

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

1. Identification

1.1. Product Identifier

Product Name LIQUID 4145-14H

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Adhesives.
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Responsible Party

Bostik Inc.
 11320 W. Watertown Plank Road
 Wauwatosa, Wisconsin 53226 USA
 Phone: +1 (800) 843-0844 (Domestic Toll Free)
 Phone: +1 (414) 774-2250 (International)
 Fax: +1 (414) 774-8075

E-mail msds@bostik.com

1.4. Emergency telephone number

Telephone: 1-800-227-0332
 (Outside U.S.) 1-703-527-3887

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

2.2. Label Elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes serious eye irritation
 May cause drowsiness or dizziness
 Highly flammable liquid and vapor



Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

Appearance Liquid	Physical State Liquid	Odor Solvent
--------------------------	------------------------------	---------------------

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ ventilating/ lighting/ equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool

Precautionary Statements - Response

Not applicable
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
In case of fire: Use CO₂, dry chemical, or foam to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown acute toxicity

15 % of the mixture consists of ingredient(s) of unknown toxicity

2.3. Other Information

No information available.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixture

3.2 Mixtures

Chemical name	CAS No.	Weight-%
Acetone	67-64-1	30 - 60
Methyl ethyl ketone	78-93-3	10 - 30

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

General advice	If medical advice is needed, have product container or label at hand.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
Skin contact	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. If symptoms persist, call a physician.
Ingestion	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
Self-protection of the first aider	Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Irritating to eyes. Drowsiness. Dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

4.4. Reference to Other Sections

Reference to other sections See Section 12: ECOLOGICAL INFORMATION
Section 7: HANDLING AND STORAGE
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Use CO₂, dry chemical, or foam. Move containers from fire area if you can do it without risk.

Unsuitable extinguishing media

Use water spray or fog; do not use straight streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

Hazardous Combustion Products Carbon oxides.

Explosion Data

Sensitivity to mechanical impact
Sensitivity to static discharge

None.
May be ignited by friction, heat, sparks or flames.

5.3. Advice for firefighters

Special protective actions for fire-fighters

Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment as required. Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing.
Other information	Water spray may reduce vapor; but may not prevent ignition in closed spaces.
For emergency responders	Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Environmental precautions

Environmental precautions	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. See Section 12 for additional Ecological Information.
----------------------------------	--

6.3. Methods and material for containment and cleaning up

Methods for containment	Dike far ahead of spill; use dry sand to contain the flow of material. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
Methods for cleaning up	Use personal protective equipment as required. Dike far ahead of spill for later disposal. Soak up with inert absorbent material. Use clean non-sparking tools to collect absorbed material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

6.4. Reference to other sections

Reference to other sections	See Section 12: ECOLOGICAL INFORMATION Section 7: HANDLING AND STORAGE Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
------------------------------------	---

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling	Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static charges. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Ensure adequate ventilation, especially in confined areas. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. After contact with skin, wash immediately with plenty of water and soap. Wash contaminated clothing before reuse.
--------------------------------	--

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep only in the original container/package in a cool well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).
Incompatible materials	Strong acids and bases.

7.3. Specific end use(s)

Specific Use(s)
Adhesives.

Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

Other information No information available.

7.4. References to Other Sections

Reference to other sections See Section 12: ECOLOGICAL INFORMATION
Section 7: HANDLING AND STORAGE
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Acetone 67-64-1	STEL: 500 ppm TWA: 250 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³	TWA: 1000 ppm TWA: 2400 mg/m ³	TWA: 1000 ppm TWA: 2400 mg/m ³ STEL: 1260 ppm STEL: 3000 mg/m ³
Methyl ethyl ketone 78-93-3	STEL: 300 ppm TWA: 200 ppm	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³	TWA: 200 ppm TWA: 590 mg/m ³	TWA: 200 ppm TWA: 590 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³

Chemical name	Argentina	Brazil	Chile	Venezuela
Acetone 67-64-1	TWA: 500 ppm STEL: 750 ppm	TWA: 780 ppm TWA: 1870 mg/m ³	TWA: 438 ppm TWA: 1040 mg/m ³	STEL: 750 ppm TWA: 500 ppm
Methyl ethyl ketone 78-93-3	TWA: 200 ppm STEL: 300 ppm	TWA: 155 ppm TWA: 460 mg/m ³	TWA: 175 ppm TWA: 516 mg/m ³	STEL: 300 ppm TWA: 200 ppm

8.2. Exposure controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Personal protective equipment [PPE]

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General hygiene considerations Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes or clothing. Avoid breathing (dust, vapor, mist, gas). Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. Regular cleaning of equipment, work area and clothing is recommended.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Liquid
Appearance Liquid

Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

Color Cream
Odor Solvent
Odor Threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No data available	
Boiling point / boiling range	56 °C / 133 °F	
Flash Point	-23 °C / -9 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability or explosive limits	No information available	
Lower flammability or explosive limits	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Relative Density	No information available	
Water Solubility	No information available	
Solubility in Other Solvents		
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	
9.2. Other information		
Softening Point	No information available	
Molecular Weight	No information available	
Solvent content (%)	No information available	
Solid content (%)	30	
Density	.880 g/cm ³	
VOC (volatile organic compound)		248.0 g/L

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Keep away from heat, sparks and flames.

10.5. Incompatible materials

Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

Strong acids and bases.

10.6. Hazardous decomposition products

None known based on information supplied.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Product Information	No data available
Inhalation	May cause drowsiness or dizziness.
Eye contact	Severely irritating to eyes.
Skin contact	No data available.
Ingestion	No data available.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone 67-64-1	= 5800 mg/kg (Rat)	>15800 mg/Kg (rat)	= 79 mg/l(Rat) 4 h
Methyl ethyl ketone 78-93-3	= 2483 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Symptoms	No information available.
Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	Severe eye irritation.
Irritation	No information available.
Corrosivity	No information available.
Sensitization	No information available.
Germ cell mutagenicity	No information available.
Reproductive toxicity	No information available.
Developmental Toxicity	No information available.
Teratogenicity	No information available.
STOT - single exposure	May cause drowsiness or dizziness.
STOT - repeated exposure	No information available.
Chronic Toxicity	Avoid repeated exposure.
Target Organ Effects	Eyes, Skin, Central nervous system, Respiratory system.
Aspiration hazard	No information available.
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by ACGIH, OSHA, IARC or NTP at or above 0.1 wt%.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Acetone 67-64-1		LC50 96 h 4.74 - 6.33 mL/L (Oncorhynchus mykiss)	EC50 = 14500 mg/L 15 min	EC50 48 h 10294 - 17704 mg/L (Daphnia magna Static)

Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

Methyl ethyl ketone 78-93-3	EC50=1972 mg/l (Pseudokirchneriella subcapitata)	LC50: 3130 - 3320mg/L (96h, Pimephales promelas)	EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min	EC50 48 h > 308 mg/L (Daphnia magna)
--------------------------------	--	---	---	--

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal of Wastes

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations

Contaminated packaging

Dispose of in accordance with federal, state and local regulations

Section 14: TRANSPORT INFORMATION

Note:

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments made in non-bulk packages (see regulatory definition)
The information shown here, may not always agree with the bill of lading shipping description for the material

DOT

UN/ID No UN1133
Proper Shipping Name Adhesives
Hazard Class 3
Packing Group II
Reportable Quantity (RQ) (Acetone: RQ (kg)= 2270.00, Methyl ethyl ketone: RQ (kg)= 2270.00)
Special Provisions 149, B52, IB2, T4, TP1, TP8
Description UN1133, Adhesives, 3, II
Emergency Response Guide Number 128

IATA

UN Number UN1133
Proper Shipping Name Adhesives
Transport hazard class(es) 3
Packing Group II
ERG Code 3L
Special Provisions A3
Description UN1133, Adhesives, 3, II

IMDG

UN Number UN1133

Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

UN proper shipping name	Adhesives
Transport hazard class(es)	3
Packing Group	II
EmS-No.	F-E, S-D
Description	UN1133, Adhesives, 3, II, (-23°C c.c.)

Section 15: REGULATORY INFORMATION

Global Inventories

TSCA	Listed
DSL	Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

Listed - The components of this product are either listed or exempt from listing on inventory.

Not Listed - One or more components of this product are not listed on inventory.

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation

SVHC: Substances of Very High Concern for Authorization:

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

No information available

Key Literature References and Sources for Data

No information available

Prepared By Product Safety & Regulatory Affairs

Revision Date 04-Apr-2019

Revision note SDS sections updated, 1, 4, 6, 7, 8, 14, 15, 16.

Safety Data Sheet

LIQUID 4145-14H
Revision Number 2

Revision Date 04-Apr-2019
Supersedes Date: 01-Aug-2017

Training Advice Provide adequate information, instruction, and training for operator

Further information No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet