATIC AMINE)

15. Regulatory Information

EU Regulations: Classification and labeling have been determined according to EU Directive 67/548/EEC and 1999/45/EC including amendments and take into account the intended product use.

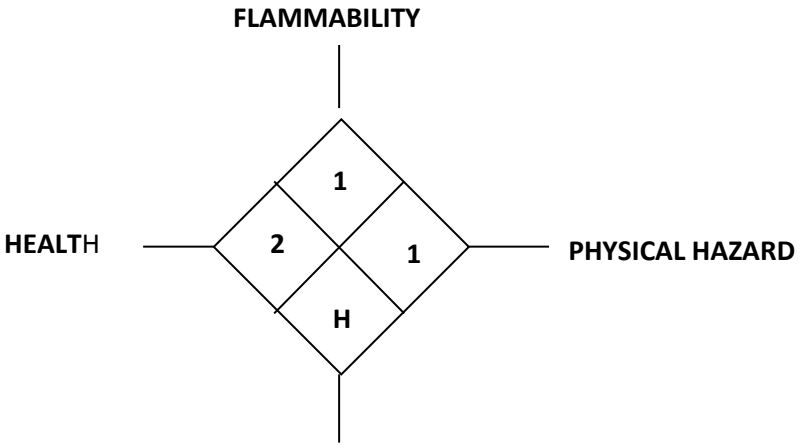
Hazardous Symbol/s	Xi, C, N
Contains	Reaction Product: Bisphenol A, (Mw=<700), Oxirane, mono(C12-C14 alkyloxy) derivs Reaction Product: Bisphenol F, (Mw=<700), Benzyl alcohol Benzene 1,3-dimethylamine tris(dimethylaminomethyl) Phenol
Risk Phase	**R20/22** Harmful by inhalation and swallowed **R34/R36/37/38** Causes burn, Irritating to eyes, respiratory system and skin **R42/43** May cause sensitization by inhalation and skin contact **R50/53** Very toxic to aquatic organism & can have Long term adverse effect on aquatic environment
Safety Phrase	S23- Do not breathe spray / vapour S24- Avoid contact with skin S36/37/39- Wear suitable protective clothing and gloves,eyes/face protection S45- In case of accident or if you feel unwell, seek medical advice immediately
Additional warning	Contains Epoxy constituents
VOC content (w/w)	< 5%

SAFETY DATA SHEET

National Regulations: Refer and Follow country specific Hazard Information and Packaging
Control of Substances hazard to Health
Health and Safety at work
Environmental Protection
Hazardous waste
Carriage of dangerous goods act

Others Code of Practice –Management of health and safety at work, HSE,

16. Other Information



PERSONAL PROTECTION

HMIS Rating		
0=Minimal	1=Slight	2=Moderate
3=Serious	4=Severe	
*=Chronic Health Hazard		

DISCLAIMER: The information contained herein is, to the best of our knowledge and belief, accurate and current as of the date of the MSDS However, since the conditions of handling and use are beyond our control; we make no guarantee of results, and assume the liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Finding determination of solubility of chemical is the sole responsibility of the user. No representations or warranties, either expressed implied of merchantability ,fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal and local laws and regulation.