

Trade Name: Lancer HR-88 Adhesive

Revision Date: October 20,2015

SECTION 1

Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product Name: Lancer HR-88 Adhesive

Product Codes: HR-88

1.2 Uses/Application

Adhesive for screen printing

1.3 Company (Name, address and phone numbers

Lancer Group International 311 Saulteaux Crescent Winnipeg, Manitoba, Canada R3J 3C7 +1 (204) 889-7422

1.4 24 Hour Emergency Number: +1(613) 996-6666 CANUTEC

SECTION 2 Hazards Identification

- 2.1 Classification of the substance or mixture
 - 2.1.1 Classification according to Regulation (EU) 1272/2008 /GHS:

Aerosol ,Category 3 Skin corrosion/irritation, category 3 Eye irritation, category 2B

2.1.2 Classification according to EU Directives 67/548/EC or 1999/45EC:

Xi irritant - R38 irritating to the skin; R38 irritating to eyes

2.1.3 WHMIS Classification: Class A -aerosol container,

Class B5 - flammable aerosol,

Class D2B – toxic material(skin/eye irritation)

22.2 Label Elements

2.2.1 Labeling according to Regulation (EU) 1272/2008

Pictogram None Signal word Warning

Hazard statement(s)

H 229 pressurized container, may burst if heated

H316 Causes mild skin irritation. H320 Causes eye irritation.

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Precautionary statement(s)

P264 Wash thoroughly after handling

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources, no smoking P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and continue rinsing.

2.3 Other hazards

Emergency Overview

Keep from reach of children. Do not puncture, incinerate, or place aerosol containers in compactors. Containers of this material may be hazardous when emptied since containers retain product residues (vapor, liquid and/or solid). All hazard precautions given must be observed. Do not flame cut, braze or use welding torch. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

Effects of overexposure

Eye contact: Can cause severe irritation, redness, tearing, and blurred vision.

Skin contact: Prolonged or repeated contact can cause moderate irritation defatting, dermatitis. Inhalation: Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness,

weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation.

overexposure may cause damage to the nervous system.

Chronic Hazards: Overexposure to this material or its components has apparently been found to cause the following effects in laboratory animals: kidney damage, eye damage, liver damage, lung damage, nasal damage, nervous system damage, testis damage.

Overexposure to this material or its components has apparently been found to cause the following effects in humans: visual impairment, central nervous system effects.

Primary Routes of Entry: Skin contact, skin absorption, inhalation, eye contact.

Carcinogenicity:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

SECTION 3 Composition/Information on Ingredients

3.1 Substances

Ingredients	Percentage	CAS#	Classification	Classification
_			according to	according to

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			directive 76/548/EEC	directive 1272/2008
Hexane	35	110-54-3	Not classified	Not classified
Acetone	20	67-64-1	Not classified	Not classified
Propane	15	74-98-6	Not classified	Not classified
Liquified Petroleum Gas	15	68476-86-8	Not classified	Not classified
Dimethyl Ether	10	115-10-6	Not classified	Not classified

There are no hazardous ingredients as defined under OSHA Regulations 29 CFR 1910.1200

SECTION 4 First Aid Measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing in an unconscious person.

- 4.1 Description of First Aid Measures
 - 4.1.1 Treatment for Eye Contact: Immediately flush eyes with water for 15 minutes holding the eyelids open. If there is any redness, pain or visual impairment consult an ophthalmologist.
 - 4.1.2 Treatment for Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water. In the event of allergic reaction, seek medical attention
 - 4.1.3 Treatment for Inhalation: In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest. If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.
 - 4.1.4 Treatment for Ingestion: Do not give the patient anything orally. In the event of swallowing, if quantity is small, rinse the mouth with water and consult a doctor. Do not induce vomiting.
- 4.2 Most important symptoms and effects, both acute and delayed: No data available
- 4.3 Indication of any immediate medical attention and special treatment needed: No data available

SECTION 5 Fire-fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: In the event of fire use carbon dioxide, dry chemical agents, foam. Water can be used to cool fire exposed containers, structures and to protect personnel.

Unsuitable extinguishing media: In the event of fire do not use water jet.

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- 5.2 Special hazards arising from the substance or mixture: A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe smoke. In the event of fire, carbon monoxide (CO) and carbon dioxide (CO₂) may be formed.
- 5.3 Advice for firefighters: Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6

Accidental Release Measures

- 6.1 Personal Precautions, protective equipment and emergency procedures
 - 6.1.1 For non-emergency personnel: Avoid inhaling vapors. Avoid any contact with skin and eyes. If large quantity has been spilled, evacuate all personnel and allow intervention by trained operators with safety apparatus
 - 6.1.2 For emergency responders: Only qualified personnel equipped with suitable protective equipment may intervene.
- 6.2 Environmental Precautions: Contain and control the leaks or spills with non-combustible absorbent material such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal. Material should not be drained into the sewers.
- 6.3 Methods and material for containment and cleaning-up:

 Scoop material into a clean, properly labeled container for disposal and absorb remainder with inert material.
- 6.4 Reference to other section: Refer to section 8

SECTION 7 Handling and Storage

- 7.1 Precautions for safe handling:
 - 7.1.1 Protective measures:

Handle and open containers with care. Avoid eye contact. Avoid excessive or repeated skin contact. Keep the containers closed when not in use.

Fire prevention: Handle in well-ventilated areas. Prevent access by unauthorized personnel

7.1.2 Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

Wash hands before taking meal brakes and immediately after handling the product.

Do not eat, drink or smoke when using the product.

Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities:

Storage Condition: Keep the container tightly closed in a cool, dry, well-ventilated area, away from oxidizing and combustible materials.

Packaging material: Store in original container

7.3 Specific end use(s):refer to section 1.2

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SECTION 8 Exposure Controls/Personal Protection

8.1 Control parameters:

Ingredients	%	CAS NUMBER	Exposure Limit					
			ACGIH		OSHA		COMPANY	
			TLV- TWA	TLV- STEL	PEL- TWA	PEL- CEILING	TLV- TWA	SKIN
Hexane	35	110-54-3	50 ppm	NE	500ppm	NE	NE	ND
Acetone	20	67-64-1	500ppm	750PPM	1000ppm	NE	NE	ND
Propane	15	74-98-6	2500ppm	NE	1000ppm	NE	NE	ND
Liquified Petroleum Gas	15	68476-86-8	800ppm	NE	NE	NE	NE	ND
Dimethyl Ether	10	115-10-6	NE	NE	NE	NE	1000ppm	ND

Note:

NE - Not Established

ND - Not Determined

8.2 Exposure controls:

- 8.2.1 Engineering Controls: Local exhaust ventilation may be needed to control air contaminants to their exposure limit. Provide mechanical ventilation for confined spaces.
- 8.2.2 Personal protective equipment:

Skin Protection: Wear gloves resistant to conditions of use. Additional protection may be necessary to prevent skin contact including the use of apron, face shield, boots or full body protection.

Personal Hygiene: Avoid breathing fumes during fusion process. Wash hands before eating.

Wash contaminated clothing before reuse. Normal washing will be sufficient.

Respiratory Protection. Not required with adequate normal ventilation

Eye protection: Wear chemical safety goggles and face shield. Have an eye-wash stations available in the work area.

8.2.3 Environmental Exposure Controls: Do not drain into sanitary sewer system. Comply with applicable community Environmental protection laws.

SECTION 9 Physical and Chemical Properties

9.1 General information on basic physical and chemical properties:

Appearance and Odor : White liquid, mint when wet

Boiling Range, °C : -44 to -159 °F

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Melting/Freezing Point, °C : ND Vapor Pressure (mm Hg @ 20°C) : ND

Vapor Density (Air = 1) : Heavier than air

Specific Gravity (Water = 1) : 0.6956
Solubility in water : Negligible
pH : Not available
Molecular Formula : Mixture

Flammability : Not Available Upper/lower flammability : Not Available Relative density : Not Available Partition coefficient: n-octanol/water : Not Available Auto-ignition temperature : Not Available Decomposition Temperature : Not Available Evaporation rate : Not Available Flammability : Not Available **Explosive limit** : Not available Viscosity: :Not available Explosive properties :Not available Oxidizing properties :Not available

Evaporation rate(BA=1) : Faster than butyl acetate

9.2 Other information:

Percent Volatile by volume: Not applicable; Does not contain any volatile organic compounds.

Hazardous Air pollutant: Does not contain any HAP's in accordance with US Environmental requirement list.

SECTION 10 Stability and Reactivity

- 10.1 Reactivity: Product stable at ambient temperature
- 10.2 Chemical Stability: Under storage at normal ambient temperatures
- 10.3 Possibility of hazardous reactions: Not established
- 10.4 Conditions to avoid: Prolonged exposure to temperatures @ 300° C
- 10.5 Incompatible material: Oxidizing agents
- 10.6 Hazardous Decomposition Products: : Carbon monoxide(CO), carbon dioxide (CO₂)

SECTION 11 Toxicological Information

11.1 Information on toxicological effects

There is no known published data available for this product.

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SECTION 12 Ecological Information

12.1 Toxicity no data available

12.2 Persistence and degradability no data available

12.3 Bioaccumulative potential no data available

12.4 Mobility in soil no data available

12.5 PBT and vPvB assessment no data available

12.6 Other adverse effects no data available

SECTION 13 Disposal Considerations

13.1 Waste Treatment Methods

13.1.1 Product/ Packaging disposal

Product Disposal: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.

Packaging Disposal: Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand. Waste Category based on European Council directive on Waste:

080399 (Appendix A –Consolidated European Waste Catalogue)

Classification: Non-hazardous

13.1.2 Waste Disposal Method: Dispose of in accordance with appropriate U.S.

Federal, State and local regulations, regulations of Canada and regulations of EU member states.

SECTION 14 Transport Information

DOT (US) Shipping Name: Aerosols Hazard Class: 2.1 UN Number: UN1950

Air Transport (IATA):

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Shipping Name: Aerosols Hazard Class: 2.1 UN Number: UN1950

Sea Transport(IMDG Code) Shipping Name: Aerosols Hazard Class: 2.1

UN Number: UN1950

TDG(Canada)

Shipping Name: Aerosols

Hazard Class: 2.1 UN Number: UN1950

SECTION 15 Regulatory Information

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture. The product is not on the list of controlled substances of the following:

EU Regulations

Regulation(EC) No.2037/2000 Regulation(EC) No. 850/2004 Regulation(EC) No. 1999/13

California Proposition 65: Not applicable

Canadian DSL Inventory Status: All components of these products are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA- SARA Hazard Category:

This product has been reviewed according to the EPA Hazard Categories promulgated under sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered under applicable definitions, to meet the following categories: Immediate Health Hazard, Chronic Health Hazard, Fire Hazard, Pressurized Gas Hazard.

SARA Section 313:

This product contains the following substance subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

Chemical Name	CAS Number	Wt/wt% is less than
Hexane	110-54-3	35%

TSCA Inventory

All component of this product are on the US TSCA inventory. Hexane is a mixture of n-hexane and other compounds all falling under the general chemical name light hydrotreated distillate CAS 68410-97-9. The n-hexane content of hexane is 60 to 70 percent. On June 16, 1995 EPA removed acetone from the VOC list and SARA 313 reportable chemicals.

National Pollutant Release Inventory (NPRI): Not applicable

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HAZARDOUS MATERIAL INFORMATION SYSTEM:	Health:	1	
	Flammability:	0	
	Reactivity:	0	
	Personal Protection:	В	

SECTION 16Other Information

DISCLAIMER: All information presented herein is given in good faith and is based on sources and tests are considered to be reliable but cannot be guaranteed. It is the user's full responsibility to accept risk for the safety, toxicity, handling, storage, and use of the product as well as to determine the suitability of this product for a specific purpose. We can make no warranty as to the results to be obtained in using the product. Therefore the user must assume all risk.

MSDS Prepared by: Discovery/Lancer Group

Phone Number: (204) 885-7792 **Issue Date:** October 21,2015

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