



Univar USA Inc Material Safety Data Sheet

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MSDS No:

Version No:

Order No:

Univar USA Inc., 17425 NE Union Hill Rd., Redmond WA 98052  
(425) 889 3400

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Emergency Assistance

For emergency assistance involving chemicals call  
Chemtrec - (800) 424-9300

COMPANY IDENTITY: Univar  
PRODUCT IDENTITY: BLEND LP ACID

DATE: 04/02/13  
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### SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System. THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)  
IMPORTANT: Read this SDS before handling & disposing of this product.  
Pass this information on to employees, customers, & users of this product.

#### SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: BLEND LP ACID  
SDS NUMBER: BCS80877  
REVISION DATE: 04/02/2013  
COMPANY IDENTITY: Univar  
COMPANY ADDRESS: 17425 NE Union Hill Road  
COMPANY CITY: Redmond, WA 98052  
COMPANY PHONE: 1-425-889-3400  
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)  
CANUTEC: 1-613-996-6666 (CANADA)

#### SECTION 2. HAZARDS IDENTIFICATION

##### WARNING!



EXPOSURE PREVENTION: AVOID ALL CONTACT!

##### RISK STATEMENTS:

- R36/37/38 Irritating to eyes, respiratory system and skin.
- R35 Causes severe burns.
- R37 Irritating to the respiratory system.

##### SAFETY STATEMENTS:

- S1/2 Keep locked up and out of the reach of children.
- S24/25 Avoid contact with skin and eyes.
- S23 Do not breathe gas, fumes, vapor, or spray.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36 Wear suitable protective clothing.
- S45 In case of accident, or if you feel unwell, seek medical advice immediately. (Show the label where possible).

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Water	7732-18-5	231-791-2	40-90
Nitric Acid	7697-37-2	231-714-2	5-38
Phosphoric Acid	7664-38-2	231-633-2	3-20

Other components: Each of the other components are present in < 1% concentration, 0.1% for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens.

None of the other components contribute significant additional hazards at the concentrations present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, and Canadian Hazardous Materials Identification system Standards (CPR 4).

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

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#### SECTION 4. FIRST AID MEASURES

##### EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

##### SKIN CONTACT:

In case of contact with skin immediately remove contaminated clothing.  
Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

##### INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

##### SWALLOWING:

Rinse mouth. Give plenty of water to drink. Do NOT induce vomiting.  
GET MEDICAL ATTENTION IMMEDIATELY. Do NOT give liquids to an unconscious or convulsing person.

#### SECTION 5. FIRE FIGHTING MEASURES

##### FIRE & EXPLOSION PREVENTIVE MEASURES

Isolate from most metals, and acids.

##### EXTINGUISHING MEDIA

Use dry powder, In case of fire in surroundings, NO foam. .

##### SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.  
Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots).  
Use NIOSH approved positive-pressure self-contained breathing apparatus.

##### UNUSUAL EXPLOSION AND FIRE PROCEDURES

Noncombustible.

Reacts with most metals producing hydrogen which is extremely flammable & may explode. Applying to hot surfaces requires special precautions. Closed containers may explode if exposed to extreme heat.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

##### PERSONAL PROTECTIVE MEASURES:

EVACUATE DANGER AREA! Consult an expert! Keep unprotected personnel away.  
Use complete chemical protective suit with self-contained breathing apparatus.  
Use PPE Level B: Triple-gloves (fire-retardant gloves, nitrile gloves, over latex gloves).  
A fire-retardant suit must be worn over the chemical resistant suit.

##### ENVIRONMENTAL PRECAUTIONS:

Keep from entering storm sewers and ditches which lead to waterways.

##### CONTAINMENT AND CLEAN-UP MEASURES:

Stop spill at source. Dike and contain. Cautiously neutralize spilled liquid with sodium bicarbonate solution only under the responsibility of an expert.  
Collect leaking liquid in sealable containers.  
Absorb remaining liquid in sand or inert absorbent. Remove to safe place.  
Do NOT absorb in sawdust or other combustible absorbents. Decontaminate area thoroughly.

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## SECTION 7. HANDLING AND STORAGE

### HANDLING

Use only with adequate ventilation. Avoid breathing of vapor or spray mist. Do not get in eyes, on skin or clothing. Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. NEVER pour water into this substance. When dissolving or diluting, always add it slowly to the water. To minimize static discharge when transferring, ensure electrical continuity by bonding and grounding all equipment. Use an inlet line diameter of at least 3.5 inches (8.9 centimeters) with a maximum flow rate of 1 meter/second.

### STORAGE

Keep separated from strong oxidants, food & feedstuffs. Keep dry. See: Section 10, <Materials to Avoid>. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage. Reacts with most metals producing hydrogen which is extremely flammable & may explode. Wear full face shield, gloves & full protective clothing when opening or handling. When empty, drain completely, replace bungs securely.

### NONBULK: CONTAINERS:

If this product is transferred into another container, only use portable containers and dispensing equipment (faucet, pump, drip can) approved for corrosive, acidic liquids. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Storage areas should be made of corrosion resistant materials. Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers may contain residual liquid or vapors which are corrosive; therefore, empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.

### BULK CONTAINERS:

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

### TANK CAR SHIPMENTS:

Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level, brakes must be set or wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tanks (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.

### PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Decontaminate equipment before maintenance begins by a triple-rinse with water followed, if necessary, by using sodium bicarbonate and an additional rinse. Collect all rinsates and dispose of according to applicable Federal, State, or local procedures.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Water	7732-18-5	231-791-2	None Known	None Known
Phosphoric Acid	7664-38-2	231-633-2	1 mg/m3	1 mg/m3
Nitric Acid	7697-37-2	231-714-2	2 ppm	2 ppm

  

MATERIAL	CAS#	EINECS#	CEILING	STEL(OSHA/ACGIH)	IDLH
Phosphoric Acid	7664-38-2	231-633-2	None Known	3 mg/m3	1000 mg/m3
Nitric Acid	7697-37-2	231-714-2	None Known	4 ppm	25 ppm

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

**RESPIRATORY EXPOSURE CONTROLS**

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**VENTILATION**

LOCAL EXHAUST: Necessary                      MECHANICAL (GENERAL): Necessary  
SPECIAL: None                                      OTHER: None  
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

**PERSONAL PROTECTIONS:**

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. Use PPE Level B: Triple-gloves (fire-retardant gloves, nitrile gloves, over latex gloves).

**WORK & HYGIENIC PRACTICES:**

Provide readily accessible eye wash stations & safety showers.  
Wash at end of each workshift & before eating, smoking or using the toilet.  
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

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#### SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Liquid, Water-White
ODOR:	Sharp,acid
ODOR THRESHOLD:	Not Available
pH (Neutrality):	1 - 2
MELTING POINT/FREEZING POINT:	-19 C / -2 F
BOILING POINT:	116 C / 241 F
FLASH POINT (TEST METHOD):	Not Applicable
EVAPORATION RATE (n-BUTYL ACETATE=1):	Not Applicable
FLAMMABILITY CLASSIFICATION:	Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg)@20 C	8
VAPOR DENSITY (air=1):	> 1
GRAVITY @ 68/68 F / 20/20 C:	
SPECIFIC GRAVITY (Water=1):	1.159 - 1.250
POUNDS/GALLON:	10.438
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Available
VOC'S (>0.44 Lbs/Sq In) :	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
TOTAL VOC'S (TVOC)*:	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC'S (CVOC)*:	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS):	0.0 Wt% /0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	0.0

\* Using California South Coast Air Quality Management District (SCAQMD) Rule 443.1.

#### SECTION 10. STABILITY & REACTIVITY

##### STABILITY

Stable but Reacts with most metals producing hydrogen which is extremely flammable & may explode.

##### CONDITIONS TO AVOID

Isolate from alkalis.

##### MATERIALS TO AVOID

The substance is a medium strong acid, reacts violently with bases and is corrosive. This substance violently polymerizes under the influence of azo compounds, and epoxides. On combustion forms irritating and toxic gases including phosphorus oxides, The substance is a strong oxidant & reacts violently with combustible & reducing materials. Reacts violently with strong bases, causing fire & explosion hazard. Reacts with alcohols, aldehydes, ketones, phenols, esters, halogenated organics. Reacts with amines, cyanides, sulfides, producing toxic fumes. Attacks many metals, forming flammable/explosive gas (hydrogen) .

##### HAZARDOUS DECOMPOSITION PRODUCTS

Nitrogen Oxide vapors, Phosphorus Pentoxide from heating.

##### HAZARDOUS POLYMERIZATION

Will not occur.

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## SECTION 11. TOXICOLOGICAL INFORMATION

### ACUTE HAZARDS

#### EYE & SKIN CONTACT:

Severe burns to skin, defatting, dermatitis.  
Severe burns to eyes, redness, tearing, blurred vision.  
Liquid can cause severe skin & eye burns. Wash thoroughly after handling.

#### INHALATION:

Severe respiratory tract irritation may occur. Nitrogen Oxide vapors damage lungs.  
Symptoms may be delayed. Do not breathe fumes

#### SWALLOWING: KEEP AWAY FROM FOOD!

Harmful or fatal if swallowed.

### SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

#### CONDITIONS AGGRAVATED

Persons with severe skin, liver or kidney problems should avoid use.

### CHRONIC HAZARDS

#### CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens, mutagens, embryotoxins, or teratogens, or reproductive toxin listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

### MAMMALIAN TOXICITY INFORMATION

MATERIAL	CAS#	EINECS#	LOWEST KNOWN LETHAL DOSE DATA
Phosphoric Acid	7664-38-2	231-791-2	LOWEST KNOWN LD50 (ORAL) 1500.0 mg/kg(Rats)

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### SECTION 12. ECOLOGICAL INFORMATION

#### AQUATIC ANIMAL INFORMATION:

No aquatic environmental information is available on this product.

#### MOBILITY IN SOIL

Mobility of this material has not been determined.

#### DEGRADABILITY

The components of this product are relatively stable in the environment; they may degrade, after time, into other organic and inorganic constituents. The following environmental data are available for the components of this product:

PHOSPHORIC ACID: Food chain concentration potential: Very Low

Chronic Hazard Level: The abundance of phosphates threatens algal blooms in fresh and some salt waters.

BOD: None, Water Solubility: 548 g/ 100 cc (cold).

TLm (mmersion, mosquito fish): 138 ppm/24 - 96 hours/ turbid water.

NITRIC ACID: LC50 (shore crab): 180 mg/L/48 hours (aerated).

LC50 (cockle): 330 - 1000 mg/L/48 hours (aerated)

LC50 (starfish): 100 - 300 mg/L/48 hours (aerated)

#### ACCUMULATION

Bioaccumulation of this product has not been determined.

### SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options.

Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

U.S EPA WASTE NUMBER: D002 (Characteristic, Corrosivity) in aqueous solution only.

### SECTION 14. TRANSPORT INFORMATION

IF > 2631 LB / 1193 KG OF THIS PRODUCT IN 1 CONTAINER, IT EXCEEDS THE "RQ" OF NITRIC ACID.

DOT SHIPPING NAME: UN3264, Corrosive liquid, acidic, inorganic, n.o.s., 8, II (Contains

Nitric Acid, Phosphoric Acid)

DRUM LABEL: (CORROSIVE)

IATA / ICAO: UN3264, Corrosive liquid, acidic, inorganic, n.o.s., 8, II (Contains

Nitric Acid, Phosphoric Acid)

IMO / IMDG: UN3264, Corrosive liquid, acidic, inorganic, n.o.s., 8, II (Contains

Nitric Acid, Phosphoric Acid)

EMERGENCY RESPONSE GUIDEBOOK NUMBER: 154

### SECTION 15. REGULATORY INFORMATION



#### EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated <\*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

#### SARA TITLE III INGREDIENTS

	CAS#	EINECS#	WT%	(REG.SECTION)	RQ(LBS)
*Nitric Acid	7697-37-2	231-714-2	5-38	(302,311,312,313)	1000
Phosphoric Acid	7664-38-2	231-633-2	3-20	(302,311,312)	5000

#### CHEMICAL NAME

	CAS#	EINECS#	SARA 302	SARA 304
*Nitric Acid	7697-37-2	231-714-2	Yes	Yes
Phosphoric Acid	7664-38-2	231-633-2	No	Yes



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**SECTION 15. REGULATORY INFORMATION (CONTINUED)**

> 2631 LB / 1193 KG OF THIS PRODUCT IN 1 CONTAINER EXCEEDS THE "RQ" OF NITRIC ACID.  
Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively.  
Failure to report may result in substantial civil and criminal penalties.  
State & local regulations may be more restrictive than federal regulations.

**STATE REGULATIONS:**

CALIFORNIA PROPOSITION 65: This product contains no chemicals known to the State of California to cause cancer & reproductive toxicity.

**U.S. STATE REGULATED COMPONENTS (HAZARDOUS SUBSTANCE LISTS):**

COMPONENT	AK	CA	FL	IL	KS	MA	MI	MN	MO	NJ	ND
Nitric Acid	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Phosphoric Acid	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

  

COMPONENT	PA	RI	TX	WV	WI
Nitric Acid	Yes	Yes	Yes	Yes	Yes
Phosphoric Acid	Yes	Yes	Yes	Yes	Yes

**INTERNATIONAL REGULATIONS**

The components of this product are listed on the chemical inventories of the following countries:  
Australia (AICS), Canada (DSL, NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

**CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)**

D2B: Irritating to skin / eyes.  
E: Corrosive Material.

**SECTION 16. OTHER INFORMATION**

**HAZARD RATINGS:**

HEALTH (NFPA): 3, HEALTH (HMIS): 3, FLAMMABILITY: 0, REACTIVITY: 1  
(Personal Protection Rating to be supplied by user based on use conditions.)  
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

**EMPLOYEE TRAINING**

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

## Univar USA Inc Material Safety Data Sheet

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For Additional Information contact MSDS Coordinator during business hours, Pacific time: (425) 889-3400

### **Notice**

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Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

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This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process