

1 Identification

- **Product identifier**
- **Trade name:** Halo EFX Performance Clear and Colors
- **Article number:**
ZS101, ZS102, ZS103, ZS104, ZS105, ZS106, ZS107, ZS108, ZS109, ZS110, SZ111, ZS112, ZS113, ZS114, ZSP101, ZSP102, ZSP103
- **Application of the substance / the mixture** Coating
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Halo Composites, LLC
4403 Gator Trace Ln
Fort Pierce FL 34982
888-235-HALO (4256)
- **Information department:** 888-235-HALO (4256)
- **Emergency telephone number:** CHEMTREC 1-800-424-9300

2 Hazard identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS08 Health hazard

Germ Cell Mutagenicity - Category 1B

H340 May cause genetic defects.

Carcinogenicity - Category 1B

H350 May cause cancer.

Reproductive Toxicity - Category 2

H361 Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Repeated Exposure - Category 2

H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irritation - Category 2

H315 Causes skin irritation.

Skin Sensitizer - Category 1

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure - Category 3

H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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Trade name: Halo EFX Performance Clear and Colors

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• **Hazard pictograms**



GHS02



GHS07



GHS08

• **Signal word** *Danger*

• **Hazard-determining components of labeling:**

Solvent naphtha (petroleum), light aliph.
toluene
bis(1,2,2,6,6-Pentamethyl-4-piperidinyl) sebacate

• **Hazard statements**

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.

• **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P240 Ground and bond container and receiving equipment.
P242 Use non-sparking tools.
P243 Take actions to prevent static discharges.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P321 Specific treatment (see on this label).
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 3
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *1
Fire = 3
Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/Information on ingredients

- **Chemical characterization: Mixtures**
- **Description:**
Mixture: consisting of the following components.
Weight percentages

- **Dangerous components:**

1330-20-7 xylene	30-60% w/w
108-88-3 toluene	10-30% w/w
64742-89-8 Solvent naphtha (petroleum), light aliph.	10-30% w/w
8042-47-5 White Mineral oil	1-5% w/w
25973-55-1 2-(2-HYDROXY-3-5-DI--(TERT)-AMYLPHENYL)BENZOTRIAZOLE	≤ 1% w/w
41556-26-7 bis(1,2,2,6,6-Pentamethyl-4-piperidinyl) sebacate	≤ 1% w/w

- **SVHC**

25973-55-1 2-(2-HYDROXY-3-5-DI--(TERT)-AMYLPHENYL)BENZOTRIAZOLE

4 First aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:**
No further data; see item 7.

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- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

1330-20-7 xylene

EL Short-term value: 150 ppm
Long-term value: 100 ppm

EV Short-term value: 650 mg/m³, 150 ppm
Long-term value: 435 mg/m³, 100 ppm

108-88-3 toluene

EL Long-term value: 20 ppm
R

EV Long-term value: 20 ppm

- **Additional information:**

The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the skin.
Avoid contact with the eyes and skin.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

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9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:
 - Form: Liquid
 - Color: According to product specification
- Odor: Characteristic
- Odor threshold: Not determined.
- pH-value: Not determined.
- Change in condition
 - Melting point/Melting range: Undetermined.
 - Boiling point/Boiling range: 110 °C
- Flash point: 7 °C
- Flammability (solid, gaseous): Not applicable.
- Ignition temperature: 500 °C
- Decomposition temperature: Not determined.
- Auto igniting: Product is not selfigniting.
- Danger of explosion: In use, may form flammable/explosive vapour-air mixture.
- Explosion limits:
 - Lower: 1.1 Vol %
 - Upper: 7.0 Vol %
- Vapor pressure at 20 °C: 29 hPa
- Density at 20 °C: 0.86612 g/cm³
- Relative density: Not determined.
- Vapor density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with Water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
 - Dynamic: Not determined.
 - Kinematic: Not determined.
- Solvent content:
 - Organic solvents: 82.8 %
 - VOC content: 82.8 %
 - 716.9 g/l / 5.98 lb/gl
- Solids content: 17.2 %
- Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.

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- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

1330-20-7 xylene		
Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
108-88-3 toluene		
Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
The product can cause inheritable damage.
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**

1330-20-7 xylene:	3
108-88-3 toluene:	3
- **NTP (National Toxicology Program)**

None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, TDG, IMDG, IATA** UN1263
- **UN proper shipping name**
- **DOT** Paint
- **TDG** 1263 Paint, special provision 640D
- **IMDG, IATA** PAINT
- **Transport hazard class(es)**
- **DOT**



- **Class** 3 Flammable liquids
- **Label** 3
- **TDG, IMDG, IATA**



- **Class** 3 Flammable liquids
- **Label** 3
- **Packing group**
- **DOT, TDG, IMDG, IATA** II
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Warning: Flammable liquids
- **EMS Number:** F-E, S-E
- **Stowage Category** B
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

• **Transport/Additional information:**

- **DOT**
- **Quantity limitations** On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

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- **TDG**
 - **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

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- **IMDG**
- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging:
30 ml
Maximum net quantity per outer packaging:
500 ml
- **UN "Model Regulation":** UN 1263 PAINT, SPECIAL PROVISION 640D, 3, II

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):**
None of the ingredient is listed.
- **Section 313 (Specific toxic chemical listings):**
1330-20-7 xylene
108-88-3 toluene
- **TSCA (Toxic Substances Control Act):**
1330-20-7 xylene
108-88-3 toluene
64742-89-8 Solvent naphtha (petroleum), light aliph.
66070-58-4 Styrene-Ethylene/Butylene-Styrene block Copolymer
8042-47-5 White Mineral oil
25973-55-1 2-(2-HYDROXY-3-5-DI--(TERT)-AMYLPHENYL)BENZOTRIAZOLE
41556-26-7 bis(1,2,2,6,6-Pentamethyl-4-piperidinyl) sebacate
6683-19-8 Tertrakis(methylene(3,5-di(tert)-butyl-4-hydroxyhydrocinnamate))
methane
82919-37-7 Methyl (1,2,2,6,6,- pentamethyl-4-piperidinyl) sebacate
106-79-6 Dimethyl sebacate(Impurity)
84633-54-5 Pentaerythritol tris tri ester with 3-(3,5-di-(tert)-butyl-4-hydroxyphenyl)propionic acid
2403-89-6 4-Piperidinol, 1,2,2,6,6 pentamethyl- (Impurity)
- **Proposition 65**
- **Chemicals known to cause cancer:**
1330-20-7 xylene
- **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.
- **Chemicals known to cause developmental toxicity:**
108-88-3 toluene
- **Cancerogenity categories**
- **EPA (Environmental Protection Agency)**
1330-20-7 xylene: I
108-88-3 toluene: II
- **TLV (Threshold Limit Value established by ACGIH)**
1330-20-7 xylene: A4
108-88-3 toluene: A4
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

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• **Canadian substance listings:**

• **Canadian Domestic Substances List (DSL)**

- 1330-20-7 xylene
- 108-88-3 toluene
- 64742-89-8 Solvent naphtha (petroleum), light aliph.
- 66070-58-4 Styrene-Ethylene/Butylene-Styrene block Copolymer
- 8042-47-5 White Mineral oil
- 112945-52-5 SILICA
- 25973-55-1 2-(2-HYDROXY-3-5-DI--(TERT)-AMYLPHENYL)BENZOTRIAZOLE
- 41556-26-7 bis(1,2,2,6,6-Pentamethyl-4-piperidinyl) sebacate
- 6683-19-8 Tertrakis(methylene(3,5-di(tert)-butyl-4-hydroxyhydrocinnamate))
methane
- 82919-37-7 Methyl (1,2,2,6,6,- pentamethyl-4-piperidinyl) sebacate
- 106-79-6 Dimethyl sebacate(Impurity)

• **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

• **Canadian Ingredient Disclosure list (limit 1%)**

108-88-3 toluene

• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

• **Hazard pictograms**



GHS02



GHS07



GHS08

• **Signal word** Danger

• **Hazard-determining components of labeling:**

Solvent naphtha (petroleum), light aliph.
toluene
bis(1,2,2,6,6-Pentamethyl-4-piperidinyl) sebacate

• **Hazard statements**

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.

• **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P240 Ground and bond container and receiving equipment.
P242 Use non-sparking tools.
P243 Take actions to prevent static discharges.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.

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P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P321 Specific treatment (see on this label).
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials:**
Carcinogenic hazardous material group III (dangerous).
- **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Environment protection department.
- **Contact:** 888-235-HALO (4256)
- **Date of preparation / last revision** 08/18/2016 / 20
- **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
- *** Data compared to the previous version altered.**