

SAFETY DATA SHEET

998 v6.0
en/US



1. Identification of the substance/mixture and of the company/undertaking

Product name	LIQUID HARDENER FOR POLYESTER PRIMERS & COATINGS	
Product code	998	Formula date: 2017-09-28
Intended use	Hardener for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 4
Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1

Endpoints which are "not classified", cannot be classified or are not applicable are not shown.

GHS-Labeling

Hazard symbols



Signal word: Danger

Hazard statements

- Combustible liquid.
- Heating may cause a fire.
- Harmful if swallowed or if inhaled
- Causes severe skin burns and eye damage.
- Toxic to aquatic life.

Precautionary statements

- Keep away from open flames/hot surfaces. - No smoking.
- Keep only in original container.
- Avoid breathing dust/ vapours/ spray.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local regulations.
Keep/Store away from clothing/ combustible materials.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Protect from sunlight.
Store at temperatures not exceeding 25°C Keep cool.
Store away from other materials.

Other hazards which do not result in classification

Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:

0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical name	Concentration
131-11-3	Phthalates	43%
1338-23-4	2-butanone, peroxide	26 - 37%
6846-50-0	2,2,4-trimethyl-1,3-pentanediol diisobutyrate	15 - 26%
78-93-3	Methyl ethyl ketone	1 - 4%
7722-84-1	Hydrogen peroxide	0.0 - 1.0%

Any concentration shown as a range is due to batch variation.

Non-regulated ingredients 0.1 - 1.0%

OSHA Hazardous: No

4. First aid measures

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact

Do NOT use solvents or thinners. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of Previn® or water.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion

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If swallowed, seek medical advice immediately and show this safety data sheet (SDS) or product label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary

No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media

Universal aqueous film-forming foam, Carbon dioxide (CO₂), Dry chemical

Extinguishing media which shall not be used for safety reasons

High volume water jet

Hazardous combustion products

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards

Combustible liquid. When heated above the flashpoint, emits vapors which, when mixed with air, will burn if an ignition source is present. Fine mist or sprays could ignite at temperatures below the flashpoint.

Special Protective Equipment and Fire Fighting Procedures

Full protective flameproof clothing should be worn as appropriate. Wear self-contained breathing apparatus for firefighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks

Ventilate area. If heated above the flashpoint, remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions

Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling

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Observe label precautions. Keep away from heat, flame and other sources of ignition. When heated above its flash point, this must be handled as if it were a flammable liquid. Close container after each use. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion

Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from combustible materials, reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps)

OSHA/NFPA Storage Classification: IIIA

8. Exposure controls/personal protection

Engineering controls and work practices

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical name	Source	Time	Type	Value	Note
131-11-3	Phthalates	ACGIH	8 hr	TWA	5 mg/m ³	
		OSHA	8 hr	TWA	5 mg/m ³	
78-93-3	Methyl ethyl ketone	ACGIH	8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
7722-84-1	Hydrogen peroxide	OSHA	8 hr	TWA	1.4 mg/m ³	

Glossary

CEIL	Ceiling exposure limit
STEL	Short term exposure limit
TL	Threshold limits
TLV	Threshold Limit Value
TWA	Time weighted average
TWAE	Time-Weighted Average

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a

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positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection

Neoprene gloves and coveralls are recommended.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls

Do not let product enter drains.

For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid **Colour:** clear

Flash point	169 °F
Lower Explosive Limit	Not applicable.
Upper Explosive Limit	Not applicable.
Evaporation rate	Slower than Ether
Vapor pressure of principal solvent	2.0 hPa
Water solubility	moderate
Vapor density of principal solvent (Air = 1)	0
Approx. Boiling Range	Not applicable.
Approx. Freezing Range	Not applicable.
Gallon Weight (lbs/gal)	9.18
Specific Gravity	1.10
Percent Volatile By Volume	4.65%
Percent Volatile By Weight	4.00%
Percent Solids By Volume	95.35%
Percent Solids By Weight	96.00%
pH (waterborne systems only)	Not applicable
Partition coefficient: n-octanol/water	No data available
Ignition temperature	404 °C DIN 51794
Decomposition temperature	Not applicable.
Viscosity (23 °C)	Not applicable. ISO 2431-1993

10. Stability and reactivity

Stability

Stable

Conditions to avoid

Stable under recommended storage and handling conditions (see section 7).

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Materials to avoid

Store separately from combustible materials, reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps)

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, benzoic acid, benzene, diphenyl, phenylbenzoate; for cyclohexanone peroxides, hexane carbonic acid, lauric carbon acid, cyclohexane.

Hazardous Polymerization

Will not occur.

Sensitivity to Static Discharge

If heated above the flash point, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact

None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity

2-butanone, peroxide	Category 4
Methyl ethyl ketone	Category 5
Hydrogen peroxide	Category 4

Acute dermal toxicity

not hazardous

Acute inhalation toxicity

not hazardous

% of unknown composition: 0 %

Skin corrosion/irritation

2-butanone, peroxide	Category 1B
Methyl ethyl ketone	Category 3
Hydrogen peroxide	Category 1A

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Serious eye damage/eye irritation

2-butanone, peroxide Category 1
Methyl ethyl ketone Category 2A

Respiratory sensitisation

Not classified according to GHS criteria

Skin sensitisation

Not classified according to GHS criteria

Germ cell mutagenicity

Not classified according to GHS criteria

Carcinogenicity

Not classified according to GHS criteria

Toxicity for reproduction

Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

Not classified according to GHS criteria

Target Organ Systemic Toxicant - Repeated exposure

Not classified according to GHS criteria

Aspiration toxicity

Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)

No information available.

Symptoms related to the physical, chemical and toxicological characteristics

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorption, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method

Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

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International transport regulations

IMDG (Sea transport)

UN number: 3105
Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID
(2-butanone, peroxide)
Hazard Class: 5.2
Subsidiary Hazard Class: Not applicable.
Packing group:
Marine Pollutant: no
EmS: F-J,S-R

ICAO/IATA (Air transport)

UN number: 3105
Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID
(2-butanone, peroxide)
Hazard Class: 5.2
Subsidiary Hazard Class: Not applicable.
Packing group:

DOT

UN number: 3105
Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID
(2-butanone, peroxide)
Hazard Class: 5.2
Subsidiary Hazard Class: Not applicable.
Packing group:
Marine Pollutant: no

The transport information is for bulk shipments. Exceptions may apply for smaller containers.

Matters needing attention for transportation

Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status

In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status

All components of the mixture are listed on the DSL.

Photochemical Reactivity

Non-photochemically reactive

Regulatory information

CAS #	Ingredient	EPCRA					CERCLA RQ(lbs)	CAA HAP
		302	TPQ	RQ	311/312	313		
131-11-3	Phthalates	N	NR	NR	NA	Y	5,000	Y
1338-23-4	2-butanone, peroxide	N	NR	NR	NA	N	NA	N
6846-50-0	2,2,4-trimethyl-1,3-pentanediol diisobutyrate	N	NR	NR	NA	N	NR	N
78-93-3	Methyl ethyl ketone	N	NR	NR	A,C,F	N	5,000	N
7722-84-1	Hydrogen peroxide	Y	1,000	1,000	A,R	N	NR	N

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Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard
	A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 0 F: 2 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems :

The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use.

The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

SDS prepared by: Axalta Coating Systems Regulatory Affairs

Report version

Version Changes

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