

Safety Data Sheet
acc. to OSHA HCS

Printing date 07/27/2017

Reviewed on 07/27/2017

1 Identification

- Product identifier
- Trade name: HB085 HBSERIES AUTOCLEAR ACTIVATOR
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
MANUFACTURED FOR:
BHG Import Exports Inc.
715 N Central Ave. Suite 213
Glendale CA 91203 United States
- Information department: Product safety department
- Emergency telephone number:
24 Hrs Emergency Contact:
CHEMTREC 628320
FOR USA AND CANADA: 1-800 424- 9300
OUTSIDE USA AND CANADA: +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.



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



GHS02



GHS08

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- Signal word Danger
- Hazard-determining components of labeling:
poly(hexamethylene diisocyanate)
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
- Hazard statements
Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
- Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
[In case of inadequate ventilation] wear respiratory protection.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
Keep container tightly closed.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
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.
Specific treatment (see on this label).
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Wash contaminated clothing before reuse.
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO₂, powder or water spray.
Take off contaminated clothing and wash it before reuse.
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 = 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.

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3 Composition/information on ingredients

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

- Dangerous components:

28182-81-2	poly(hexamethylene diisocyanate)	25-50%
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	25-50%
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	2.5-10%
108-32-7	propylene carbonate	2.5-10%
108-65-6	2-methoxy-1-methylethyl acetate	2.5-10%
123-86-4	n-butyl acetate	2.5-10%

4 First-aid measures

- Description of first aid measures
- After inhalation:
Supply fresh air and to be sure call for a 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: 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.
- 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: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
- 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 contaminated material as waste according to item 13.
Ensure adequate ventilation.
- Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

28182-81-2	poly(hexamethylene diisocyanate)	7.8 mg/m3
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	0.02 ppm
108-32-7	propylene carbonate	34 mg/m3
108-65-6	2-methoxy-1-methylethyl acetate	50 ppm
123-86-4	n-butyl acetate	5 ppm

· PAC-2:

28182-81-2	poly(hexamethylene diisocyanate)	86 mg/m3
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	0.14 ppm
108-32-7	propylene carbonate	370 mg/m3
108-65-6	2-methoxy-1-methylethyl acetate	1,000 ppm
123-86-4	n-butyl acetate	200 ppm

· PAC-3:

28182-81-2	poly(hexamethylene diisocyanate)	510 mg/m3
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	0.6 ppm
108-32-7	propylene carbonate	2,200 mg/m3
108-65-6	2-methoxy-1-methylethyl acetate	5000* ppm
123-86-4	n-butyl acetate	3000* ppm

7 Handling and storage

- Handling:
- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- 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: No special requirements.
 - Information about storage in one common storage facility: Not required.
 - Further information about storage conditions: Keep receptacle tightly sealed.
- 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:
 - 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.

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4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	
REL	Short-term value: 0.18 mg/m ³ , 0.02 ppm Long-term value: 0.045 mg/m ³ , 0.005 ppm Skin
TLV	Long-term value: 0.045 mg/m ³ , 0.005 ppm
108-65-6 2-methoxy-1-methylethyl acetate	
WEEL	Long-term value: 50 ppm
123-86-4 n-butyl acetate	
PEL	Long-term value: 710 mg/m ³ , 150 ppm
REL	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 710 mg/m ³ , 150 ppm
TLV	Short-term value: 712 mg/m ³ , 150 ppm Long-term value: 238 mg/m ³ , 50 ppm

· 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 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.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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:



Tightly sealed goggles

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9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	According to product specification
· Odor: Characteristic	
· Odor threshold: Not determined.	
· pH-value: Not determined (pH N/A in solvent coatings)	
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	124 °C (255 °F)
· Flash point: 27 °C (81 °F)	
· Flammability (solid, gaseous): Not applicable.	
· Ignition temperature: 430 °C (806 °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:	Not determined.
Upper:	Not determined.
· Vapor pressure: Not determined.	
· Density at 20 °C (68 °F): 1.181 g/cm ³ (9.855 lbs/gal)	
· Relative density: Not determined.	
· Vapor density: Not determined.	
· Evaporation rate: Not determined.	
· 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:	13.4 %
VOC content:	7.1 %
	Coating VOC 140.4 g/l / 1.17 lb/gl
	Material VOC 83.8 g/l / 0.70 lb/gl
· Solids content: 50.0 %	
· Other information: No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

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

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
 - on the skin: Irritant to skin and mucous membranes.
 - on the eye: Irritating effect.
- Sensitization:
 - Sensitization possible through inhalation.
 - Sensitization possible through skin contact.
- 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)

None of the ingredients is listed.

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

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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

Refer to **TDG** regulations (Canadian Transportation of Dangerous Goods regulations);**USA DOT:** 49 cfr 173.173 b(2) and Consumer Commodity (49 cfr 173.150(c), Regulations.

Sizes 5 L and under

Limited Quantity



Sizes greater than 5 L

UN number: **UN1263**
 Shipping Name: **PAINT**
 Class: **3**
 Packing Group: **II**
 Marine pollutant: **NO**

**Air:** Refer to ICAO-IATA Dangerous Goods Regulations.

Sizes 5 L and under

Limited Quantity



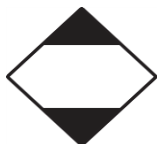
Sizes up to 5 L (passenger), 60 L (cargo)

UN number: **UN1263**
 Shipping Name: **PAINT**
 Class: **3**
 Packing Group: **II**
 Marine pollutant: **NO**

**Sea:** Refer to IMDG regulations.

Sizes 5 L and under

Limited Quantity



Sizes greater than 5 L

UN number: **UN1263**
 Shipping Name: **PAINT**
 Class: **3**
 Packing Group: **II**
 Marine pollutant: **NO**



Note: Shipper must be appropriately trained and certified before involvement with the transport of dangerous goods.

- 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

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- | | |
|---|--|
| <ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) | <p>5L
Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml</p> |
| <ul style="list-style-type: none"> · UN "Model Regulation": | <p>UN 1263 PAINT, 3, III</p> |

15 Regulatory information

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

- Section 355 (extremely hazardous substances):

4098-71-9	β-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
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- Section 313 (Specific toxic chemical listings):

4098-71-9	β-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
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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.

- Carcinogenic 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.

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

- Hazard pictograms



GHS02 GHS08

- Signal word Danger

- Hazard-determining components of labeling:

poly(hexamethylene diisocyanate)
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

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- Hazard statements
 - Flammable liquid and vapor.
 - Causes skin irritation.
 - Causes serious eye irritation.
 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 - May cause an allergic skin reaction.
- Precautionary statements
 - Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 - Use explosion-proof electrical/ventilating/lighting/equipment.
 - [In case of inadequate ventilation] wear respiratory protection.
 - Avoid breathing dust/fume/gas/mist/vapors/spray
 - Wear protective gloves/protective clothing/eye protection/face protection.
 - Ground/bond container and receiving equipment.
 - Keep container tightly closed.
 - Use only non-sparking tools.
 - Take precautionary measures against static discharge.
 - Wash thoroughly after handling.
 - Contaminated work clothing must not be allowed out of the workplace.
 - 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.
 - Specific treatment (see on this label).
 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
 - Wash contaminated clothing before reuse.
 - If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
 - If skin irritation or rash occurs: Get medical advice/attention.
 - If eye irritation persists: Get medical advice/attention.
 - In case of fire: Use for extinction: CO₂, powder or water spray.
 - Take off contaminated clothing and wash it before reuse.
 - Store in a well-ventilated place. Keep cool.
 - Dispose of contents/container in accordance with local/regional/national/international regulations.
- 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: Environment protection department.
- Contact: Product Safety Dept.
- Date of preparation / last revision 07/27/2017 / -
- 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)
 - HMIS: Hazardous Materials Identification System (USA)
 - VOC: Volatile Organic Compounds (USA, EU)
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - NIOSH: National Institute for Occupational Safety

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OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1

USA