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Safety Data Sheet

LIQUID 4045
Revision Number 2

Revision Date 02-Jul-2018
Supersedes Date: 02-Oct-2014

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name LIQUID 4045

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

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Appearance No information available **Physical State** Liquid **Odor** No information available

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/sparks/open flames/hot surfaces. — 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
13% 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-%
Methyl ethyl ketone	78-93-3	15 - 40

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Acetone	67-64-1	15 - 40

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

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.

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).

Explosion Data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.

5.3. Advice for firefighters

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Protective equipment and precautions for firefighters
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

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. Keep people away from and upwind of spill/leak. 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/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static charges. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. 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.

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7.3. Specific end use(s)

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
Methyl ethyl ketone 78-93-3	STEL: 300 ppm TWA: 200 ppm	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m³ STEL: 300 ppm STEL: 885 mg/m³	TWA: 200 ppm TWA: 590 mg/m³	TWA: 200 ppm TWA: 590 mg/m³ STEL: 300 ppm STEL: 885 mg/m³
Acetone 67-64-1	STEL: 500 ppm TWA: 250 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m³	TWA: 1000 ppm TWA: 2400 mg/m³	TWA: 1000 ppm TWA: 2400 mg/m³ STEL: 1260 ppm STEL: 3000 mg/m³

Chemical Name	Argentina	Brazil	Chile	Venezuela
Methyl ethyl ketone 78-93-3	TWA: 200 ppm STEL: 300 ppm	TWA: 155 ppm TWA: 460 mg/m³	TWA: 175 ppm TWA: 516 mg/m³	STEL: 300 ppm TWA: 200 ppm
Acetone 67-64-1	TWA: 500 ppm STEL: 750 ppm	TWA: 780 ppm TWA: 1870 mg/m³	TWA: 438 ppm TWA: 1040 mg/m³	STEL: 750 ppm TWA: 500 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 breathing (dust, vapor, mist, gas). Avoid contact with skin, eyes or clothing. 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

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Color	No information available
Odor	No information available
Odor Threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 56 °C / 133 °F	
Flash Point	-17 °C / 1 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	Not applicable for liquids
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 (%)	26.3
Density	0.871 g/ml
VOC	37.2 %

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

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Keep away from heat, sparks and flames.

10.5. Incompatible materials

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 Irritating to eyes. Avoid contact with eyes.
Skin Contact No data available.
Ingestion No data available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl ethyl ketone 78-93-3	= 2483 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h
Acetone 67-64-1	= 5800 mg/kg (Rat)	>15800 mg/Kg (rat)	= 79 mg/l(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 No information available.
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 No information available.
STOT - Repeated Exposure No information available.
Chronic Toxicity Avoid repeated exposure.
Target Organ Effects Central nervous system, Eyes, Respiratory system, Skin.
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

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

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: TRANSPORTATION 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

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IMDG

UN Number	UN1133
Proper Shipping Name	Adhesives
Transport hazard class(es)	3
Packing Group	II
EmS-No	F-E, S-D
Description	UN1133, Adhesives, 3, II, (-17°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.

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59
This product does not contain candidate substances of very high concern at a concentration >=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

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Revision Date	02-Jul-2018
Revision Note	SDS sections updated, 1, 2, 4, 5, 6, 7, 8, 11, 12, 14, 15, 16.
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