

Safety Data Sheet

acc. to OSHA HCS

Printing Date 12/01/2023

Revision Number 2

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1 Identification

- Product identifier
- Trade name: HP-2000 Aerosol Can
- Article number: 15418-A6.48
- Relevant identified uses of the substance or mixture. Industrial Use Only.
- Application of the substance / the mixture Adhesive
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Royal Adhesives And Sealants, LLC
2001 W. Washington Street South
Bend IN 46628-2023 Information
Phone Number: 574-246-5000
- Information department: Global Regulatory Department.

2 Hazard(s) identification

- Classification of the substance or mixture



GHS02 Flame

Flammable Aerosols 1

H222 Extremely flammable aerosol.



GHS07

Eye Irritation 2A

H319 Causes serious eye irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure 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 statements Extremely flammable aerosol. Causes serious eye irritation. May cause an allergic skin reaction. May cause drowsiness or dizziness.
- Precautionary statements Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

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Avoid breathing dust/fume/gas/mist/vapors/spray
 Wash thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves / eye protection / face protection.
 If on skin: Wash with plenty of water.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 Call a poison center/doctor if you feel unwell.
 Specific treatment (see on this label).
 If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

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



Health = 2
 Fire = 4
 Reactivity = 0

- HMIS-ratings (scale 0 - 4)



Health = 2
 Fire = 4
 Physical Hazard = 3

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

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture

· Hazardous components:

79-20-9	methyl acetate	25-50%
74-98-6	propane	10-25%
106-97-8	butane (containing 0,1 % butadiene (203-450-8))	2.5-10%
110-82-7	cyclohexane	2.5-10%
	polyterpene resin	2.5-10%
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	2.5-10%
109-66-0	pentane	≤ 2.5%
109-60-4	propyl acetate	≤ 2.5%
1309-48-4	magnesium oxide	≤ 0.5%
128-37-0	Butylated hydroxytoluene	≤ 0.5%

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epoxy resin

≤ 0.5%

4 First-aid measures

- Description of first aid measures
- After inhalation: Overexposure, remove to fresh air and seek medical attention.
- 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.
- 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). 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.

7 Handling and storage

- Handling:
- Precautions for safe handling Avoid contact with skin and eyes.
Handle/process in well ventilated areas.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

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Pressurized container: protect from sunlight and do not expose to high temperatures. Do not pierce or burn, even after 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 away from foodstuffs.
 - Further information about storage conditions: Keep away from heat, spark and flame.
 - 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 section 7.
- Control parameters
- Components with limit values that require monitoring at the workplace:
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

79-20-9 methyl acetate

PEL	Long-term value: 610 mg/m ³ , 200 ppm
REL	Short-term value: 760 mg/m ³ , 250 ppm Long-term value: 610 mg/m ³ , 200 ppm
TLV	Short-term value: 250 ppm Long-term value: 200 ppm

74-98-6 propane

PEL	Long-term value: 1800 mg/m ³ , 1000 ppm
REL	Long-term value: 1800 mg/m ³ , 1000 ppm
TLV	see Appendix F Minimal oxygen content (D, EX)

106-97-8 butane (containing 0,1 % butadiene (203-450-8))

REL	Long-term value: 1900 mg/m ³ , 800 ppm
TLV	Short-term value: 1000 ppm (EX)

110-82 -7 cyclohexane

PEL	Long-term value: 1050 mg/m ³ , 300 ppm
REL	Long-term value: 1050 mg/m ³ , 300 ppm
TLV	Long-term value: 100 ppm BEI

109-66 -0 pentane

PEL	Long-term value: 2950 mg/m ³ , 1000 ppm
REL	Long-term value: 350 mg/m ³ , 120 ppm Ceiling limit value: 1800* mg/m ³ , 610* ppm *15-min
TLV	Long-term value: 1000 ppm

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109-60-4 propyl acetate

PEL	Long-term value: 840 mg/m ³ , 200 ppm
REL	Short-term value: 1050 mg/m ³ , 250 ppm Long-term value: 840 mg/m ³ , 200 ppm
TLV	Short-term value: 150 ppm Long-term value: 100 ppm
WEEL	D

· **Ingredients with biological limit values:****110-82-7 cyclohexane**

BEI	NIC-50 mg/g creatinine Medium: - Time: end of shift at end of workweek Parameter: NIC-1.2-Cyclohexanediol (nonspecific)
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· **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. Wash hands before breaks and at the end of work. Store protective clothing separately. Do not inhale gases / fumes / aerosols. 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**

- **Material of gloves**
Nitrile rubber, NBR
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:**

**Tightly sealed goggles**

- **Body protection:** Protective work clothing

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9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:
 - Form: Aerosol
 - Color: Not determined.
- Odor: Characteristic
- Odor threshold: Not Available.
- pH-value: Not applicable.
- Change in condition
 - Boiling point: Not applicable, as aerosol.
- Flash point: -104.4 °C (-155.9 °F)
- Auto igniting: Not Available
- Ignition temperature: Product is not selfigniting.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- Flammable limits:
 - Lower: Not Available
 - Upper: Not Available
- Vapor pressure: Not Available
- Specific gravity at 20 °C (68 °F): 0.8187 g/cm³ (6.83205 lbs/gal)
- Solubility in / Miscibility with
 - Water: Not miscible or difficult to mix.
- Viscosity:
 - Dynamic: Not Available
 - Kinematic: Not Available
- Solvent content:
 - Organic solvents: 38.7%
 - Water: 0.0 %
- Solids content: Not Available.
- Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity Not reactive as supplied
- Chemical stability Stable under recommended storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid
 - Exposure to high temperatures.
 - Heat, flames, sparks.
- Incompatible materials: Strong oxidizers, acids, and bases.
- Hazardous decomposition products:
 - Carbon monoxide and carbon dioxide

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Hydrocarbons

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11 Toxicological information

- Information on toxicological effects

- Acute toxicity:

- LD/LC50 values that are relevant for classification:

106-97-8 butane (containing 0,1 % butadiene (203-

450-8)) Inhalative LC50/4 h 658 mg/l (rat)

- Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.

- on the eye: Irritating effect.

- Sensitization:

Sensitizing effect through inhalation and contact with the skin is possible with prolonged or repeated exposures.

- 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)

128-37-0 Butylated hydroxytoluene

3

epoxy resin

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.

- 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: Comply with current regulations.

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- Uncleaned packagings:
- Recommendation: Comply with current regulations.

14 Transport information

· UN-Number	UN1950
· DOT, IMDG, IATA	
· UN proper shipping name	Aerosols, flammable
· DOT	AEROSOLS (CYCLOHEXANE,
· IMDG	CHLOROBENZOTRIFLUORIDES), MARINE POLLUTANT
· IATA	AEROSOLS, flammable
· Transport hazard class(es)	
· DOT	
	
· Class	2.1 Gases
· Label	2.1
· IMDG	
	
· Class	2.1 Gases
· Label	2.1
· IATA	
	
· Class	2.1 Gases
· Label	2.1
· Packing group	
· DOT, IMDG, IATA	not regulated
· Environmental hazards:	Product contains environmentally hazardous substances: 4-chloro-alpha,alpha,alpha-trifluorotoluene
· Marine pollutant:	· Yes (DOT) Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user	Warning: Gases
· Hazard identification number (Kemler code): -	
· EMS Number:	F-D,S-U

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• Segregation groups • Stowage Code	Liquid halogenated hydrocarbons SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
• Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
• Transport/Additional information:	
• DOT • Remarks:	Special marking with the symbol (fish and tree).
• UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

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):

110-82-7 cyclohexane

- TSCA (Toxic Substances Control Act):

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

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

- Hazardous Air Pollutants

None of the ingredients is listed.

- Proposition 65

Please contact H.B. Fuller for more information regarding Proposition 65 on this product:
reg.request@hbfuller.com.

- (DSL) Canada Domestic Substance List

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

- Cancerogenity categories

- EPA (Environmental Protection Agency)

110-82-7 cyclohexane

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- TLV (Threshold Limit Value)

1309-48-4 magnesium oxide

A4

128-37-0 Butylated hydroxytoluene

A4

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· MAK (German Maximum Workplace Concentration)

128-37-0 Butylated hydroxytoluene

4

epoxy resin

3A

· 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: Global Regulatory Department.

· Creation Date: 12/16/2021

· Contact:

· Date of preparation / last revision 12/01/2023

· Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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)

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

Flammable Aerosols 1: Aerosols – Category 1

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation – Category 1

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

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