

Safety Data Sheet dated 5/27/2015, version 3







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

1.1. Product identifier

Trade name: H30 UV resin blue

1.2. Relevant identified uses of the substance or mixture and uses advised against
Resins system used in the production of fibre reinforced plastics or non-reinforced filled
products. Resin system used in the production of reinforced plastic laminates.

1.3. Details of the supplier of the safety data sheet

Company:

Vosschemie-Benelux bvba. Mechelsesteenweg 303, B-2500 Lier, Belgium Tel. +32 3 489 28 28 Fax +32 3 488 19 27

Competent person responsible for the safety data sheet:

info@vosschemie-benelux.com

1.4. Emergency telephone number

+32 70 24 52 45

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- Warning, Flam. Lig. 3, Flammable liquid and vapour.
- Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2, Causes serious eye irritation.
- Warning, Repr. 2, Suspected of damaging fertility or the unborn child.
- ◆ Warning, STOT SE 3, May cause respiratory irritation.
- Danger, STOT RE 1, Causes damage to organs through prolonged or repeated exposure.

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects: No other hazards

2.2. Label elements

Symbols:





Danger

Hazard statements:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child.

H335 May cause respiratory irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P273 Avoid release to the environment.

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

P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.

P370+P378 In case of fire, use a CO2 fire extinguisher to extinguish.

P370+P378 In case of fire, use a foam fire extinguisher to extinguish.

Special Provisions:

Not classified

Contents:

Styrene

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

Not classified

2.3. Other hazards

vPvB Substances: Not classified - PBT Substances: Not classified

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

 $\label{thm:local_equation} \mbox{Hazardous components within the meaning of the CLP regulation and related classification:} \\$

>= 40% - < 50% Styrene

REACH No.: 01-2119457861-32, Index number: 601-026-00-0, CAS: 100-42-5, EC: 202-851-5

2.6/3 Flam. Liq. 3 H226

3.10/1 Asp. Tox. 1 H304

◆ 3.8/3 STOT SE 3 H335

3.7/2 Repr. 2 H361d

4.1/C3 Aquatic Chronic 3 H412

3.1/4/Inhal Acute Tox. 4 H332



♦ 3.9/1 STOT RE 1 H372

3.2/2 Skin Irrit. 2 H315

(1) 3.3/2 Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse.

In case of eyes contact:

Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

In case of Ingestion:

Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

In case of Inhalation:

Move person to fresh air. If not breathing, give artificial respiration.

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

None

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

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.

Extinguishing media which must not be used for safety reasons:

Do not use water in a jet.

5.2. Special hazards arising from the substance or mixture

In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, organic acids.

5.3. Advice for firefighters

Keep people away. Isolate fire and deny unnecessary entry. Soak

thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Wear positive-pressure self-contained breathing apparatus and protective fire fighting clothing



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosionproof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

7.2. Conditions for safe storage, including any incompatibilities

Do not store above the following temperature: 30°C (86°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Ventilation required along the floor. Store in original container, protected from direct sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Incompatible materials:

None in particular. See also paragraph 10 below

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular



SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Styrene - CAS: 100-42-5

TLV TWA - 213 mg/m3, 50 ppm

TLV STEL - 40 ppm

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Safety glasses with side shields.

Protection for skin:

Chemical-resistant protective suit.

Protection for hands:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory protection:

Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment (gas mask filter ABEK).

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance:	liquid		
Colour:	blue		
Odour:	characteristic		
Odour threshold:			
pH:			
Melting point / freezing point:	- 31 ℃		
Initial boiling point and boiling range:	145 ℃		
Flash point:	32 ℃		
Evaporation rate:			
Solid/gas flammability:			
Upper/lower flammability or explosive limits:	1-6 % v/v		
Vapour pressure:	670 Pa (20 ℃)		
Density:	1.00-1.12 g/cm3		
Vapour density:			
Relative density:			



Solubility in water:	< 1%	
Solubility in oil:		
Partition coefficient (noctanol/water):	2.95	
Auto-ignition temperature:	490 ℃	
Decomposition temperature:		
Viscosity:	1800 mPas (25 ℃)	
Explosive properties:		
Oxidizing properties:		

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:			
Fat Solubility:			
Conductivity:			
Substance Groups relevant properties			

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at ambient temperatures.

10.2. Chemical stability

Stable at ambient temperatures.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Avoid static discharge.

10.5. Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials

10.6. Hazardous decomposition products

Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide. Silica. Formaldehyde.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Styrene - CAS: 100-42-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 5000 mg/kg - Duration: sir24h Test: LC50 - Route: Inhalation - Species: Rat = 11.8 mg/l - Duration: 4h



If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Styrene - CAS: 100-42-5 a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 4.7 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae = 4.9 mg/l - Duration h: 72 Endpoint: LC50 - Species: Fish = 4.02 mg/l - Duration h: 96

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: Not classified - PBT Substances: Not classified

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



14.1. UN number

ADR-UN Number: 1866 IATA-UN Number: 1866



IMDG-UN Number: 1866

14.2. UN proper shipping name

ADR-Shipping Name: RESIN SOLUTION, flammable RESIN SOLUTION, flammable RESIN SOLUTION, flammable RESIN SOLUTION, flammable

14.3. Transport hazard class(es)

ADR-Class: 3

ADR - Hazard identification number: 30

IATA-Class: 3 IATA-Label: 3 IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III

14.5. Environmental hazards

ADR-Environmental Pollutant: No IMDG-Marine pollutant: No Special proportions for user

14.6. Special precautions for user

ADR-Subsidiary risks: -

ADR-S.P.: 640E
ADR-Tunnel Restriction Code: (D/E)
IATA-Passenger Aircraft: 355
IATA-Subsidiary risks: IATA-Cargo Aircraft: 366
IATA-S.P.: A3
IATA-ERG: 3L

IMDG-EmS: F-E , S-E

IMDG-Subsidiary risks:

IMDG-Storage category: Category A

IMDG-Storage notes:

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code No

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 453/2010 (Annex II)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII

Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:



No restriction.

Not classified

Where applicable, refer to the following regulatory provisions:

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent

amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A

15.2. Chemical safety assessment

S

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H335 May cause respiratory irritation.

H361d Suspected of damaging the unborn child.

H412 Harmful to aquatic life with long lasting effects.

H332 Harmful if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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

NIOSH - Registry of toxic effects of chemical substances (1983)

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,

Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van

Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

Sax I. Dangerous properties of industrial materials 7th Edition, 1990

ACGIH Threshold Limit Values for chemical substances for 1992/93

Silver Platter Chemical Hazards Response Information Service 1992

Silver Platter Hazardous Substances data bank 1992

Silver Platter RTECS data bank 1992

Dutch Chemical Industry Association - Chemical Safety Sheets 1990

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.



GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STE: Short-term exposure. STEL:

Short Term Exposure limit.

STOT: Specific Target Organ Toxicity. TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.

(ACGIH Standard).

WGK: German Water Hazard Class.