



Safety Data Sheet dated 11/9/2020, version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Mixture identification:
Trade name: RP 2160

1.2. Relevant identified uses of the substance or mixture and uses advised against Uses advised against:

Not suitable for self help.

1.3. Details of the supplier of the safety data sheet

Boldan Oy, Matkuntie 3, FI-05200 Rajamäki, +358 (0)9 853 1042, www.boldan.fi

Competent person responsible for the safety data sheet:

info@boldan.fi

1.4. Emergency telephone number

n. +39 0521-812188 Fax n. +39 0521-812195

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

- ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
- ⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.
- ⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.
- ☠ Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash the tools thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/clothing and eye/face protection.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P391 Collect spillage.

Special Provisions:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contains

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)
Formaldehyde, oligomeric reac. products with 1-chloro-2,3-epoxypropane, phenol: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

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- 2.3. Other hazards
 vPvB Substances: None - PBT Substances: None
 Other Hazards:
 No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 80%	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	Index number: 603-074-00-8 CAS: 25068-38-6 EC: 500-033-5 REACH No.: 01-2119456619-26-XXXX	<ul style="list-style-type: none"> ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A, 1B H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 10% - < 20%	Formaldehyde, oligomeric reac. products with 1-chloro-2,3-epoxypropane, phenol	CAS: 9003-36-5 EC: 500-006-8 REACH No.: 01-2119454392-40-XXXX	<ul style="list-style-type: none"> ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A, 1B H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

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- 5.1. Extinguishing media
Suitable extinguishing media:
CO₂ or Dry chemical fire extinguisher.
Extinguishing media which must not be used for safety reasons:
None in particular.
- 5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
- 5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Wash with plenty of water.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Store in original containers, dry, tightly closed, in a cool and well-ventilated area.
Avoid contact with skin, eyes and clothing.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
No occupational exposure limit available
DNEL Exposure Limit Values
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

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Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

Worker Professional: 8.33 mg/kg - Consumer: 3.571 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 8.33 mg/kg - Consumer: 3.571 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Worker Professional: 12.25 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Formaldehyde, oligomeric reac. products with 1-chloro-2,3-epoxypropane, phenol - CAS: 9003-36-5

Worker Professional: 8.3 04 - Exposure: Human Dermal - Frequency: Short Term, local effects

Worker Professional: 104.15 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 29.39 mg/m³ - Consumer: 8.7 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 62.5 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 6.25 - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

Target: Fresh Water - Value: 3 mg/l

Target: Marine water - Value: 0.3 mg/l

Target: Freshwater sediments - Value: 0.5 mg/l

Target: Marine water sediments - Value: 0.5 mg/l

Formaldehyde, oligomeric reac. products with 1-chloro-2,3-epoxypropane, phenol - CAS: 9003-36-5

Target: Fresh Water - Value: 0.003 mg/l

Target: Marine water - Value: 0.0003 mg/l

Target: Freshwater sediments - Value: 0.294 mg/kg/d

Target: Marine water sediments - Value: 0.0294 mg/kg/d

Target: 08 - Value: 0.237 mg/kg/d

8.2. Exposure controls

Eye protection:

Wear protective goggles (ref. Standard EN 166).

Protection for skin:

Safety shoes.

Wear work clothes with long sleeves and safety footwear for professional use of category I (REF. Dir. 89/686/EEC and EN 344).

Protection for hands:

Protect your hands with work gloves (ref. Directive 89/686 / EEC and its amendments and EN 374/2003)

Respiratory protection:

Use adequate protective respiratory equipment. (Ref. Dir. 89/686 / EEC, as amended - UNI PROTECTED / 1998 - UNI EN 529/2006)

Thermal Hazards:

None

Environmental exposure controls:

Prevent from entering sewers, basements or any place where its accumulation can be dangerous.

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	liquid, colourless	--	--
Odour:	low	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	> 200°C	--	--
Flash point:	> 100°C ° C	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	1.15 - 1.20 g/ ml	--	--
Solubility in water:	insoluble	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

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Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
COV:	--	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

In normal use and storage, hazardous reactions are not predictable.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 30.000 mg/kg

i) STOT-repeated exposure:

Test: NOAEC - Route: Oral - Species: Rat = 50 mg/kg

Test: NOAEC - Route: Skin - Species: Rat = 100 mg/kg

Formaldehyde, oligomeric reac. products with 1-chloro-2,3-epoxypropane, phenol - CAS: 9003-36-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2.000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2.000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit 0.7 - Duration: 4h

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

e) germ cell mutagenicity;

f) carcinogenicity;

g) reproductive toxicity;

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- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.
N.A.

12.2. Persistence and degradability

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Biodegradability: No data available.

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

Biodegradability: not biodegradable

Formaldehyde,oligomeric reac. products with 1-chloro-2,3-epoxypropane,phenol - CAS: 9003-36-5

Biodegradability: Non-readily biodegradable

12.3. Bioaccumulative potential

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Bioaccumulation: Information not available

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

Bioaccumulation: Information not available

Formaldehyde,oligomeric reac. products with 1-chloro-2,3-epoxypropane,phenol - CAS: 9003-36-5

Bioaccumulation: Potentially bioaccumulative

12.4. Mobility in soil

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Mobility in soil: No data available

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

Mobility in soil: No data available

Formaldehyde,oligomeric reac. products with 1-chloro-2,3-epoxypropane,phenol - CAS: 9003-36-5

Mobility in soil: No data available

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 3082

IATA-Un number: 3082

IMDG-Un number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)

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- 14.3. Transport hazard class(es)
- | | |
|-------------------------------------|----|
| ADR-Class: | 9 |
| ADR-Label: | 9 |
| ADR - Hazard identification number: | 90 |
| IATA-Class: | 9 |
| IATA-Label: | 9 |
| IMDG-Class: | 9 |
- 14.4. Packing group
- | | |
|---------------------|-----|
| ADR-Packing Group: | III |
| IATA-Packing group: | III |
| IMDG-Packing group: | III |
- 14.5. Environmental hazards
- | | |
|-------------------|------------------|
| Marine pollutant: | Marine pollutant |
|-------------------|------------------|
- 14.6. Special precautions for user
- | | |
|------------------------------|--|
| ADR-Tunnel Restriction Code: | E |
| Rail (RID): | 3082 |
| IMDG-Technical name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (Epoxy resin) |
| IMDG-EMS: | F-A S-F |
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
- No

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Dir. 98/24/EC (Risks related to chemical agents at work)
 - Dir. 2000/39/EC (Occupational exposure limit values)
 - Regulation (EC) n. 1907/2006 (REACH)
 - Regulation (EC) n. 1272/2008 (CLP)
 - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 - Regulation (EU) 2015/830
 - Regulation (EU) n. 286/2011 (ATP 2 CLP)
 - Regulation (EU) n. 618/2012 (ATP 3 CLP)
 - Regulation (EU) n. 487/2013 (ATP 4 CLP)
 - Regulation (EU) n. 944/2013 (ATP 5 CLP)
 - Regulation (EU) n. 605/2014 (ATP 6 CLP)
 - Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 - Regulation (EU) n. 2016/918 (ATP 8 CLP)
 - Regulation (EU) n. 2016/1179 (ATP 9 CLP)
 - Regulation (EU) n. 2017/776 (ATP 10 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
- None
- Where applicable, refer to the following regulatory provisions :
- Directive 2012/18/EU (Seveso III)
 - Regulation (EC) nr 648/2004 (detergents).
 - Dir. 2004/42/EC (VOC directive)
- Provisions related to directive EU 2012/18 (Seveso III):
- Seveso III category according to Annex 1, part 1
 - Product belongs to category: E2
- 15.2. Chemical safety assessment
- No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

- Text of phrases referred to under heading 3:
- H319 Causes serious eye irritation.

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H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H411 Toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.
 Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
 Commission of the European Communities
 SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
 Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ATE: Acute Toxicity Estimate
 ATEmix: Acute toxicity Estimate (Mixtures)
 CAS: Chemical Abstracts Service (division of the American Chemical Society).
 CLP: Classification, Labeling, Packaging.
 DNEL: Derived No Effect Level.
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

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ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.