



SAFETY DATA SHEET

This safety data sheet complies with the requirements of: 29CFR1910.1200

Issue Date 24-Oct-2018

Revision Date 28-Oct-2019

Version 6

Product identifier

Product Name ADHESION PROMOTER - AEROSOL

Other means of identification

Product Code LUCAS 5015 AEROSOL

UN/ID no. UN 1950

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Adhesion promoter.

Uses advised against For exterior use only. Do not use indoors.

Details of the supplier of the safety data sheet

Manufacturer Address R.M. Lucas Company
3211 South Wood Street
Chicago, Illinois 60608
(773) 523-4300

Emergency telephone number

Emergency Telephone Call CHEMTREC Day or Night:
Within USA and Canada: 1-800 424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 2

Label elements

Emergency Overview

<p>Danger</p> <p>Hazard statements Causes skin irritation May cause genetic defects May cause cancer Suspected of damaging fertility or the unborn child May cause respiratory irritation. May cause drowsiness or dizziness May cause damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways Highly flammable liquid and vapor</p>



Appearance Aerosol spray can

Physical state Liquid

Odor Solvent (Mineral Spirits)

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed when product is not in use.
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical/ventilating/lighting/equipment
Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see first aid information on this label)
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting
In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

- May be harmful in contact with skin
 - Toxic to aquatic life with long lasting effects
- Unknown acute toxicity 35% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Mixture

This product is a mixture.
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical nature

Organic solvents and additives.

Chemical Name	CAS No.	Weight-%	Trade Secret
Hexane	110-54-3	40 - 50%	*
N-Butane	106-97-8	10 - 20%	*
Propane	74-98-6	10 - 20%	*
PCBTF	98-56-6	10 - 20%	*
Hydrocarbon Resin	69430-35-9	10 - 20%	*
Dimethyl carbonate	616-38-6	10 - 20%	*
Styrene/Butadiene Copolymer	66070-58-4	0 - 10%	*

4. FIRST AID MEASURES

Description of first aid measures

General advice	Contains petroleum distillate. Harmful or fatal if swallowed. Vapor harmful. May affect the brain or central nervous system causing dizziness, headache, or nausea. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Eye contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin contact	Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air in case of accidental inhalation of vapors. If continued difficulty with breathing is experienced, get medical attention immediately.
Ingestion	Not an expected route of exposure. If swallowed, do not induce vomiting. Get medical attention immediately.
Self-protection of the first aider	First aider: Pay attention to self-protection!

Most important symptoms and effects, both acute and delayed

Symptoms May cause skin irritation. May cause eye irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO₂). Sand. Use foam or water FOG as a last resort.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Sealed container may rupture/burst when heated or exposed to excessive heat.

Hazardous combustion products Thermal decomposition (burning) may release irritating, corrosive and/or toxic gases, vapors and fumes.

Explosion data

Sensitivity to Mechanical Impact Not sensitive.

Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Personal precautions** No action should be taken involving any personal risk or without suitable training. Use personal protective equipment as required.
- Other Information** Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).
- For emergency responders** Use personal protection recommended in Section 8.

Environmental precautions

- Environmental precautions** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering sewers, drains, or waterways. Local authorities should be advised if significant spillages can not be contained. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

- Methods for containment** Contain spillage with non-combustible absorbent material, e.g. sand, earth, diatomaceous earth, vermiculite.
- Methods for cleaning up** Pick up the absorbed material (described just above) and transfer to properly labeled containers for disposal according to local / national regulations (see Section 13).
- Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

- Advice on safe handling** Use personal protective equipment as required. Remove all sources of ignition. Use only outdoors.

Conditions for safe storage, including any incompatibilities

- Storage Conditions** Keep containers tightly closed in a cool, dry, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition.
- Incompatible materials** Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

- Exposure Guidelines** No ACGIH or OSHA PEL is assigned to this mixture. Exposure limits for the component materials are shown below. This product, as supplied, is not believed to contain any hazardous material that exceeds exposure limits established by OSHA. .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hexane 110-54-3	TWA: 50 ppm S*	TWA: 500 ppm TWA: 1800 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m ³	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m ³
N-Butane 106-97-8	STEL: 1000 ppm explosion hazard	(vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 1600 ppm TWA: 800 ppm

Propane 74-98-6	: See Appendix F: Minimal Oxygen Content, explosion hazard	TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³	TWA: 1900 mg/m ³ IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³
PCBTF 98-56-6	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F (vacated) TWA: 2.5 mg/m ³	IDLH: 250 mg/m ³ F

Appropriate engineering controls

Engineering Controls Use natural cross ventilation, local (mechanical) pick-up, and/or general area mechanical cross ventilation. Ventilation pattern should be designed to prevent accumulation of vapors. Ventilation must be sufficient to maintain vapor concentrations below the TWA limits outlined above.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Wear safety glasses with side shields (or goggles).
- Skin and body protection** Wear protective gloves and protective clothing that is resistant to chemical penetration.
- Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, a NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Solvent (Mineral Spirits) 1-30 PPM. Odor thresholds vary greatly. Do not rely on odor threshold alone to determine potentially hazardous substances.
Appearance	Aerosol spray can	Odor threshold	
Color	Black		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting point/freezing point	Not applicable °C Not applicable °F	Not applicable
Boiling point / boiling range	> 69 °C / °F	Not applicable
Flash point	> -23 °C / > -9 °F	Setaflash
Evaporation rate	8.1	Butly acetate = 1
Flammability (solid, gas)	No information available	Not applicable
Flammability Limit in Air		No data available.
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	140	@ 20 °C
Vapor density	3	Where: Air = 1 at 68 degrees F (20 degrees C)
Specific Gravity	.7	Water = 1g/ml
Water solubility	Insoluble	
Solubility in other solvents	Soluble in aromatic and aliphatic solvents.	
Partition coefficient	No information available	.
Autoignition temperature	225 °C / 437 °F	
Decomposition temperature	No information available	No information available
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	Vapor accumulation could flash or explode if ignited.	

Oxidizing properties None

Other Information

Softening point Not applicable
Molecular weight No information available
VOC Content (%) No data available.
Density 5.8 lb/gal
Bulk density Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Not applicable Not applicable

Chemical stability

Stable.

Possibility of Hazardous Reactions

None under normal use.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Avoid static discharge. Avoid heat, sparks, and open flame.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous Decomposition Products

Combustion may produce carbon monoxide, carbon dioxide, and other asphyxiants.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

Inhalation Avoid breathing vapors or mists.

Eye contact Avoid contact with eyes. Contact with eyes may cause irritation.

Skin contact May cause irritation.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately. Not an expected route of exposure.

Component Information

* The IARC Monograph (Vol. 103, 2013, Bitumen and Bitumen Emissions) defines Asphalt as 'Group 2B, Possible Carcinogen to Humans'. This definition is based on studies of exposure to Asphalt fumes at elevated temperatures. The Monograph states that temperature plays an important role in determining the degree of exposure and also the carcinogenic potential of bitumen emissions. This same Monograph states that Asphalt is non volatile at ambient temperature. There is no data presented in the Monograph to demonstrate that Asphalt at ambient temperature is considered a carcinogen. Since the normal use of this product is at ambient temperature, the Asphalt used in this product is not listed as a carcinogen. No other national or international agency has defined Asphalt as a carcinogen.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hexane	= 25 g/kg (Rat)	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h

110-54-3			
N-Butane 106-97-8	-	-	= 658 g/m ³ (Rat) 4 h
Propane 74-98-6	-	-	> 800000 ppm (Rat) 15 min
PCBTF 98-56-6	= 13 g/kg (Rat)	> 2 mL/kg (Rabbit)	= 33 mg/L (Rat) 4 h
Dimethyl carbonate 616-38-6	= 13 g/kg (Rat)	> 5 g/kg (Rabbit)	= 140 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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

Skin corrosion/irritation Can cause skin irritation.
Serious eye damage/eye irritation Irritating to eyes.
Irritation Irritating to eyes, respiratory system and skin.
Corrosivity Not classified.
Sensitization May cause sensitization of susceptible persons.
Germ cell mutagenicity This product does not contain any ingredients that cause germ cell mutagenicity.
Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Legend

Reproductive toxicity None known for product as a whole.
Developmental Toxicity None known for product as a whole.
Teratogenicity None known.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - No information available

The following values are calculated based on chapter 3.1 of the GHS document For exterior use only. Do not use indoors.

ATEmix (oral) 17,672.80
ATEmix (dermal) 2,680.84
ATEmix (inhalation-vapor) 41,600.00

12. ECOLOGICAL INFORMATION

Ecotoxicity

14.75% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Hexane 110-54-3	-	2.1 - 2.98: 96 h Pimephales promelas mg/L LC50 flow-through	1000: 24 h Daphnia magna mg/L EC50
PCBTF 98-56-6	-	11.5 - 15.8: 48 h Lepomis macrochirus mg/L LC50 static	3.68: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
N-Butane 106-97-8	2.89
Propane 74-98-6	2.3

PCBTF 98-56-6	3.7
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Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable local, regional, national and international laws and regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number D001

Chemical Name	California Hazardous Waste Status
Hexane 110-54-3	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. UN 1950
Proper shipping name Aerosol
Hazard Class 2.1
Packing Group NA

TDG

UN/ID no. NA 1950
Proper shipping name Aerosols
Hazard Class 2.1
Packing Group NA

MEX

UN/ID no. NA 1950
Proper shipping name Aerosol
Hazard Class 2.1

ICAO (air)

UN/ID no. UN 1950
Hazard Class 2.1

IATA

UN/ID no. UN 1950
Hazard Class 9

IMDG

UN/ID no. 1950
Proper shipping name AEROSOLS
Hazard Class 2.1

RID

Not applicable in the United States. Not regulated.

ADR

Not applicable in the United States. Not regulated.

ADN

Not applicable in the United States. Not regulated.

15. REGULATORY INFORMATION

International Inventories

TSCA All of the components of this product are listed on the US TSCA (Toxic Substances Control Act) Inventory or are exempt.
DSL/NDSL All of the components of this product are listed on the DSL.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

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

Chemical Name	SARA 313 - Threshold Values %
Hexane - 110-54-3	1.0

SARA 311/312 Hazard Categories

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

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hexane 110-54-3	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Hexane - 110-54-3	Male Reproductive

U.S. State Right-to-Know Regulations

This product contains the following substances regulated by various State Right-to-Know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hexane 110-54-3	X	X	X
N-Butane 106-97-8	X	X	X
Propane 74-98-6	X	X	X
PCBTF 98-56-6	X	-	-
Dimethyl carbonate	X	X	X

616-38-6			
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U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 2	Flammability 4	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2	Flammability 4	Physical hazards 0	Personal protection -
<i>Chronic Hazard Star Legend</i>		<i>* = Chronic Health Hazard</i>		

Prepared By Prepared by Adam Dunn
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Revision Note
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