SAFETY DATA SHEET
E33 EPOXY GROUT BASE COMPONENT

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME E33 EPOXY GROUT BASE COMPONENT
CAS-No. 25668-38-6
SUPPLIER PAREX Ltd
Holly Lane Industrial Estate
Atherstone
Warwickshire
CV9 2QZ
Tel: +44 (0)1827 711755
(Mon-Fri 8:30-16:30)
Fax: +44 (0)1827 711330
sds@parex.co.uk
PRODUCT NO. TG12, TG13, TG18 (SDS 15)

2 HAZARDS IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
CLASSIFICATION (1999/45) Xi;R36/38. R43. N;R51/53.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification (67/548)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OXYRONE, MONO(C12-C14 ALKOXYMETHYL) DERIVATIVES</td>
<td></td>
<td>25668-38-6</td>
<td>30-60%</td>
<td>Xi;R36/38. N;R51/53. R43.</td>
</tr>
<tr>
<td>REACTION PRODUCT BIS A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOL WT &lt;=700)</td>
<td></td>
<td>25668-38-6</td>
<td>30-60%</td>
<td>Xi;R36/38. N;R51/53. R43.</td>
</tr>
<tr>
<td>REACTION PRODUCT BIS F - (EPICHLORHYDRIN); EPOXY RESIN (NUMBER AVERAGE MOL WT &lt;=700)</td>
<td></td>
<td>25668-38-6</td>
<td>10-30%</td>
<td>Xi;R36/38. N;R51/53. R43.</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases are Displayed in Section 16

CAS-No. 25668-38-6

4 FIRST-AID MEASURES

INHALATION
General first aid, rest, warmth and fresh air. Get medical attention if any discomfort continues.

INGESTION
DO NOT induce vomiting. Get medical attention immediately. Immediately rinse mouth and drink plenty of water (200-300 ml).

SKIN CONTACT
Remove contaminated clothing immediately and wash skin with soap and water.

EYE CONTACT
Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Extinguish with foam, carbon dioxide, dry powder or water fog.

SPECIAL FIRE FIGHTING PROCEDURES
Keep run-off water out of sewers and water sources. Dike for water control.

UNUSUAL FIRE & EXPLOSION HAZARDS
No unusual fire or explosion hazards noted.
SPECIFIC HAZARDS
In case of fire, toxic and corrosive gases may be formed.

PROTECTIVE MEASURES IN FIRE
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS
Do not discharge into drains, water courses or onto the ground.

SPILL CLEAN UP METHODS
For waste disposal, see section 13. Dam and absorb spillage with sand, sawdust or other absorbent.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Ensure there is sufficient ventilation in work area. Observe good chemical hygiene practices.

USAGE DESCRIPTION
Do not use outside manufacturers specification.

STORAGE PRECAUTIONS
Store in tightly closed original container in a dry and cool place.

STORAGE CLASS
Unspecified storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT COMMENTS
No exposure limits noted for ingredient(s).

PROTECTIVE EQUIPMENT

RESPIRATORY EQUIPMENT
No specific recommendations.

HAND PROTECTION
The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION
Wear approved safety goggles.

HYGIENE MEASURES
Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated.

SKIN PROTECTION
Avoid skin contact

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Viscous liquid

COLOUR Light (or pale) Yellow

ODOUR Characteristic

SOLUBILITY Insoluble in water Soluble in: Organic solvents

BOILING POINT (°C) >200@760mg Hg

MELTING POINT (°C) -5

RELATIVE DENSITY 1.13g/ml

VISCOITY 900-1050 mPas 25

FLASH POINT (°C) >140°C Not noted.

10 STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions and recommended use.
CONDITIONS TO AVOID
Avoid frost.

HAZARDOUS POLYMERISATION
May polymerise.

POLYMERISATION DESCRIPTION
Will polymerise with amines

MATERIALS TO AVOID
Amines

HAZARDOUS DECOMPOSITION PRODUCTS
In case of fire, toxic gases (CO, CO₂, NOₓ) may be formed.

11 TOXICOLOGICAL INFORMATION

INHALATION
May cause irritation to the respiratory system.

INGESTION
May cause discomfort if swallowed.

SKIN CONTACT
Irritating to skin. May cause sensitisation by skin contact.

EYE CONTACT
Irritating to eyes.

12 ECOLOGICAL INFORMATION

ECOTOXICITY
Dangerous for the environment: May cause long-term adverse effects in the aquatic environment. Harmful to Fish
EC 50, 48 Hrs, DAPHNIA, mg/l 2.8

DEGRADABILITY
The product is not readily biodegradable.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION
Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

DISPOSAL METHODS
Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

PROPER SHIPPING NAME
Environmentally Hazardous Substance, Liquid, NOS (Epoxide Resin)

<table>
<thead>
<tr>
<th>UN NO.</th>
<th>ADR PACK GROUP</th>
<th>RID CLASS NO.</th>
<th>UN NO. SEA</th>
<th>IMDG PACK GR.</th>
<th>UN NO. AIR</th>
<th>AIR PACK GR.</th>
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<tr>
<td>ROAD 3082</td>
<td>9</td>
<td>9</td>
<td>3082</td>
<td>III</td>
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<td>III</td>
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<tr>
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<td>ADR LABEL NO.</td>
<td>RID PACK GROUP</td>
<td>IMDG CLASS</td>
<td>MARINE POLLUTANT</td>
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<td>9</td>
<td>III</td>
<td>9</td>
<td>No.</td>
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</table>

15 REGULATORY INFORMATION

LABELLING
E33 EPOXY GROUT BASE COMPONENT

CONTAINS
OXYRONE, MONO(C12-C14 ALKOXYMETHYL) DERIVATIVES
REACTION PRODUCT BIS A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOL WT <=700)
REACTION PRODUCT BIS F -(EPICHLORHYDRIN); EPOXY RESIN (NUMBER AVERAGE MOL WT <=700)

RISK PHRASES
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37 Wear suitable gloves.
S57 Use appropriate containment to avoid environmental contamination.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

UK REGULATORY REFERENCES
ENVIRONMENTAL LISTING
Control of Pollution (Special Waste Regulations) Act 1980.
EU DIRECTIVES
STATUTORY INSTRUMENTS
Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.
APPROVED CODE OF PRACTICE
Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.
GUIDANCE NOTES
Workplace Exposure Limits EH40. CHIP for everyone HSG(108).
NATIONAL REGULATIONS

16 OTHER INFORMATION

REVISION DATE 28/01/2011
REV. NO./REPL. SDS GENERATED 3
SDS NO. 15
RISK PHRASES IN FULL
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

DISCLAIMER
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SAFETY DATA SHEET
E33 EPOXY GROUT FILLER COMPONENT

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME: E33 EPOXY GROUT FILLER COMPONENT

SUPPLIER: PAREX Ltd
Holly Lane Industrial Estate
Atherstone
Warwickshire
CV9 2QZ
Tel: +44 (0)1827 711755
(Mon-Fri 8:30-16:30)
Fax: +44 (0)1827 711330
sds@parex.co.uk

PRODUCT NO.: TG12, TG13 (SDS17)

2 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification (67/548)</th>
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<tr>
<td>SILICA SAND</td>
<td>238-878-4</td>
<td>14808-60-7</td>
<td>60-100%</td>
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</tbody>
</table>

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

INHALATION
Move the exposed person to fresh air at once.

INGESTION
Rinse mouth thoroughly. DO NOT INDUCE VOMITING! Get medical attention if any discomfort continues.

SKIN CONTACT
Wash the skin immediately with soap and water.

EYE CONTACT
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS
Avoid generation and spreading of dust. Shovel into dry containers. Cover and move the containers. Flush the area with water.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Avoid spilling, skin and eye contact. Avoid handling which leads to dust formation.

STORAGE PRECAUTIONS
Store in tightly closed original container in a dry and cool place. Keep in original container.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION
E33 EPOXY GROUT FILLER COMPONENT

<table>
<thead>
<tr>
<th>Name</th>
<th>Std</th>
<th>TWA - 8 hrs</th>
<th>STEL - 15 min</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICA SAND</td>
<td>WEL</td>
<td>0,1 mg/m³</td>
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</tr>
</tbody>
</table>

WEL = Workplace Exposure Limit.

PROTECTIVE EQUIPMENT

ENGINEERING MEASURES
Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust.

RESPIRATORY EQUIPMENT
No specific recommendation made, but protection against nuisance dust must be used when the general level exceeds 10 mg/m³.

HAND PROTECTION
Use suitable protective gloves if risk of skin contact.

EYE PROTECTION
Wear approved safety goggles.

HYGIENE MEASURES
DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

APPEARANCE Powder, dust

STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions.

HAZARDOUS DECOMPOSITION PRODUCTS
Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

TOXICOLOGICAL INFORMATION

INHALATION
Dust in high concentrations may irritate the respiratory system.

INGESTION
May cause discomfort if swallowed.

SKIN CONTACT
Powder may irritate skin.

EYE CONTACT
Particles in the eyes may cause irritation and smarting.

ECOTOXICITY
Not regarded as dangerous for the environment.

DISPOSAL CONSIDERATIONS

DISPOSAL METHODS
Dispose of waste and residues in accordance with local authority requirements.

TRANSPORT INFORMATION

ROAD TRANSPORT NOTES Not Classified
RAIL TRANSPORT NOTES Not classified.
SEA TRANSPORT NOTES Not classified.
AIR TRANSPORT NOTES Not classified.
15 REGULATORY INFORMATION

RISK PHRASES
NC Not classified.

SAFETY PHRASES
NC Not classified.

UK REGULATORY REFERENCES
The Control of Substances Hazardous to Health Regulations 1988.

EU DIRECTIVES

STATUTORY INSTRUMENTS
Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE
Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

GUIDANCE NOTES
Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

NATIONAL REGULATIONS

16 OTHER INFORMATION

REV. NO./REPL. SDS GENERATED 6
SDS NO. 17
RISK PHRASES IN FULL
NC Not classified.

DISCLAIMER
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SAFETY DATA SHEET
E33 EPOXY GROUT HARDENER COMPONENT

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME E33 EPOXY GROUT HARDENER COMPONENT
SUPPLIER PAREX Ltd
Holly Lane Industrial Estate
Atherstone
Warwickshire
CV9 2QZ
Tel: +44 (0)1827 711755
(Mon-Fri 8:30-16:30)
Fax: +44 (0)1827 711330
sds@parex.co.uk
PRODUCT NO. TG12, TG13, TG 18 (SDS16)

2 HAZARDS IDENTIFICATION

Harmful by inhalation, in contact with skin and if swallowed. Causes burns. May cause sensitisation by skin contact. Possible risk of impaired fertility.
CLASSIFICATION (1999/45) Xn;R20/21/22. Repr. Cat. 3;R62. C;R34. R43.

3 COMPOSITION/INFORMATION ON INGREDIENTS

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<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification (67/548)</th>
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<tbody>
<tr>
<td>BENZYL ALCOHOL</td>
<td>100-51-6</td>
<td>30-60%</td>
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<td>DIETHYLENETRIAMINE</td>
<td>203-865-4</td>
<td>111-40-0</td>
<td>30-60%</td>
<td>C;R34 Xn;R21/22 R43</td>
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<td>P'-p' ISOPROPYLIDENEDIPHENOL</td>
<td>80-05-7</td>
<td>10-30%</td>
<td>Repr. Cat. 3;R62. X;R37,R41. R43,R52.</td>
<td></td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

INHALATION
Move into fresh air and keep at rest.

INGESTION
Get medical attention. Immediately rinse mouth and provide fresh air.

SKIN CONTACT
Remove contaminated clothing immediately and wash skin with soap and water.

EYE CONTACT
Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Extinguish with foam, carbon dioxide, dry powder or water fog.

SPECIAL FIRE FIGHTING PROCEDURES
Beware, risk of formation of toxic and corrosive gases.

UNUSUAL FIRE & EXPLOSION HAZARDS
Vapours may ignite.

SPECIFIC HAZARDS
Oxides of Carbon, Benzoic Acid, Benzene

PROTECTIVE MEASURES IN FIRE
Use protective equipment appropriate for surrounding materials.

6 ACCIDENTAL RELEASE MEASURES
PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS
Do not discharge into drains, water courses or onto the ground.

SPILL CLEAN UP METHODS
Collect with absorbent, non-combustible material into suitable containers.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Read and follow manufacturer’s recommendations.

USAGE DESCRIPTION
Do not use outside manufacturers specification.

STORAGE CLASS
Corrosive storage.

8 EXPOSURE CONTROLS/PERSOAL PROTECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Std</th>
<th>TWA - 8 hrs</th>
<th>STEL - 15 min</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIETHYLENETRIAMINE</td>
<td>WEL</td>
<td>1 ppm(Sk)</td>
<td>4.3 mg/m3(Sk)</td>
<td></td>
</tr>
</tbody>
</table>

WEL = Workplace Exposure Limit.

ENGINEERING MEASURES
Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

RESPIRATORY EQUIPMENT
In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment.

HAND PROTECTION
For prolonged or repeated skin contact use suitable protective gloves.

EYE PROTECTION
wear suitable safety glasses to EN166

SKIN PROTECTION
Avoid skin contact

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Light viscous liquid

COLOUR Light (or pale) Amber

ODOUR Amine.

SOLUBILITY Immiscible with water

BOILING POINT (°C) >200@760mmHg

VAPOUR PRESSURE 0.3 Pa 20

VISCOSITY 25 mPas 23

AUTO IGNITION 395

TEMPERATURE (°C) FLAMMABILITY LIMIT - UPPER(%) 13.0

RELATIVE DENSITY 1.01(g/ml) 23

VOLATILE BY VOL. (%) NIL

FLASH POINT (°C) 96 °C

FLAMMABILITY LIMIT - LOWER(%) 1.0

10 STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID
Minimise contact with air to avoid degredation.

POLYMERISATION DESCRIPTION
Will polymerise with epoxy resins
HAZARDOUS DECOMPOSITION PRODUCTS
In case of fire, toxic gases (CO, CO₂, NOₓ) may be formed.

11 TOXICOLOGICAL INFORMATION

INHALATION
Upper respiratory irritation.

INGESTION
Irritating. May cause nausea, stomach pain and vomiting.

SKIN CONTACT
Irritating to skin.

EYE CONTACT
Irritating to eyes. Irritation of eyes and mucous membranes.

12 ECOLOGICAL INFORMATION

ECOTOXICITY
Harmful to Fish The product may have adverse effects on organisms in soil and water.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS
Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

PROPER SHIPPING NAME  CORROSIVE LIQUID N.O.S
PROPER SHIPPING NAME  (2, 2'-iminodiethylamine, benzyl alcohol, bisphenol A)
UN NO. ROAD  1760  ADR CLASS NO.  8
ADR PACK GROUP  II  RID CLASS NO.  8
RID PACK GROUP  II  UN NO. SEA  1760
IMDG CLASS  8  IMDG PACK GR.  II
UN NO. AIR  1760  AIR CLASS  8
AIR PACK GR.  II

15 REGULATORY INFORMATION

LABELLING

Corrosive  Harmful

CONTAINS
BENZYL ALCOHOL
DIETHYLENETRIAMINE
P'-p' ISOPROPYLDIENE-DIPHENOL

RISK PHRASES
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R43 May cause sensitisation by skin contact.
R62 Possible risk of impaired fertility.

SAFETY PHRASES
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
E33 EPOXY GROUT HARDENER COMPONENT

S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S60 This material and its container must be disposed of as hazardous waste.
S28 After contact with skin, wash immediately with plenty of water.

UK REGULATORY REFERENCES
The Control of Substances Hazardous to Health Regulations 1988.

EU DIRECTIVES

APPROVED CODE OF PRACTICE
Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES
Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

NATIONAL REGULATIONS

<table>
<thead>
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<th>16 OTHER INFORMATION</th>
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<tr>
<td>REVISION DATE</td>
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<tr>
<td>REV. NO./REPL. SDS GENERATED</td>
</tr>
<tr>
<td>SDS NO.</td>
</tr>
</tbody>
</table>

RISK PHRASES IN FULL
- R34 Causes burns.
- R20/22 Harmful by inhalation and if swallowed.
- R21/22 Harmful in contact with skin and if swallowed.
- R52 Harmful to aquatic organisms.
- R37 Irritating to respiratory system.
- R43 May cause sensitisation by skin contact.
- R62 Possible risk of impaired fertility.
- R41 Risk of serious damage to eyes.

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