

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name RV-03 - Rear View Mirror Adhesive - Part A

Other means of identification

Synonyms Not applicable

Recommended use of the chemical and restrictions on use

Identified uses Adhesives.
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address ABRO Industries, Inc.
3580 Blackthorn Ct.
South Bend, IN 46628 USA

Emergency Telephone Chemtrec: US/Canada 1-800-424-9300
International +1-703-527-3887

2. HAZARDS IDENTIFICATION

Emergency Overview

Physical state	liquid (gel)	Color	light yellow
Odor	Characteristic	Appearance	translucent

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
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

Target Organ Effects

Respiratory system.

GHS Label elements, including precautionary statements



Signal word

Warning

Hazard statements

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention
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

Precautionary Statements - Storage

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)

None

Other Information

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical Name	CAS No	Weight-%	Trade Secret	Classification (Reg. 1272/2008)
Isobornyl Acrylate	5888-33-5	25-39	*	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)
2-Hydroxyethyl methacrylate	868-77-9	25-39	*	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1 (H317)
tert-Butyl Perbenzoate	614-45-9	1-3	*	Org. Perox C (H242) Acute Tox. 4 (H332) Skin Irrit. 2 (H315)

				Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)
Organic Acid	Proprietary	1-3	*	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)
Maleic Acid	110-16-7	1-3	*	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2A (H319) STOT SE 3 (H335) Aquatic Acute 3 (402)
Silane Coupling Agent	Proprietary	<1	*	Skin Sens. 1 (H317)
Epoxy Resin	Proprietary	<1	*	Skin Irrit. 3 (H316) Eye Irrit. 2B (H320) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)

Remaining ingredients are not considered hazardous in accordance with the Globally Harmonized System (GHS)

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Eye contact

Flush eyes with water for at least 15 minutes. Get medical attention if eye irritation develops or persists.

Skin Contact

Wash off immediately with plenty of water, Get medical attention if irritation develops and persists.

Inhalation

Remove to fresh air, If symptoms persist, call a physician.

Ingestion

If swallowed, Rinse mouth, Get medical attention.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Main Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use CO₂, dry chemical, or foam.

Unsuitable extinguishing media

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

Specific hazards arising from the chemical

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

Hazardous combustion products

Hazardous decomposition products due to incomplete combustion.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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

Ensure adequate ventilation, Wear protective gloves/clothing and eye/face protection.

Environmental precautions

Environmental precautions

Do not allow material to contaminate ground water system, Try to prevent the material from entering drains or water courses, See Section 12 for additional Ecological Information, Local authorities should be advised if significant spillages cannot be contained.

Other Information

See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice

Ensure adequate ventilation

Protect from light

Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed in a dry and well-ventilated place

Protect from light

Incompatible products

Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers, Thiosulfates.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls**Engineering Measures**

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Safety glasses with side-shields, If splashes are likely to occur, wear:, Goggles.

Skin and body protection

Wear protective gloves and protective clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required, Do not breathe vapors, mist or gas.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice, When using do not eat, drink or smoke, Wear suitable gloves and eye/face protection, Wash hands before breaks and at the end of workday, Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid (gel)	Odor	Characteristic
Appearance	translucent	Odor threshold	No information available
Color	light yellow		
<u>Property</u>	<u>Values</u>	<u>Remarks / • Method</u>	
pH		No information available	
Melting point / freezing point		No information available	
Boiling point / boiling range			
Flash point	101 °C / 213 °F		
Evaporation rate		No information available	
Flammability (solid, gas)		No information available	
Flammability Limit in Air			
Upper flammability limit	-		
Lower flammability limit	-		
Vapor pressure		No information available	
Vapor density		No information available	
Specific Gravity		No information available	
Water Solubility	Practically insoluble		
Solubility in other solvents		No information available	
Partition coefficient: n-octanol/water		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Dynamic viscosity	30,000 cP		
Kinematic viscosity		No information available	
Explosive properties	No information available		
Oxidizing properties	No information available		

Other Information

Softening point	No information available
VOC Content (%)	1.66571998596191
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No information available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Protect from light. Heat, flames and sparks.

Incompatible materials

Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers.

Hazardous Decomposition Products

No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Information on likely routes of exposure

Inhalation	There is no data for this product
Eye contact	There is no data for this product
Skin Contact	There is no data for this product
Ingestion	There is no data for this product
Symptoms	No information available.

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

Sensitization	May cause sensitization of susceptible persons.
Mutagenic effects	No information available.
Reproductive toxicity	No information available.
Carcinogenicity	Contains no ingredients above reportable quantities listed as a carcinogen.
STOT - single exposure Target Organ Effects	. Respiratory system.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Chronic toxicity	Repeated contact may cause allergic reactions in very susceptible persons

Avoid repeated exposure

Numerical measures of toxicity - Product Information

0 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	7204 mg/kg
ATEmix (dermal)	13754 mg/kg
ATEmix (inhalation-dust/mist)	6.8
ATEmix (inhalation-vapor)	393 mg/l

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	
2-Hydroxyethyl methacrylate	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	
tert-Butyl Perbenzoate	= 4838 mg/kg (Rat)	= 3,817 mg/kg (Rabbit)	
Organic Acid	= 2969 mg/kg (Rat)		
Maleic Acid	= 708 mg/kg (Rat)	= 1560 mg/kg (Rabbit)	> 720 mg/m ³ (Rat) 1 h
Silane Coupling Agent	> 5000 mg/kg (Rat)		
Epoxy Resin	= 11400 mg/kg (Rat)		

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Acute aquatic toxicity

Product Information

Testing for acute and chronic aquatic effects determined no environmental classification is required.

Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Isobornyl Acrylate	ErC 50 = 2.7 mg/L 96 h (Pseudokirchneriella subcapitata)	LC50 = 1.8 mg/L 96 h (Danio rerio)	EC 50 = 1.1 mg/L 48 h (Daphnia magna)
2-Hydroxyethyl methacrylate	-	LC50 = 227 mg/L 96 h (Pimephales promelas)	EC50 > 380 mg/l 48 h (Daphnia magna)
tert-Butyl Perbenzoate	EC50 1.3 mg/l 72 h (Pseudokirchneriella subcapitata)	LC50 1.6 mg/l 96 h (Brachydanio rerio)	EC50 11 mg/L 48 h (Daphnia magna)
Organic Acid	EC50 47 mg/L 72 h (Desmodesmus subspicatus)	LC50 190 mg/L 24 h (Salmo gairdneri)	EC 480 mg/L 48 h (Daphnia magna)
Maleic Acid	-	LC50= 5 mg/L 96 h (Pimephales promelas)	EC50 250-400 48 h (Daphnia magna)
Silane Coupling Agent	EC50 > 536,00 mg/l 72 h (Scenedesmus subspicatus)	LC50 > 1024,00 mg/l 96 h (Brachydanio rerio)	EC50 > 876,00 mg/l 48 h (Daphnia magna)
Epoxy Resin	-	-	EC50 = 1.4 mg/L 48 h (Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical Name	log Pow
Isobornyl Acrylate	4.21
2-Hydroxyethyl methacrylate	0.47
tert-Butyl Perbenzoate	3
Organic Acid	-0.4
Maleic Acid	-0.79 - 0.32

Epoxy Resin	2.821
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Mobility in soil

No product level data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
AICS	Not listed
DSL/NDSL	Not listed
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
NZIoC	Not listed
PICCS	Not listed
TCSI	Not listed

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- AICS** - Australian Inventory of Chemical Substances
- 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
- NZIoC** - New Zealand Inventory of Chemicals
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- TCSI** - Taiwan Chemical Substance Inventory

US Federal Regulations

OSHA Regulatory Status

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

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	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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)
Maleic Acid	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
tert-Butyl Perbenzoate	X	X	X
Maleic Acid	X	X	X
tert-Butyl hydroperoxide	X	X	X

16. OTHER INFORMATION

We believe all information given is accurate. It is offered in good faith but without guarantee. Since conditions of use are beyond our control, user assumes all responsibility and risk.

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name RV-03 - Rear View Mirror Adhesive - Part B

Other means of identification

Synonyms Not applicable

Recommended use of the chemical and restrictions on use

Identified uses Adhesives.
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address ABRO Industries, Inc.
3580 Blackthorn Ct.
South Bend, IN 46628 USA

Emergency Telephone

Chemtrec: US/Canada 1-800-424-9300
International +1-703-527-3887

* 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

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



GHS07

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

- **Signal word** Danger

- **Hazard-determining components of labeling:**

isopropanol

- **Hazard statements**

H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

- **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P233 Keep container tightly closed.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves / eye protection / face protection.
P280 Wear eye protection / face protection.
P240 Ground/bond container and receiving equipment.
P242 Use only non-sparking tools.
P271 Use only outdoors or in a well-ventilated area.
P243 Take precautionary measures against static discharge.
P264 Wash face, hands and any exposed skin thoroughly after handling.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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P312 Call a POISON CENTER/doctor if you feel unwell.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
 P405 Store locked up.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:

- NFPA ratings (scale 0 - 4)



Health = 1
 Fire = 3
 Reactivity = 0

- HMIS-ratings (scale 0 - 4)



Health = 1
 Fire = 3
 Reactivity = 0

- Other hazards

- Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

67-63-0 isopropanol	Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336	90-100%
1338-02-9 Metal Salt Complex	Flam. Liq. 3, H226; Acute Tox. 4, H302	1-5%

4 First-aid measures

- Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **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 or alcohol resistant foam.

CO2, sand, extinguishing powder. Do not use water.

- For safety reasons unsuitable extinguishing agents: Water with full jet

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

- Advice for firefighters

- Protective equipment:

Wear self-contained respiratory protective device.
 Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.
 Ensure adequate ventilation
 Wear protective clothing.

- Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.
 Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:

Ensure adequate ventilation.
 Do not flush with water or aqueous cleansing agents
 Dispose of the collected material according to regulations.

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- 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

- Handling:

- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

- Conditions for safe storage, including any incompatibilities

- Storage:

- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.
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:**

67-63-0 isopropanol

PEL Long-term value: 980 mg/m³, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm
Long-term value: 980 mg/m³, 400 ppm

TLV Short-term value: 984 mg/m³, 400 ppm
Long-term value: 492 mg/m³, 200 ppm
BEI

- **Ingredients with biological limit values:**

67-63-0 isopropanol

BEI 40 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Acetone (background, nonspecific)

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

- 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.
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.

- 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.
Nitrile rubber, NBR

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- 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:



Tightly sealed goggles

- Body protection: Protective work clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

- **Form:** Liquid
- **Color:** Colorless
- **Odor:** Alcohol-like
- **Odor threshold:** Not determined.

- pH-value: Not determined.

- Change in condition

- **Melting point/Melting range:** -89.5 °C (-129 °F)
- **Boiling point/Boiling range:** 82 °C (180 °F)

- Flash point: 13 °C (55 °F)

- Flammability (solid, gaseous): Not applicable.

- Ignition temperature: 425 °C (797 °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:** 2 Vol %
- **Upper:** 12 Vol %

- Vapor pressure at 20 °C (68 °F): 43 hPa (32 mm Hg)

- Density at 20 °C (68 °F): 0.7876 g/cm³ (6.573 lbs/gal)

- **Relative density:** Not determined.
- **Vapor density:** Not determined.
- **Evaporation rate:** Not determined.

- Solubility in / Miscibility with

- **Water at 20 °C (68 °F):** 1 g/l

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:

- **Dynamic at 20 °C (68 °F):** 1 mPas
- **Kinematic:** Not determined.

- Solvent content:

- **Organic solvents:** 98.8 %
 - **VOC content:** 98.8 %
- 778.1 g/l / 6.49 lb/gl

- Other information No further relevant information available.

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 No dangerous reactions known.

- Conditions to avoid No further relevant information available.

- Incompatible materials: No further relevant information available.

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2/2/14 SJU

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- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

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

67-63-0 isopropanol

Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

1338-02-9 Metal Salt Complex

Oral	LD50	7500 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4 h	3 mg/l (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

- **Carcinogenic categories**

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

67-63-0 isopropanol

3

- **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

- **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.

- **Ecotoxicological effects:**

- **Remark:** Harmful to fish

- **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.
Harmful to aquatic organisms

- **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 not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

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

14 Transport information

- **UN-Number**

- **DOT, IMDG, IATA**

UN1219

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Safety Data Sheet



acc. to OSHA HCS

Printing date 01/29/2016

Reviewed on 10/29/2015

Trade name: Rearview Mirror Adhesive

(Contd. of page 5)

- **UN proper shipping name**
 - DOT Isopropanol
 - IMDG ISOPROPANOL (ISOPROPYL ALCOHOL) mixture
 - IATA Isopropanol mixture
- **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:**
 - Marine pollutant: No
- **Special precautions for user**
 - Warning: Flammable liquids
 - Danger code (Kemler): 33
 - EMS Number: F-E,S-D
 - Stowage Category B
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
 - Not applicable.
- **Transport/Additional information:**
 - DOT
 - Quantity limitations
 - On passenger aircraft/rail: 5 L
 - On cargo aircraft only: 60 L
 - IMDG
 - Limited quantities (LQ) 1L
 - Excepted quantities (EQ)
 - Code: E2
 - Maximum net quantity per inner packaging: 30 ml
 - Maximum net quantity per outer packaging: 500 ml
- **UN "Model Regulation":**
 - UN 1219 ISOPROPANOL MIXTURE, 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):
All ingredients are listed.
 - 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.

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- 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.	
- Carcinogenic categories	
- EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
- TLV (Threshold Limit Value established by ACGIH)	
67-63-0 isopropanol	A4
- NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
- 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.

- **Department issuing SDS:** Safety, Health and Environmental Affairs

- **Contact:** Safety, Health and Environmental Affairs

- **Date of preparation / last revision** 01/29/2016 / 4

- **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

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)

HMS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

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, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

- *** Data compared to the previous version altered.**

- **Disclaimer**

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