

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

SECTION 1. IDENTIFICATION

Product name : EPOCAST® 2223 A-40 US

Manufacturer or supplier's details

Company name of supplier : Huntsman Advanced Materials Americas LLC
Address : P.O. Box 4980
The Woodlands,
TX 77387
United States of America
Telephone : Non-Emergency: (800) 257-5547
E-mail address of person responsible for the SDS : MSDS@huntsman.com
Emergency telephone number : Chemtrec: (800) 424-9300 or (703) 527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Epoxy constituents
Epoxy constituents

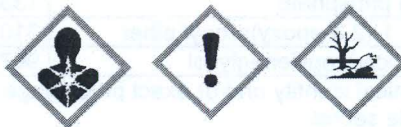
SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2
Eye irritation : Category 2A
Skin sensitisation : Category 1
Reproductive toxicity : Category 2
Acute aquatic toxicity : Category 2
Chronic aquatic toxicity : Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H411 Toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P391 Collect spillage.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Bisphenol A epoxy resin	25068-38-6	30 - 60
tris(methylphenyl) phosphate	1330-78-5	3 - 7
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	3101-60-8	1 - 3
diglycidylether of polypropyleneglycol	9072-62-2	1 - 3

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

- If inhaled : Call a physician or poison control centre immediately.
If unconscious place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Induce vomiting immediately and call a physician.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : No data is available on the product itself.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : No data is available on the product itself.
- Specific extinguishing methods : No data is available on the product itself.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, : Use personal protective equipment.

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
 Date of first issue: 09/20/2016

- protective equipment and emergency procedures : Ensure adequate ventilation.
- Environmental precautions : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
 Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Avoid formation of aerosol.
 Do not breathe vapours/dust.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Dispose of rinse water in accordance with local and national regulations.
 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Strong acids
 Strong bases
 Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters****Personal protective equipment**

- Respiratory protection : No personal respiratory protective equipment normally required.

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- Hand protection
Material : butyl-rubber
Break through time : > 8 h
Solvent-resistant gloves (butyl-rubber)
Nitrile rubber
10 - 480 min
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
- Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : paste
- Colour : white
- Odour : slight
- Odour Threshold : No data is available on the product itself.
- pH : No data is available on the product itself.
- Flash point : > 198 °C Method: estimated, closed cup
- Evaporation rate : No data is available on the product itself.
- Flammability (solid, gas) : No data is available on the product itself.
- Flammability (liquids) : No data is available on the product itself.
- Upper explosion limit : No data is available on the product itself.
- Lower explosion limit : No data is available on the product itself.
- Vapour pressure : No data is available on the product itself.

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

Relative vapour density : No data is available on the product itself.
Relative density : No data is available on the product itself.
Density : 1.5 g/cm³
Solubility(ies)
Water solubility : No data is available on the product itself.
Solubility in other solvents : No data is available on the product itself.
Partition coefficient: n-octanol/water : No data is available on the product itself.
Auto-ignition temperature : No data is available on the product itself.
Thermal decomposition : No data is available on the product itself.
Self-Accelerating decomposition temperature (SADT) : No data is available on the product itself.
Viscosity
Viscosity, dynamic : 48,000 mPa.s

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.
Chemical stability : No decomposition if stored and applied as directed.
Possibility of hazardous reactions : No decomposition if stored and applied as directed.
Conditions to avoid : No data available
Hazardous decomposition products : Burning produces noxious and toxic fumes.
Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data is available on the product itself.

Acute toxicity

Components:

Bisphenol A epoxy resin:

Acute oral toxicityComponents : LD50 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 420
Assessment: The substance or mixture has no acute oral toxicity

tris(methylphenyl) phosphate:

Acute oral toxicityComponents : LD50 (Rat): > 20,000 mg/kg

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

Acute oral toxicityComponents : LD50 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 425
GLP: yes
Assessment: The substance or mixture has no acute oral toxicity

diglycidylether of polypropyleneglycol:
Acute oral toxicityComponents : LD50 (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Components:

tris(methylphenyl) phosphate:
Acute inhalation toxicity : LC50 (Rat): > 11.1 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Components:

Bisphenol A epoxy resin:
Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

tris(methylphenyl) phosphate:
Acute dermal toxicity : LD50 (Rabbit): 3,700 mg/kg
Assessment: The component/mixture is low toxic after single contact with skin.

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity

Acute toxicity (other routes of administration) : No data available

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: - Date of first issue: 09/20/2016

Cell type: Somatic
Application Route: Oral
Dose: 0 - 5000 mg/kg
Method: OPPTS 870.5395
Result: negative

Components:

Bisphenol A epoxy resin:
Germ cell mutagenicity-
Assessment : Weight of evidence does not support classification as a germ cell mutagen.

tris(methylphenyl) phosphate:
Germ cell mutagenicity-
Assessment : In vitro tests did not show mutagenic effects

Germ cell mutagenicity-
Assessment : No data available

Carcinogenicity

Components:

Bisphenol A epoxy resin:
Species: Rat, (male and female)
Application Route: Oral
Exposure time: 24 month(s)
Dose: 15 mg/kg
Frequency of Treatment: 7 days/week
Method: OECD Test Guideline 453
Result: negative

Species: Mouse, (male)
Application Route: Dermal
Exposure time: 24 month(s)
Dose: 0.1 mg/kg
Frequency of Treatment: 3 days/week
Method: OECD Test Guideline 453
Result: negative

Species: Rat, (female)
Application Route: Dermal
Exposure time: 24 month(s)
Dose: 1 mg/kg
Frequency of Treatment: 5 days/week
Method: OECD Test Guideline 453
Result: negative

Components:

tris(methylphenyl) phosphate:
Carcinogenicity -
Assessment : Animal testing did not show any carcinogenic effects.

IARC

Group 1: Carcinogenic to humans

EPOCAST® 2223 A-40 US

Version 1.0	Revision Date: 09/20/2016	SDS Number: 400001014905	Date of last issue: - Date of first issue: 09/20/2016
----------------	------------------------------	-----------------------------	--

quartz (SiO₂)

Group 2B: Possibly carcinogenic to humans

carbon black

titanium dioxide

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

Known to be human carcinogen

Talc (Mg₃H₂(SiO₃)₄)**Reproductive toxicity****Components:**

Bisphenol A epoxy resin:
Effects on fertility

: Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Dose: >750 milligram per kilogram
General Toxicity - Parent: No-observed-effect level: 540 mg/kg body weight
General Toxicity F1: No-observed-effect level: 540 mg/kg body weight
Symptoms: No adverse effects
Method: OECD Test Guideline 416
Result: No effects on fertility and early embryonic development were detected.

tris(methylphenyl) phosphate:

Species: Rat, male and female
Application Route: Oral
Target Organs: Testes
Method: OECD Test Guideline 415

Target Organs: Ovary

Components:

Bisphenol A epoxy resin:
Effects on foetal
development

: Species: Rabbit, female
Application Route: Dermal
General Toxicity Maternal: No observed adverse effect level: 30 mg/kg body weight
Method: Other guidelines
Result: No teratogenic effects

Species: Rabbit, female
Application Route: Oral
General Toxicity Maternal: No observed adverse effect level: 60 mg/kg body weight
Method: OECD Test Guideline 414

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

Result: No teratogenic effects

Species: Rat, female
Application Route: Oral
General Toxicity Maternal: No observed adverse effect level:
180 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects

tris(methylphenyl) phosphate:

Species: Rat, female
Application Route: Oral
General Toxicity Maternal: No-observed-effect level: 20 mg/kg
body weight
Method: OPPTS 870.3700
Result: Teratogenic effects

Components:

tris(methylphenyl) phosphate:
Reproductive toxicity -
Assessment

: Some evidence of adverse effects on sexual function and
fertility, and/or on development, based on animal experiments.

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity

Components:

Bisphenol A epoxy resin:
Species: Rat, male and female
NOAEL: 50 mg/kg
Application Route: Ingestion
Exposure time: 14 Weeks
Number of exposures: 7 d
Method: Subchronic toxicity

Species: Rat, male and female
NOEL: 10 mg/kg
Application Route: Skin contact
Exposure time: 13 Weeks
Number of exposures: 5 d
Method: Subchronic toxicity

Species: Mouse, male
NOAEL: 100 mg/kg
Application Route: Skin contact
Exposure time: 13 Weeks
Number of exposures: 3 d
Method: Subchronic toxicity

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

tris(methylphenyl) phosphate:
Species: Rat, male and female
NOEL: 1000 mg/kg
Application Route: Ingestion
Exposure time: 2,160 h
Method: Subchronic toxicity

Repeated dose toxicity - Assessment : No data available

Aspiration toxicity

No data available

Experience with human exposure

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Bisphenol A epoxy resin:
Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): 1.5 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water

EPOCAST® 2223 A-40 US

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	09/20/2016	400001014905	Date of first issue: 09/20/2016

Method: OECD Test Guideline 203

tris(methylphenyl) phosphate:
 Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.6 mg/l
 Exposure time: 96 h

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
 Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 7.5 mg/l
 Exposure time: 96 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 203

diglycidylether of polypropyleneglycol:
 Toxicity to fish : LC50: > 100 mg/l
 Exposure time: 96 h
 Method: Directive 67/548/EEC, Annex V, C.1.

Components:

Bisphenol A epoxy resin:
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.7 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: Fresh water

tris(methylphenyl) phosphate:
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.146 mg/l
 Exposure time: 48 h
 GLP: yes

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): ca. 67.9 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 202
 GLP: yes

diglycidylether of polypropyleneglycol:
 Toxicity to daphnia and other aquatic invertebrates : EC50: > 320 mg/l
 Exposure time: 24 h
 Method: Directive 67/548/EEC, Annex V, C.2.

Components:

Bisphenol A epoxy resin:
 Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 9.4 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: EPA-660/3-75-009

tris(methylphenyl) phosphate:
 Toxicity to algae : ErC50: 0.4042 mg/l
 Exposure time: 72 h

EPOCAST® 2223 A-40 US

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	09/20/2016	400001014905	Date of first issue: 09/20/2016

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
 Toxicity to algae : EbC50 (Selenastrum capricornutum (green algae)): ca. 9 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 201
 GLP: yes

M-Factor (Acute aquatic toxicity) : No data available

Components:

tris(methylphenyl) phosphate:
 Toxicity to fish (Chronic toxicity) : NOEC (Other): 0.01 mg/l
 Exposure time: 28 d

Components:

Bisphenol A epoxy resin:
 Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.3 mg/l
 Exposure time: 21 d
 Test Type: semi-static test
 Test substance: Fresh water
 Method: OECD Test Guideline 211

tris(methylphenyl) phosphate:
 Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.1 mg/l
 Exposure time: 21 d
 M-Factor (Chronic aquatic toxicity) : No data available

Components:

Bisphenol A epoxy resin:
 Toxicity to bacteria : IC50 (activated sludge): > 100 mg/l
 Exposure time: 3 h
 Test Type: static test
 Test substance: Fresh water

tris(methylphenyl) phosphate:
 Toxicity to bacteria : EC50 (activated sludge): > 1,000 mg/l
 Exposure time: 3 h

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
 Toxicity to bacteria : EC50: > 1,000 mg/l
 Exposure time: 3 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 209
 GLP:

diglycidylether of polypropyleneglycol:
 Toxicity to bacteria : EC50: > 100 mg/l
 Exposure time: 3 h
 Method: Information given is based on data obtained from

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	09/20/2016	400001014905	Date of first issue: 09/20/2016

similar substances.

Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

Ecotoxicology Assessment
Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

Further information:
No data available

Persistence and degradability

Components:

Bisphenol A epoxy resin:
Biodegradability: Inoculum: Sewage (STP effluent)
Concentration: 20 mg/l
Result: Not readily biodegradable.
Biodegradation: 5 %
Exposure time: 28 d
Method: OECD Test Guideline 301Ftris(methylphenyl) phosphate:
Biodegradability: Result: Not readily biodegradable.
Biodegradation: 24.2 %
Exposure time: 28 d
Method: OECD Test Guideline 301Dp-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
Biodegradability: Test Type: aerobic
Inoculum: activated sludge
Concentration: 5 mg/l
Result: Not readily biodegradable.
Biodegradation: ca. 1.1 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes

Biochemical Oxygen Demand (BOD) : No data available

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

Chemical Oxygen Demand (COD) : No data available

BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon (DOC) : No data available

Physico-chemical removability : No data available

Components:

Bisphenol A epoxy resin:
Stability in water : Degradation half life(DT50): 4.83 d (25 °C) pH: 4
Method: OECD Test Guideline 111
Remarks: Fresh water

Degradation half life(DT50): 7.1 d (25 °C) pH: 9
Method: OECD Test Guideline 111
Remarks: Fresh water

Degradation half life(DT50): 3.58 d (25 °C) pH: 7
Method: OECD Test Guideline 111
Remarks: Fresh water

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
Stability in water : Degradation half life(DT50): 17 d (25 °C) pH: 7
Method: OECD Test Guideline 111
GLP: No information available.
Remarks: Fresh water

Photodegradation : No data available

Impact on Sewage Treatment : No data available

Bioaccumulative potential

Components:

Bisphenol A epoxy resin:
Bioaccumulation : Bioconcentration factor (BCF): 31
Remarks: Does not bioaccumulate.

Components:

Bisphenol A epoxy resin:
Partition coefficient: n-octanol/water : log Pow: 3.242 (25 °C)
pH: 7.1
Method: OECD Test Guideline 117

tris(methylphenyl) phosphate:

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	09/20/2016	400001014905	Date of first issue: 09/20/2016

Partition coefficient: n-octanol/water : log Pow: 5.93

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
Partition coefficient: n-octanol/water : log Pow: 3.59 (20 °C)
pH: 7
Method: OECD Test Guideline 107

Mobility in soil

Mobility : No data available

Components:

Bisphenol A epoxy resin:
Distribution among environmental compartments : Koc: 445
tris(methylphenyl) phosphate:
Distribution among environmental compartments : Koc: 4.31 Method: OECD Test Guideline 121
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
Distribution among environmental compartments : OECD Test Guideline 121
log Koc: 2.88
Method: OECD Test Guideline 121

Stability in soil : No data available

Other adverse effects

Environmental fate and pathways : No data available

Results of PBT and vPvB assessment : No data available

Endocrine disrupting potential : No data available

Adsorbed organic bound halogens (AOX) : No data available

Hazardous to the ozone layer

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information - Product : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

Global warming potential (GWP) : No data available

EPOCAST® 2223 A-40 US

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	09/20/2016	400001014905	Date of first issue: 09/20/2016

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulation****IATA**

- UN/ID No. : UN 3082
- Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(TRICRESYL PHOSPHATE, BISPHENOL A EPOXY RESIN)
- Class : 9
- Packing group : III
- Labels : Miscellaneous
- Packing instruction (cargo aircraft) : 964
- Packing instruction (passenger aircraft) : 964

IMDG

- UN number : UN 3082
- Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TRICRESYL PHOSPHATE, BISPHENOL A EPOXY RESIN)
- Class : 9
- Packing group : III
- Labels : 9
- EmS Code : F-A, S-F
- Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**DOT Classification**

- UN/ID/NA number : UN 3082

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TRICRESYL PHOSPHATE, BISPHENOL A EPOXY RESIN)
Class : 9
Packing group : III
Labels : CLASS 9
ERG Code : 171
Marine pollutant : yes (TRICRESYL PHOSPHATE, BISPHENOL A EPOXY RESIN)

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 311/312 Hazards : Chronic Health Hazard
Acute Health Hazard

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

California Prop. 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

CH INV : The formulation contains substances listed on the Swiss Inventory, On the inventory, or in compliance with the inventory
TSCA : On the inventory, or in compliance with the inventory
DSL : All components of this product are on the Canadian DSL
AICS : Not in compliance with the inventory
NZIoC : Not in compliance with the inventory
ENCS : On the inventory, or in compliance with the inventory
KECI : On the inventory, or in compliance with the inventory
PICCS : On the inventory, or in compliance with the inventory
IECSC : On the inventory, or in compliance with the inventory
TCSI : On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

TSCA - 5(a) Significant New Use Rule List of Chemicals

No substances are subject to a Significant New Use Rule.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

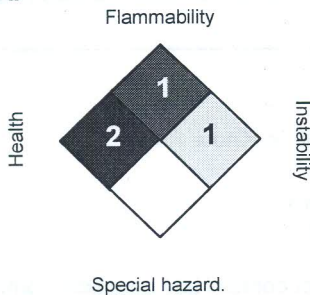
Version 1.0 Revision Date: 09/20/2016 SDS Number: 400001014905 Date of last issue: -
Date of first issue: 09/20/2016

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	1

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

Revision Date : 09/20/2016

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

The trademarks above are the property of Huntsman Corporation or an affiliate thereof.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE.

SAFETY DATA SHEET

HUNTSMAN

Enriching lives through innovation

EPOCAST® 2223 A-40 US

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	09/20/2016	400001014905	Date of first issue: 09/20/2016
