

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/03/2013 Revision date: 06/13/2023 Version: 4.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : RAKU® TOOL EA-2800

Product code : 07.03.0011

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

RAMPF Group, Inc. 49037 Wixom Tech Drive

Wixom, 48393

T 2482950223 - F 2482950224

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300 or +1-703-527-3887 CCN 649907

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2 Skin sensitization, Category 1

Causes serious eye irritation
May cause an allergic skin reaction

Causes skin irritation

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : Causes skin irritation

May cause an allergic skin reaction Causes serious eye irritation

Precautionary statements (GHS-US) : Avoid breathing dust, fume, gas, mist, vapors, spray.

Wash hands, forearms and face thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace

Wear eye protection, protective gloves, protective clothing.

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

and easy to do. Continue rinsing

Specific treatment (see After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap, If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing on this label) If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Wash contaminated clothing before reuse.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	(CAS-No.) 25068-38-6	60 - 99	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general

: Wash contaminated clothing before re-use. Never give anything to an unconscious person. If you feel unwell, seek medical advice.

First-aid measures after inhalation

- First-aid measures after skin contact
- : Remove person to fresh air and keep comfortable for breathing. Call a doctor.
- Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention. May cause an allergic skin reaction. Remove material from skin immediately. Wash off immediately with soap and plenty of water for at least 15 minutes. Do not use solvents or thinners to dissolve the material. Take off contaminated clothing and wash before reuse. Get medical attention immediately if symptoms occur. Allergic symptoms may be delayed.

First-aid measures after eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Consult a doctor/medical service

First-aid measures after ingestion

 Rinse mouth with water. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

: Carbon dioxide. Dry powder. Water spray. Alcohol-resistant foam.

5.2. Specific hazards arising from the chemical

Reactivity

: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Clean up any spills as soon as possible, using an absorbent material to collect it.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment, do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment

: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up

: Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

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6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Use only outdoors or in a well-ventilated area. Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) (25068-38-6)		
DNEL	DNEL	12.3 mg/m³ Acute, inhalation
PNEC	PNEC	0.196 mg/l soil

8.2. Appropriate engineering controls

Appropriate engineering controls

: Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

Hand protection:

Chemically resistant protective gloves. butyl rubber (Butyl) -=0.7 mm thickness; Nitrile rubber (Nitrile) - 0.4 mm thickness; Select the appropriate glove material adhering to the breakthrough time, permeation rate and the degradation. Because of the great variety of glove types, the manufacturer's instructions for use must be adhered to.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

breathing appartus needed only when vapor or mist is formed. Use a NIOSH approved mask.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Emerald Green

Odor : mild

Odor threshold : No data available pH : No data available Melting point : No data available Freezing point : No data available Boiling point : > 200 °C

Boiling point : $> 200 \, ^{\circ}\text{C}$ Flash point : $> 200 \, ^{\circ}\text{C}$

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available

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Specific gravity / density : 1.17 g/cm³ Solubility : No data available Log Pow : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available Viscosity, kinematic No data available : 10000 - 15000 cP Viscosity, dynamic **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No additional information available

Conditions to avoid 10.4.

No additional information available

Incompatible materials

Acids. Bases. Oxidizing agents.

Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation)

Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) (25068-38-6)	
LD50 oral rat	> 2000 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)

Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Causes serious eye irritation. Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified : Not classified Reproductive toxicity Specific target organ toxicity - single exposure : Not classified Specific target organ toxicity - repeated : Not classified

exposure

Aspiration hazard : Not classified Viscosity, kinematic : No data available

SECTION 12: Ecological information

Toxicity

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Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) (25068-38-6)	
LC50 fish 2	2.3 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss; Semi-static
	system; Fresh water, Experimental value)

12.2. Persistence and degradability

Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) (25068-38-6)	
Persistence and degradability	Not readily biodegradable in water. Hydrolysis in water. Low potential for adsorption in soil.

12.3. Bioaccumulative potential

Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) (25068-38-6)	
BCF other aquatic organisms 1	3-31,BCF
Log Pow	>= 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) (25068-38-6)	
Surface tension	0.0587-0.0589,20 °C
Log Koc	Koc,SRC PCKOCWIN v2.0; 445; QSAR; log Koc; SRC PCKOCWIN v2.0; 2.65; QSAR

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste) : Disposal must be done according to official regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O.S. (LIQUID EPOXY RESIN)), 9, III

UN-No. (IMDG) : 308

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class (IMDG) : 9 - Miscellaneous dangerous substances and articles

Packing group (IMDG) : III - substances presenting low danger

Air transport

Transport document description (IATA) : UN 3082 (ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O.S. (LIQUID EPOXY

RESIN)), 9, III

UN-No. (IATA) : 3082

Class (IATA) : 9 - Miscellaneous Dangerous Goods

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) (25068-38-6)		
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).	

15.2. International regulations

CANADA

Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) (25068-38-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

RAKU® TOOL EA-2800	
U.S California - Proposition 65 - Carcinogens List	Yes
U.S California - Proposition 65 - Developmental Toxicity	No
U.S California - Proposition 65 - Reproductive Toxicity - Female	No
U.S California - Proposition 65 - Reproductive Toxicity - Male	No



This product can expose you to Reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

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Full text of H-phrases:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H401	Toxic to aquatic life

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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