

Safety Data Sheet
acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

1 Identification

- **Product identifier**
- **Trade name:** *Remove-Debonder*
- **Relevant identified uses of the substance or mixture.** *Debonder*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
*Adhesive Systems, Inc.
A Division of Royal Adhesives & Sealants, LLC
9411 Corsair Road
Frankfort, Illinois 60423
Phone Number: 800-552-0299*
- **Information department:** *Environment protection department.*
- **Emergency telephone number:**
*ChemTrec: Day or Night within USA and Canada: 1-800-424-9300.
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)*

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**
- **GHS label elements** *The product is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** *Danger*
- **Hazard statements**
Highly flammable liquid and vapor.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 1)

Harmful if swallowed.

Causes serious eye irritation.

Suspected of causing cancer.

May cause drowsiness or dizziness.

· **Precautionary statements**

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

Use explosion-proof electrical/ventilating/lighting/equipment.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves / eye protection / face protection.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Rinse mouth.

In case of fire: Use for extinction: CO2, powder or water spray.

Store locked up.

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

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 2

· **HMIS-ratings (scale 0 - 4)**

HEALTH	2
FIRE	3
PHYSICAL HAZARD	2

Health = 2

Fire = 3

Physical Hazard = 2

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

* 3 Composition/information on ingredients

· **Chemical characterization:** Mixtures

· **Description:** Mixture

(Contd. on page 3)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 2)

· Hazardous components:

75-52-5	nitromethane	50-100%
78-93-3	methyl ethyl ketone	25-50%

4 First-aid measures

· Description of first aid measures
· After inhalation:

Supply fresh air or oxygen; call for doctor.

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

· After skin contact: Immediately wash with water and soap and rinse thoroughly.
· After eye 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.
· Information for doctor:

· Most important symptoms and effects, both acute and delayed No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
· Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture No further relevant information available.

· Advice for firefighters

Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

· Protective equipment: Protective clothing and respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste in accordance with federal state and local regulations.

Ensure adequate ventilation.

· 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.

USA

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 3)

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Open and handle receptacle with care.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep container closed when not in use.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Ground and bond containers prior to use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location away from direct heat.
- **Information about storage in one common storage facility:**
Store away from oxidizing agents.
Store as flammable liquid.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **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.
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

75-52-5 nitromethane

PEL	Long-term value: 250 mg/m ³ , 100 ppm
TLV	Long-term value: 50 mg/m ³ , 20 ppm

78-93-3 methyl ethyl ketone

PEL	Long-term value: 590 mg/m ³ , 200 ppm
REL	Short-term value: 885 mg/m ³ , 300 ppm
	Long-term value: 590 mg/m ³ , 200 ppm
TLV	Short-term value: 885 mg/m ³ , 300 ppm
	Long-term value: 590 mg/m ³ , 200 ppm
BEI	

- **Ingredients with biological limit values:**

78-93-3 methyl ethyl ketone

BEI	2 mg/L
	Medium: urine
	Time: end of shift
	Parameter: MEK

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment (see listings below)**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.

(Contd. on page 5)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 4)

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Protective 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.

· **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 with side shields.



Tightly sealed goggles

Safety glasses with side shields or tightly sealed goggles. Selection of eye protection is based on how the product will be used.

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid
Color: Not determined.

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point: Undetermined.
Boiling point: 79 °C (174 °F)

· **Flash point:** -4 °C (25 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 415 °C (779 °F)

· **Decomposition temperature:** Not determined.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 5)

· Auto igniting:	869F
· Danger of explosion:	Heating may cause an explosion.
· Flammable limits:	
Lower:	1.8 Vol %
Upper:	63.0 Vol %
· Vapor pressure at 20 °C (68 °F):	105 hPa (79 mm Hg)
· Specific gravity at 20 °C (68 °F):	0.8 g/cm ³ (6.676 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	≤0.1
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	Not determined
Solids content:	Not available
· Other information	<20 grams/liter Per SCAQMD Method 316B.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Forms explosive gas mixture with air.
- **Conditions to avoid** Heat, flames, sparks.
- **Incompatible materials:** Strong oxidizers, acids, and bases.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

75-52-5 nitromethane

Oral	LD50	940 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** May irritate the skin.
- **on the eye:**
Irritating effect.
Vapors may be irritating to the eyes.
- **Sensitization:** No sensitizing effects known.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 6)

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

75-52-5	nitromethane	2B
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- **NTP (National Toxicology Program)**

75-52-5	nitromethane	R
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- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:** At present there are no ecotoxicological assessments.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:** Must be specially treated adhering to official regulations.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

- **DOT, IMDG, IATA**

UN1993

- **UN proper shipping name**

- **DOT**

- **IMDG, IATA**

Flammable liquids, n.o.s. (Ethyl methyl ketone, Nitromethane)

FLAMMABLE LIQUID, N.O.S. (ETHYL METHYL KETONE
(METHYL ETHYL KETONE), NITROMETHANE)

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 7)

· **Transport hazard class(es)**· **DOT**

· **Class** 3 Flammable liquids
 · **Label** 3

· **IMDG, IATA**

· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**· **DOT, IMDG, IATA** II· **Environmental hazards:** Not applicable.· **Special precautions for user** Warning: Flammable liquids· **Danger code (Kemler):** 33· **EMS Number:** F-E,S-E· **Stowage Category** B· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.· **UN "Model Regulation":** UN 1993 FLAMMABLE LIQUIDS, N.O.S. (ETHYL METHYL KETONE, NITROMETHANE), 3, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
 · Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

75-52-5 | nitromethane

· **TSCA (Toxic Substances Control Act):**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

· **Proposition 65**· **Chemicals known to cause cancer:**

75-52-5 | nitromethane

· **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.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 8)

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· (DSL) Canada Domestic Substance List

All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements.

· New Jersey Right-to-Know List:

All ingredients are listed.

· New Jersey Special Hazardous Substance List:

75-52-5	nitromethane	CA, F3, R4
78-93-3	methyl ethyl ketone	F3

· Pennsylvania Right-to-Know List:

All ingredients are listed.

· Pennsylvania Special Hazardous Substance List:

78-93-3	methyl ethyl ketone	E
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· Cancerogenity categories
· EPA (Environmental Protection Agency)

78-93-3	methyl ethyl ketone	I
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· TLV (Threshold Limit Value established by ACGIH)

75-52-5	nitromethane	A3
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· MAK (German Maximum Workplace Concentration)

75-52-5	nitromethane	3B
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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· National regulations:
· Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

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

16 Other information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

· Department issuing SDS: Environment protection department.

· Creation Date: 11/21/2016

· Date of preparation / last revision 11/21/2016 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Printing Date 11/21/2016

Revision Number 1

Revision Date 11/21/2016

Trade name: Remove-Debonder

(Contd. of page 9)

*LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**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**BEI: Biological Exposure Limit**Flam. Liq. 2: Flammable liquids – Category 2**Acute Tox. 4: Acute toxicity – Category 4**Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A**Carc. 2: Carcinogenicity – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

USA