

**Safety data sheet**  
**COMMISSION REGULATION (EU) 2020/878 of 18 June**  
**2020 amending Annex II to Regulation (EC) No**  
**1907/2006**

Printing date 22.03.2022

Version number 1

Revision: 22.03.2022

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

- **1.1 Product identifier**
- **Trade name: OC™ - 234 HV**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture**  
Raw Material for curing the outer most layer of Pre molded article
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
ORSON RESINS AND COATINGS PVT LTD  
Gut NO.-398, Dinkar pada Road, Village-Kondle-Kudus,  
Wada Dist:- Thane 421312
- **Further information obtainable from:**  
Tel: 022 – 26862524 / 26852529 / 26852530,  
E-mail: info@orsonchemicals.com
- **1.4 Emergency telephone number:**  
Contact details of European importer  
Emergency telephone number:  
Telephone number of EU importer:  
Opening hours:  
Other Comments (e.g. language(s) of the phone service): English

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



health hazard

Repr. 2 H361d Suspected of damaging the unborn child.

STOT RE 1 H372 Causes damage to the hearing organs through prolonged or repeated exposure.



Acute Tox. 4 H332 Harmful if inhaled.

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Skin Irrit. 2 H315 Causes skin irritation.

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Eye Irrit. 2 H319 Causes serious eye irritation.

· **2.2 Label elements**· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

GHS02 GHS07 GHS08

· **Signal word** Danger· **Hazard-determining components of labelling:**

styrene

· **Hazard statements**

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H372 Causes damage to the hearing organs through prolonged or repeated exposure.

· **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** No further relevant information available.

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
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**Trade name: OC™ - 234 HV**· **vPvB:** No further relevant information available.

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### SECTION 3: Composition/information on ingredients

#### · 3.2 Chemical characterisation: Mixtures

CAS no./ CAS Name	Classification	Composition
Polymer + additive	-	60%
100-42-5 (Styrene)	 Flam. Liq. 3, H226  Repr. 2, H361d; STOT  RE 1, H372  Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	40%

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

· **General information:** Immediately remove any clothing soiled by the product.

#### · **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

#### · **After skin contact:**

Consult a physician

Immediately wash with water and soap and rinse thoroughly.

#### · **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

· **Information for doctor:** Treat symptomatically and supportively.

#### · **4.2 Most important symptoms and effects, both acute and delayed**

Irritating to Skin and Eye, Causes damage to the hearing organs through prolonged or repeated exposure and Harmful if inhaled.

#### · **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

#### · **Suitable extinguishing agents:**

Water spray-mist. CO<sub>2</sub>, powder, alcohol-resistant foam, Sand

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- **For safety reasons unsuitable extinguishing agents:** Do not use water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Fire will produce large amount of dense black fumes, Inhalation of which would cause serious health hazards
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Firefighters must be equipped to prevent breathing of vapors or products of combustion. Wear an approved self-contained breathing apparatus and protective clothing.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Do not eat, drink or smoke when using this product.  
Avoid breathing vapors, mist or gas.  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 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 section 13.  
Ensure adequate ventilation.
- **6.4 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in original container.  
Store in cool and dry place.

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- **Information about storage in one common storage facility:** (Contd. of page 4)  
Do not store near heat sources or expose to excessive temperatures.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

#### Occupational Exposure limits

Chemical Name	ACGIH OEL (Ceiling)	The United Kingdom	Ireland
Styrene 100-42-5	TLV-8h TWA: 20 ppm - 85 mg/m3 TLV-15min STEL: 40 ppm - 170 mg/m3	STEL 250 ppm STEL 1080 mg/m3 TWA 100 ppm TWA 430 mg/m3	TWA 20 ppm TWA 85 mg/m3 STEL 40 ppm STEL 170 mg/m3

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 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 eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

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

*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*

· **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*

· **Body protection:** Protective work clothing

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· <b>Appearance:</b>	<i>Clear liquid</i>
· <b>Form:</b>	<i>Liquid</i>
· <b>Colour:</b>	<i>Light Yellow</i>
· <b>Odour:</b>	<i>Characteristic</i>

· **Change in condition**

· <b>Melting point/freezing point:</b>	<i>Undetermined.</i>
· <b>Initial boiling point and boiling range:</b>	<i>140-150 °C</i>

· <b>Flash point:</b>	<i>33 °C</i>
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· <b>Flammability:</b>	<i>Flammable Liquid</i>
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· <b>Auto-ignition temperature:</b>	<i>Product is not selfigniting.</i>
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· <b>Explosive properties:</b>	<i>Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</i>
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· <b>Density:</b>	<i>Not determined.</i>
· <b>Vapour density</b>	<i>Heavier than air</i>

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· <b>Evaporation rate</b>	Slower than (Base: n-Butyl Acetate)
· <b>Solubility in / Miscibility with water:</b>	Water Negligible, Organic Solvents Limited
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>9.2 Other information</b>	Specific Gravity: 1.1 to 1.12 (60% W/W non volatiles)

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable at ambient temperature and under normal conditions of use.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
In use, may form flammable/explosive vapour-air mixture
- **10.4 Conditions to avoid**  
Temperatures above 30°C. Take precautionary measures against static discharges. Keep away from direct sunlight
- **10.5 Incompatible materials:** Avoid strong acids and oxidizing agents
- **10.6 Hazardous decomposition products:**  
Fire will produce large amount of dense black fumes and toxic gases such as carbon monoxide and carbon dioxide, Inhalation of which would cause serious health hazards

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity**  
Harmful if inhaled.

- **LD/LC50 values relevant for classification:**

**100-42-5 styrene**

Oral	LD50	5,000 mg/kg (rat)
Inhalative	LC50/4 h	24 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.

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- **Serious eye damage/irritation**  
Causes serious eye irritation.  
After placing two drops of liquid styrene in the right eyes of an unspecified number of rabbits, ocular injury was manifested by moderate conjunctival irritation, inflammation, slight swelling of the eyelids, and slight transient corneal injury.
- **Respiratory or skin sensitisation**  
Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**  
Suspected of damaging the unborn child.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**  
Causes damage to the hearing organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### · 12.1 Toxicity

#### · Aquatic toxicity:

##### 100-42-5 styrene

EC50 (21 days)	1.88 mg/L ( <i>Daphnia magna</i> ) (According to OECD Guideline 211)
EC50 (48 hrs)	4.7 mg/L ( <i>Daphnia magna</i> ) (According to OECD Guideline 202)
EC50 (96 Hrs)	6.3 mg/L (Algae) (EPA OTS 797.1050)
LC50 (96 hrs)	10 mg/L ( <i>Pimephales Promelas</i> (Fathead Minnow)) (According to OECD Guideline 203)

### · 12.2 Persistence and degradability

Styrene (CAS 100-42-5)

% Degradation after 28 d: 73.2 % (of ThOD) (Readily biodegradable)

### · 12.3 Bioaccumulative potential

Styrene (CAS 100-42-5):

BCF: 74 (Non Bioaccumulative)

### · 12.4 Mobility in soil

No further relevant information available.

### · Additional ecological information:

#### · General notes:

Do not allow product to reach ground water, water course or sewage system.

### · 12.5 Results of PBT and vPvB assessment

· **PBT:** No further relevant information available· **vPvB:** No further relevant information available.

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· **12.6 Other adverse effects** No further relevant information available.

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### SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN1866

· **14.2 UN proper shipping name**

· **ADR**

1866 RESIN SOLUTION

· **IMDG, IATA**

RESIN SOLUTION

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class**

3 Flammable liquids.

· **Label**

3

· **14.4 Packing group**

· **ADR, IMDG, IATA**

III

· **14.5 Environmental hazards:**

Not applicable.

· **14.6 Marine Pollutant**

No

**Special precautions for user**

Warning: Flammable liquids.

· **Hazard identification number (Kemler code):**

33

· **EMS Number:**

F-E,S-E

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- |  |   |
|--|---|
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.   |
| · <b>Transport/Additional information:</b>                                       |   |
| · <b>ADR</b>   |   |
| · <b>Limited quantities (LQ)</b>   | 500 ml  |
| · <b>Excepted quantities (EQ)</b>  | Code: E3<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 300 ml |
| · <b>Transport category</b>  | 1   |
| · <b>Tunnel restriction code</b>   | D/E   |
| · <b>IMDG</b>  |   |
| · <b>Limited quantities (LQ)</b>   | 500 ml  |
| · <b>Excepted quantities (EQ)</b>  | Code: E3<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 300 ml |
| · <b>UN "Model Regulation":</b>  | UN 1866 RESIN SOLUTION, 3, I  |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
styrene
- **Hazard statements**  
H226 Flammable liquid and vapour.

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*H332 Harmful if inhaled.**H315 Causes skin irritation.**H319 Causes serious eye irritation.**H361d Suspected of damaging the unborn child.**H372 Causes damage to the hearing organs through prolonged or repeated exposure.***· Precautionary statements***P101 If medical advice is needed, have product container or label at hand.**P102 Keep out of reach of children.**P103 Read label before use.**P201 Obtain special instructions before use.**P210 Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking.**P243 Take precautionary measures against static discharge.**P260 Do not breathe dust/fume/gas/mist/vapours/spray.**P273 Avoid release to the environment**P280 Wear protective gloves/protective clothing/eye protection/face protection.**P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulation***· Directive 2012/18/EU****· Named dangerous substances - ANNEX I Substance not listed****· Seveso category P5c FLAMMABLE LIQUIDS****· Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t****· Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t****· 15.2 Chemical safety assessment:***A Chemical Safety Assessment has not been carried out.***SECTION 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.*

**· Relevant phrases***H226 Flammable liquid and vapour.**H315 Causes skin irritation.**H319 Causes serious eye irritation.**H332 Harmful if inhaled.**H361d Suspected of damaging the unborn child.*

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*H372 Causes damage to organs through prolonged or repeated exposure.*

· **Department issuing SDS:** Product safety department.

· **Contact:**

Tel: 022 – 26862524 / 26852529 / 26852530,

E-mail: [info@orsonchemicals.com](mailto:info@orsonchemicals.com)

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

· **Sources**

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

- ECHA: <https://echa.europa.eu/registration-dossier/-/registered-dossier/15565/9/document/UID=9f9211f4-3476-4a82-b33c-bdc6baf853ce>

- ChemID Plus: <https://chem.nlm.nih.gov/chemidplus/rn/100-42-5>

- RTECS: <https://document-cache.toxplanet.com/2/1646117731010/Styrene.htm>

- Pubchem: <https://pubchem.ncbi.nlm.nih.gov/compound/7501section=Toxicity&fullscreen=true>

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