

Printing date 12/07/2015 Reviewed on 07/06/2015

1: Identification

- · 1.1 Product identifier
- · Trade name: Remover E-59A spraycan
- · Application of the substance / the mixture

NDT Inspection penetrant remover "class 2" per AMS-2644/ASTM E-1417

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Met-L-Chek Company

1639 Euclid Street

Santa Monica, California, 90404, U.S.A.

Phone: 1-310-450-1111 Fax: 1-310-452-4046

E-mail: info@met-l-chek.com http://www.met-l-chek.com

- · Information department: Product safety department
- · 1.4 Emergency telephone number: Chemtrec +1-800-424-9300 in U.S.A.; outside U.S.A. 001-703-527-3887

2: Hazard(s) identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.

Skin Irrit. 2 H315 Causes skin irritation. Eve Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H336 May cause drowsiness or dizziness. H304 Asp. Tox. 1 May be fatal if swallowed and enters airways.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

· Hazard pictograms







GHS02 GHS07

· Signal word Danger

· Hazard-determining components of labeling:

Naphtha (petroleum), hydrotreated light

· Hazard statements

H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.

Causes skin irritation. H315 H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking. P210

P301+P310 IF SWALLOWED: Immediately call a doctor.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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Dispose of contents/container in accordance with local regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1 Fire = 4 Reactivity = 3

· HMIS-ratings (scale 0 - 4)



Health = 1 Fire = 4 Reactivity = 3

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3: Composition/information on ingredients

- · 3.2 Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

	· Dangerous components:		
Γ	CAS: 64742-49-0	Naphtha (petroleum), hydrotreated light	50-100%
		Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H336	
		Petroleum gases, liquefied	10-25%
	EINECS: 270-704-2	Flam. Gas 1, H220; Press. Gas, H280	

4: First-aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

Take affected persons into fresh air and keep quiet.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eve contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Do not induce vomiting; immediately call for medical help.

A person vomiting while lying on their back should be turned onto their side.

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

No further relevant information available.

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· 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

5: Fire-fighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Water haze

Foam

- ABC powder · For safety reasons unsuitable extinguishing agents: Water spray
- · 5.2 Special hazards arising from the substance or mixture Carbon monoxide and carbon dioxide
- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Collect liquid in an appropriate container or absorb with an inert material such as vermiculite, dry sand, or earth; DO NOT use combustible materials.

Place in a chemical waste container.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7: Handling and storage

• 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Work only in fume cabinet.

· Information about protection against explosions and fires:

Do not spray on a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

Use explosion-proof apparatus / fittings and spark-proof tools.

Containers may be hazardous when empty since residue liquid and vapors may be present

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurized containers.

· Information about storage in one common storage facility: Not required.

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· Further information about storage conditions:

Store receptacle in fume compartment. Keep receptacle tightly sealed.

• 7.3 Specific end use(s) No further relevant information available.

8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · 8.2 Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.





Ventilation System: A system of local or general exhaust is recommended to keep employee exposure below the airborne exposure limits. If exposure limit is exceeded use organic vapor respirator (type A), or self contained breathing apparatus. For dry powder nuisance exposue use type P96(US) or type Pi(EU EN143 particle respirator. For higher level protection use type OV/AG/P99(US or ABEK-P2(EU EN 143) respirator cartridges.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Safety glasses

Tightly sealed goggles

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· Body protection: Use protective suit.

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• 9.1 Information on basic physical ar	nd chemical properties
· General Information	
· Appearance: Form:	Aerosol
Color:	Colorless
· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	-40 °C (-40 °F)
Flash point:	< - 18 °C (ASTM D-93)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	> 200 °C (> 392 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	1,5 Vol %
Upper:	10,9 Vol %
· Vapor pressure at 20 °C (68 °F):	172 hPa (129 mm Hg)
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wate	r): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	78.0 %
VOC content:	78.0 % 780.0 g/l / 6.51 lb/gl



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• 9.2 Other information

No further relevant information available.

10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Avoid contact with acetaldehyde, acids, chlorine, ethylene oxide, isocyanate and strong oxidizing agents

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity: Information on hazardous ingredients
- · LD/LC50 values that are relevant for classification:

64742-49-0 Naphtha (petroleum), hydrotreated light

Dermal LD50 >3000 mg/kg (rabbit)
Inhalative LC50/4h 0,29 >20 mg/kg (rat)

- · Primary irritant effect:
- on the skin:

Causes skin irritation.

on the eye:

Causes serious eye irritation.

- · Sensitization: Based on available data, the classification criteria are not met.
- · Additional toxicological information:
- · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Group 1 Carcinogenic to humans
Group 2A Probably carcinogenic to humans
Group 2B Possibly carcinogenic to humans

Group 3 Not classifiable as to its carcinogenicity to humans

Group 4 Probably not carcinogenic to humans

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

Information on hazardous ingredients

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64742-49-0 Naphtha (petroleum), hydrotreated light

LC50/ 96 h 51 mg/l (Fish)

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Waste/ unused products

Collect all waste in suitable and labelled containers and dispose according to local legislation.

- · Uncleaned packagings:
- · Recommendation:

Waste / used products

Waste products and empty packages dispose of in accordance with local regulations.

Empty containers may contain flammable residue and vapors.

14: Transport information

- · 14.1 UN-Number
- · DOT, ADR, IMDG, IATA

UN1950

· 14.2 UN proper shipping name

· DOT, IATA

Aerosols, flammable

· ADR

1950 Aerosols

· IMDG

AEROSOLS (Naphtha (petroleum), hydrotreated light), MARINE POLLUTANT

- · 14.3 Transport hazard class(es)
- · DOT



· Class 2.1

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· Label	(Contd. of page 2.1
	Z.1
ADR	
· Class	2 5F Gases
· Label	2.1
· IMDG	
*	
· Class	2.1
· Label	2.1
· IATA	
· Class · Label	2.1 2.1
· 14.4 Packing group · DOT, ADR, IMDG, IATA	not applicable
· 14.5 Environmental hazards:	Product contains environmentally hazardous substand Naphtha (petroleum), hydrotreated light
· Marine pollutant:	Yes Symbol (fish and tree)
14.6 Special precautions for user	Warning: Gases
· Danger code (Kemler):	-
· EMS Number: · Stowage Code	F-D,S-U SW1 Protected from sources of heat.
- Stowage Coue	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 li Category A. For AEROSOLS with a capacity above 1 li Category B. For WASTE AEROSOLS: Category C, Cl of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 li Segregation as for class 9. Stow "separated from" class except for division 1.4. For AEROSOLS with a capa above 1 litre: Segregation as for the appropria subdivision of class 2. For WASTE AEROSOLS
	Segregation as for the appropriate subdivision of class 2
 14.7 Transport in bulk according to Annex 	v II of



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· Transport/Additional information:

· DOT

· Quantity limitations



On passenger aircraft/rail: 75 kg



On cargo aircraft only: 150 kg

· ADR

· Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

• Remarks: Aerosols can be transported under LIMITED QUANTITIES

(LQ).

See ADR 3.4 - LQ2. That means no label 2.

·IMDG

Limited quantities (LQ)Excepted quantities (EQ)Code: E0

Not permitted as Excepted Quantity

· Remarks: Aerosols can be transported under LIMITED QUANTITIES

(LQ).

See IMDG 3.4 - LQ2. That means no label 2.

·IATA

· Remarks: Quantity Limitation - Passenger Aircraft

75kg

Quantity Limitation - Cargo Aircraft

150kg

Quantity Limitation - Limited quantities

30 kg Ğ

Packaging Instruction: Passenger Aircraft - PI 203 Cargo aircraft - PI 203 Limited quantities - PI Y203

· UN "Model Regulation": UN 1950 AEROSOLS, 2.1

15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

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· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Cancerogenity categories

• EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

- · Department issuing SDS: Product safety department
- · Contact: Met-L-Chek Company
- · Date of preparation / last revision 12/07/2015 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised $\dot{\text{S}}\textsc{ystem}$ of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, ÉU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Gas 1: Flammable gases, Hazard Category 1
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1 Plam. Aerosol 1: Flammable aerosols, Hazard Category 1
Press. Gas: Gases under pressure: Compressed gas
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard Category 1

 \cdot * Data compared to the previous version altered.