

SAFETY DATA SHEET

Issue Date 02-Jun-2015 Revision Date 02-Jun-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name COMPONENT A

Other means of identification

Product Code RT100102 Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Spray foam insulation
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800 El Segundo, CA 90245-2716

Web Site: www.henry.com www.ca.henry.com

Emergency telephone number

Company Phone Number 800-486-1278

Emergency Telephone CHEMTREC: 800-424-9300 CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
|--|------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2 |
| Respiratory sensitization | Category 1 |
| Skin sensitization | Category 1 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 2 |

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause respiratory irritation

May cause damage to organs through prolonged or repeated exposure



Appearance viscous Physical state liquid Odor Aromatic

Precautionary Statements - Prevention

Obtain special instructions before use

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

Use personal protective equipment as required

Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: 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

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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

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)

Not applicable

Other Information

Not applicable.

Unknown acute toxicity

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical Name | CAS No | Weight-% |
|--|-----------|----------|
| Isocyanic acid, polymethylenepolyphenylene ester * | 9016-87-9 | 30 - 60 |
| 4,4-Methylenediphenyl diisocyanate * | 101-68-8 | 30 - 60 |
| Benzene, | 5873-54-1 | 3 - 7 |
| 1-isocyanato-2-[(4-isocyanatophenyl)methyl]- * | | |

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

Description of first aid measures

General advice In case of accident or unwellness, seek medical advice immediately (show directions for

use or safety data sheet if possible). If symptoms persist, call a physician.

Eye contact Call a physician immediately. Immediately flush with plenty of water. After initial flushing,

remove any contact lenses and continue flushing for at least 15 minutes. If symptoms

persist, call a physician.

Skin contact Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If

symptoms persist, call a physician.

Inhalation Immediate medical attention is required. Move victim to fresh air. Administer oxygen if

breathing is difficult. If breathing is irregular or stopped, administer artificial respiration.

Ingestion Call a physician or poison control center immediately. Do NOT induce vomiting. Drink

plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved and take precautions to

protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause

allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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 Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use

personal protective equipment as required.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do

not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment If possible, turn leaking containers so that gas escapes rather than liquid. Absorb spill with

inert material (e.g. dry sand or earth), then place in a chemical waste container. Transport to well ventilated area and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2% detergent. Add about 10 parts of neutralizer per part of isocyanate, with mixing. Allow

substance to evaporate.

Methods for cleaning up Do not direct water at spill or source of leak. Decontaminate floor with decontamination

solution letting stand for at least 15 minutes.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in

confined areas. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place.

Incompatible materials Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------------------------|----------------|--------------------------------|---------------------------------------|
| 4,4-Methylenediphenyl diisocyanate | TWA: 0.005 ppm | Ceiling: 0.02 ppm | IDLH: 75 mg/m ³ |
| 101-68-8 | | Ceiling: 0.2 mg/m ³ | Ceiling: 0.020 ppm 10 min |
| | | | Ceiling: 0.2 mg/m ³ 10 min |
| | | | TWA: 0.005 ppm |
| | | | TWA: 0.05 mg/m ³ |

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

AppearanceviscousOdorAromatic

Color brown Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No information available
Melting point / freezing point
Boiling point / boiling range
Flash point 198 °C / 388.4 °F
Evaporation rate No information available
Flammability (solid, gas)
Flammability Limit in Air

Upper flammability limit:No information availableLower flammability limit:No information available

Vapor pressure ~0

Vapor density No information available

Relative density 1.234

Water solubility insoluble Reacts with water Solubility in other solvents
Partition coefficient No information available 150-250 mPa s

Explosive propertiesOxidizing properties
No information available
No information available

Other Information

Softening point
Molecular weight
VOC Content (%)
Density
No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization may occur.

Conditions to avoid

Keep from any possible contact with water. Extremes of temperature and direct sunlight. Storage near to reactive materials.

Incompatible materials

Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract. May cause sensitization by inhalation. Harmful by

inhalation.

Eye contact Irritating to eyes.

Skin contactRepeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Irritating to skin.

Ingestion

Based on available data, the classification criteria are not met.

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|-----------------|-------------------------|-------------------------|
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | = 49 g/kg (Rat) | > 9400 mg/kg (Rabbit) | = 490 mg/m³ (Rat) 4 h |
| 4,4-Methylenediphenyl diisocyanate = 31600 mg/kg (Rat) = 9200 mg/kg (Rat) | | - | = 369 mg/m³ (Rat) 4 h |

Information on toxicological effects

Symptoms May cause an allergic skin reaction. Redness.

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

Sensitization
Germ cell mutagenicity
Carcinogenicity

Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.

This product contains one or more substances which are classified by IARC as

carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly

carcinogenic to humans (Group 2B).

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--|-------|---------|-----|------|
| lsocyanic acid, polymethylenepolyphenylen e ester 9016-87-9 | - | Group 3 | - | - |
| 4,4-Methylenediphenyl diisocyanate 101-68-8 | • | Group 3 | - | - |

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Based on available data, the classification criteria are not met.
Causes damage to organs through prolonged or repeated exposure.

Chronic toxicity Repeated or prolonged exposure may cause central nervous system damage. Repeated or

prolonged contact causes sensitization, asthma and eczemas.

Target Organ EffectsRespiratory system, Eyes, Skin, Central nervous system.Aspiration hazardBased on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

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

ATEmix (oral) 18,281.00 **ATEmix (dermal)** 17,108.00

ATEmix (inhalation-dust/mist) 3.30 18282 17094 4

12. ECOLOGICAL INFORMATION

Ecotoxicity

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDGNot regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | SARA 313 - Threshold Values % | |
|--|-------------------------------|--|
| Isocyanic acid, polymethylenepolyphenylene ester - 9016-87-9 | 1.0 | |
| 4,4-Methylenediphenyl diisocyanate - 101-68-8 | 1.0 | |
| Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl] 5873-54-1 | 1.0 | |

SARA 311/312 Hazard Categories

| Acute health hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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) |
|------------------------------------|--------------------------|----------------|--------------------------|
| 4,4-Methylenediphenyl diisocyanate | 5000 lb | - | RQ 5000 lb final RQ |
| 101-68-8 | | | 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 |
|---|------------|---------------|--------------|
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | X | - | - |
| 4,4-Methylenediphenyl diisocyanate 101-68-8 | Х | X | Х |
| Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]- 5873-54-1 | X | - | • |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 3 Flammability 1 Instability 0 Physical and Chemical

Properties -

HMIS Health hazards 3* Flammability 1 Physical hazards 0 Personal protection X

 Issue Date
 02-Jun-2015

 Revision Date
 02-Jun-2015

Revision NoteNo information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet