

## SAFETY DATA SHEET

### 1. Chemical product identification and manufacturer and/or supplier information

1.1 Product Name: HS antigravel (HS Graviflex, Spray HS antigravel)

Manufacturer / Supplier: ECOPOL LLC  
 Suvorov str. 35, Dzerzhinsk, 606010, Nizhny Novgorod Region, Russia  
 Telephone number: +7 (8313) 230351; 230839; 230781; 230746  
 Phone/Fax: +7 (8313) 254103; 274016

1.2 Relevant identified uses of the substance or mixture and uses advised against:

The product is intended for industrial or professional use only.

1.3 Emergency Phone No.:  
 In case of emergency contact with the National Emergency Center.

### 2. Hazard(s) identification

2.1 Classification of the substance or mixture  
 · Classification according to Regulation (EC) No. 1272/2008:

H225:	Highly flammable liquid and vapour.	Flammable liquids, Hazard Category 2
H315:	Causes skin irritation.	Skin corrosion/irritation, Hazard Category 2
H332:	Harmful if inhaled	Acute toxicity, Hazard Category 4
H336:	May cause drowsiness or dizziness	Specific toxicity for specific organ, Hazard Category 3
H361d:	Suspected of damaging the unborn child	Reproductive toxicity, Hazard Category 2
H373:	May cause damage to organs through prolonged or repeated exposure.	Specific target organ toxicity — Repeated exposure, Hazard Category 2

2.2 Label elements

· Labeling according to Regulation (EC) No. 1272/2008:

This product is classified and labeled according to the Regulations for Substance and Mixture Classification, Labeling, and Packaging (CLP).

· Safety icons:



GHS02 GHS07 GHS08

· Signal word: Danger.

· Hazard-determining components of labeling:

Toluene,  
 xylene

· Hazard warnings:

H225:	Highly flammable liquid and vapour.
H315:	Causes skin irritation.
H332:	Harmful if inhaled
H336:	May cause drowsiness or dizziness
H361d:	Suspected of damaging the unborn child
H373:	May cause damage to organs through prolonged or repeated exposure.

· Precautions:

P210:	Keep away from heat/sparks/open flames/hot surfaces. — No smoking;
P260:	Do not breathe dust/fume/gas/mist/vapours/spray.
P271:	Use only outdoors or in a well-ventilated area;
P280:	Wear protective gloves/protective clothing/eye protection/face protection;
P312:	Call a POISON CENTER or doctor/physician if you feel unwell;
P273:	Avoid release to the environment;
P102:	Keep out of reach of children.

2.3 Other hazards:












No information.

### 3. Composition (information on ingredients)

3.2 Chemical characterization: Mixtures

· Description: Mixture of below-listed substances with non-hazardous additives.

· Hazardous substances contained:

Chemical Name	H-Phrases		Icons and Signal Word (Codes)
Toluene (methylbenzen) Concentration, % (by weight) 13-40 CAS № 108-88-3 EINECS № 203-625-9 Index Number 601-021-00-3 REACH 01-2119471310-51-XXXX	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Repr. 2 STOT RE 2 *	H225 H304 H315 H336 H361d H373	 GHS02  GHS07  GHS08 Dgr
Naphta (petroleum), hydrotreated light Concentration, % (by weight) 5-17 CAS № 64742-49-0 EINECS № 265-151-9 Index Number 649-328-00-1 REACH 01-2119475133-43-XXXX	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2	H225 H304 H315 H336 H411	 GHS02  GHS07  GHS08  GHS09 Dgr
Acetone (propan-2-one) Concentration, % (by weight) 3-9 CAS № 67-64-1 EINECS № 200-662-2 Index Number 606-001-00-8 REACH 01-2119471330-49-XXXX	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336 EUH066	 GHS02  GHS07 Dgr
Dimethylbenzene (xylene) (isomer mixture) Concentration, % (by weight) 0-7 CAS No. 1330-20-7 EINECS No. 215-535-7 Index Number 601-022-00-9 REACH No. 01-2119488216-32-XXX	Flam. Liq. 3 Acute Tox. 4 * Skin Irrit. 2 Acute Tox. 4 *	H226 H312 H315 H332	 GHS02  GHS07 Wng

#### 4. First aid measures

##### · 4.1 Description of the first aid measures

###### · General guides:

Remove the pieces of clothing contaminated with this product immediately.

Toxicity symptoms may appear after many hours, therefore medical supervision is necessary for at least 48 hours after accident (casualty).

###### · After inhalation:

Supply fresh air or oxygen, seek medical care.

In loss of consciousness (syncopal state), put a patient on the side in stable position for transportation.

###### · After skin contact:

Wash with water and soap immediately, rinse well.

Get medical attention.

###### · After eye contact:

Wash an open eye with running water for several minutes. Remove contact lenses, if any, continue eye washing, and get medical advice.

###### · In case of ingestion:

Rinse mouth and drink a plenty of water. DO NOT induce vomiting. Get medical advice.

##### · 4.2 The most critical symptoms and effects, both immediate and subsequent:

There is no any respective information.

##### · 4.3 Indication of immediate medical attention and special treatment:

symptomatic treatment.

#### 5. Fire-fighting measures

##### · 5.1 Extinguishing facilities

###### · Suitable extinguishing media:

CO<sub>2</sub>, extinguishing powder or fine-sprayed (-sprinkled) water jet.

Large fire extinguishing with fine-sprayed (-sprinkled) water jet or alcohol foam.

###### · Extinguishing media unsuitable for safety reasons:

Full-jet water.

##### · 5.2 Special hazards from substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>).

##### · 5.3 Advice for firefighters

· Protective equipment: Put on a self-contained respiratory protection unit.

· Further information:

Cool exposed tanks with fine-sprinkled water jet.

Fire residues and contaminated water must be disposed of according to the instructions of administrative services.

#### 6. Accidental release measures

##### · 6.1 Personal precautions, protective equipment, and emergency procedures:

Put on protective equipment. Keep unprotected people away.

Provide for sufficient ventilation.  
Keep away from ignition sources.  
Use a unit for respiratory protection against vapor / dust / aerosol.  
Avoid contact with skin and eyes.  
· 6.2 Environmental precautions:  
Do not allow entering sewers/ surface or ground water/ ditches and basements.  
If entered water basins or sewers, communicate it to the respective services.  
· 6.3 Methods and materials for containment and cleaning up:  
Provide for sufficient ventilation.  
Collect using liquid-binding material (sand, kizelgur, acid restrigent, multi-purpose restrigents, and sawdust).  
Send it for recovery or disposal in suitable tanks.  
Dispose of collected material according to the instructions.  
· 6.4 Reference to other sections:  
For safe handling information, see Chapter 7.  
For personal protective equipment information, see Chapter 8.  
For disposal information, see Chapter 13.

## 7. Chemical product storage and handling regulations

· 7.1 Precautions for safe handling:  
Ensure good ventilation/exhaustion at the workplace.  
Ensure good air ventilation, especially at the floor level (vapors are heavier than air)  
Amount of stock at the workplace should be limited.  
Use exclusively in well-ventilated areas.  
Avoid contact with skin and eyes.  
Do not breathe smoke / aerosol.  
Make sure that the entire area used of a production premise is examined.  
· Fire and explosion protection guides:  
Vapors with air may form explosive mixtures.  
In empty container, air-gas mixtures able to ignite may form.  
Keep away from the sources of ignition/heating/ sparks/open fire. Do not smoke.  
Take precautionary measures against static discharge.  
Use explosion-proof instruments / fittings and sparkless tools.  
· 7.2 Conditions for safe storage including any incompatibilities  
· Storage:  
· The requirements imposed on warehouse premises and containers:  
Store in a cool location.  
Adhere to the flammable liquid storage regulations.  
Adhere to the water-blocking regulations.  
· Guides on compatibility with other substances in storage:  
Adhere to the flammable liquid storage regulations.  
· Further data for storage conditions:  
Store the tank in well-ventilated area.  
Store in tightly closed container at cool and dry area.  
Protect against heating and direct sunlight.

## 8. Substance impact limitation and control / personal protective equipment

· 8.1 Control parameters  
· The components with limit values requiring in-place monitoring:  
CAS No. 108-88-3 toluene  
MPC (RF) maximal one-time: 150 mg/m<sup>3</sup>  
Shift-average: 50 mg/m<sup>3</sup>  
CAS No. 64742-49-0 naphtha (petroleum), hydrotreated light  
MPC (RF) Shift-average: 1000 mg/m<sup>3</sup>  
CAS No. 67-64-1 acetone  
MPC (RF) maximal one-time: 800 mg/m<sup>3</sup>  
Shift-average: 200 mg/m<sup>3</sup>  
CAS No. 1330-20-7 xylene (isomer mixture)  
MPC (RF) maximal one-time: 150 mg/m<sup>3</sup>  
Shift-average: 50 mg/m<sup>3</sup>

### DNEL values

CAS No. 108-88-3 toluene  
Application: employee (inhalation)  
Potential health effect: Long exposure - systemic and local effects: 192 mg/m<sup>3</sup>  
Application: employee (inhalation)  
Potential health effect: Short exposure - systemic and local effects: no information  
Application: employee (dermatitis)  
Potential health effect: Long exposure - systemic effects: no information  
Application: employee (dermatitis)  
Potential health effect: Short exposure - systemic and local effects: no information  
CAS No. 67-64-1 acetone

Application: employee (inhalation)  
 Potential health effect: Long exposure - systemic effects: low-hazard (threshold value is not defined)  
 Application: employee (inhalation)  
 Potential health effect: Short exposure - local effects: low-hazard (threshold value is not defined)  
 Application: employee (dermatitis)  
 Potential health effect: Long exposure - systemic effects: low-hazard (threshold value is not defined)  
 Application: employee (dermatitis)  
 Potential health effect: Short exposure: low-hazard (threshold value is not defined)  
 CAS No. 1330-20-7: xylene (isomer mixture)  
 Application: employee (inhalation)  
 Potential health effect: Long exposure - systemic effects: 221 mg/m<sup>3</sup>  
 Application: employee (inhalation)  
 Potential health effect: Short exposure - systemic and local effects: 442 mg/m<sup>3</sup>  
 Application: employee (dermatitis)  
 Potential health effect: Long exposure - systemic effects: 212 mg/kg of body weight/day  
 Application: employee (dermatitis)  
 Potential health effect: Short exposure - local effects: no information

PNEC values

CAS No. 108-88-3 toluene  
 freshwater: 0.68 mg/l  
 marine water: 0,68 mg/l  
 soil 2,89 mg/kg of soil dry weight  
 CAS No. 67-64-1 acetone  
 freshwater: 10.6 mg/l  
 marine water: 1.06 mg/l  
 soil 29,5 mg/kg of soil dry weight  
 CAS No. 1330-20-7: xylene (isomer mixture)  
 freshwater: 0.327 mg/l  
 marine water: 0.327 mg/l  
 soil 2.31 mg/kg of soil dry weight

- Further instructions:  
 The data up-to-date when written was as a basis.
- 8.2 Exposure Controls / Personal Protection
- Personal protection equipment:
- General exposure-protection and hygienic measures:  
 Keep away from foodstuffs, beverages and animal feed.  
 During work, do not eat, drink, smoke or sniff tobacco.  
 Remove all the clothes contaminated and impregnated with harmful substances.  
 Do not breathe gases/vapors/aerosols.  
 Avoid contact with skin and eyes.  
 Wash hands before breaks and at the end of work.  
 Do not keep product-impregnated dusters / cleaning rags at the pockets of trousers.
- Respiratory Protection:  
 If the workplaces are well-ventilated, then no precautions are required.
- Hand protection:  
 Rubber gloves.
- Eye protection: Closely fitting goggles
- Body protection:  
 Protective work clothing  
 Body protection must be selected according to activity type and possible exposure.
- Ecological impact limitation and control:  
 Do not allow to enter sewers/ surface or ground water.

9. Physical and chemical properties

- 9.1 Information on the basic physical and chemical properties
- General information

Appearance	Liquid
Color	Intended
Odor	Natural to organic solvents
pH	Not specified
Boiling point	Not specified
Flash point (closed cup)	Plus 4 °C (methylbenzen) <0 °C (Naphta (petroleum), hydrotreated light) Minus 18 °C (propan-2-one) Plus 24 °C (dimethylbenzene)

Self-ignition temperature	Plus 536 °C (methylbenzen) Plus > 200 °C (Naphta (petroleum), hydrotreated light) Plus 547 °C (propan-2-one) Plus 494 °C (dimethylbenzene)
Density g/cm <sup>3</sup>	1,2
Viscosity (relative, sec)	Not specified
Lower explosion limit, % volume	1,3 (methylbenzen) 0,6 (Naphta (petroleum), hydrotreated light) 2,2 (propan-2-one) 1,0 (dimethylbenzene)
Upper explosion limit, % volume	6,7 (methylbenzen) 7,0 (Naphta (petroleum), hydrotreated light) 13,6 (propan-2-one) 6,0 (dimethylbenzene)
Vapor Density (Pa/20°C):	Not specified
Non-volatile matter mass fraction content %	55, not less than
Solubility in water	Insoluble

· 9.2 Other information: There is no any respective information.

#### 10. Stability and reactivity

##### 10.1 Chemical stability:

Stable under the recommended product storage and handling conditions.

##### 10.2 Reactivity:

None under the recommended product storage and handling conditions.

##### 10.3 Conditions to avoid:

Direct sunlight, high temperatures, open flame, and sparks.

Contact with strong oxidizers, peroxides, strong acids and bases.

##### 10.4 Hazardous decomposition products:

Thermal decomposition may produce carbon monoxide and other toxic gases.

#### 11. Toxicological data

##### · 11.1 Information on toxicological effects

###### · Acute toxicity:

· LD/LC50 values (lethal dose/concentration) necessary for classification:

CAS No. 108-88-3 toluene

Orally (by mouth) LD50 5 580 mg/kg bw (rat)

Dermally (dermal contact) LD50 5000 mg/kg bw (rabbit)

Inhalative (by breathing) LC50/4h 25.7-30 mg/l (rat)

CAS № 64742-49-0 naphta (petroleum), hydrotreated light

Orally (by mouth) LD50 2000-5580 mg/kg bw (rat)

Dermally (dermal contact) LD50 2000-5000 mg/kg bw (rabbit)

Inhalative (by breathing) LC50/4h 25.7-43.767 mg/l air (rat)

CAS No. 67-64-1 acetone

Orally (by mouth) LD50 5800 mg/kg bw (rat)

Dermally (dermal contact) LD50 7 426 – 15 800 mg/kg (rabbit)

Inhalative (by breathing) LC50/3h 132 mg/l (rat)

CAS No. 1330-20-7 xylene (isomer mixture)

Orally (by mouth) LD50 3523-4000 mg/kg bw (rat)

Dermally (dermal contact) LD50 12126 mg/kg bw (rabbit)

Inhalative (by breathing) LC50/4h 30097-31756 mg/l (rat)

###### · Primary irritant effect:

· on skin: Long-time and repeated contacts may degrease skin and induce dermatitis.

· on eyes: Irritating effect.

· Toxicity - from subacute to chronic: not related.

###### · Additional toxicological directions:

Based on the calculation method of EC General Classification Directive for Preparations as revised (updated), the product poses the following hazard types:

Harmful to health.

Irritating.

Hazard through skin absorption.

###### · Information on the following potential impact groups:

· Sensitization: Unaware of sensitizing impact.

· Reintaking toxicity: not defined.

· Carcinogenic, heredity-changing and infertility-inducing action

As per contemporary knowledge, no CMR effects are known.

## 12. Ecological information

### · 12.1 Toxicity

CAS No. 108-88-3 toluene  
 EC50 /3h 134 - 207 mg/l / for algae  
 EC50 /48h 3.78 mg/l / for aquatic invertebrates  
 LC50/96h 5.5 mg/l / for fish  
 NOEC/40 days 1.39 mg/l / for fish  
 CAS № 64742-49-0 naphta (petroleum), hydrotreated light  
 EC50/72h 12.4-18.9 mg/l / for algae  
 EC50/48h 4.7 mg/l / for aquatic invertebrates  
 LC50/96h 8.41 mg/l / for fish  
 CAS No. 67-64-1 acetone  
 NOEC/28 days 1.106 – 2.212 g/l / for aquatic invertebrates  
 LC50/24h 2.1 g/l / for aquatic invertebrates  
 LC50/96h 5.54 – 8.12 g/l / for fish  
 CAS No. 1330-20-7 xylene (isomer mixture)  
 EC50 (72h) 4.6 - 4.9 mg/l / for algae  
 NOEC /7 days 0.960 – 1.17 mg/l / for aquatic invertebrates  
 NOEC/21 days 1.57 mg/l / for aquatic invertebrates  
 LC50/96h 2.6 - 8.4 mg/l / for fish  
 NOEC/56 days 1.3 mg/l / for fish

### · 12.2 Persistence and degradability:

There is no any respective information.

### · 12.3 Bioaccumulative potential: There is no any respective information.

### · 12.4 Mobility in soil: There is no any respective information.

### · Additional ecological directions:

#### · General guides:

The product contains volatile organic components. Prevent the product from getting into earth, water, water basin, sewers, and biological treatment plants.

### · 12.5 PBT (persistent bioaccumulative toxin) and vPvB

(very persistent and very accumulative) evaluation results:

#### · PBT: No information.

#### · vPvB: No information.

### · 12.6 Other harmful effects: There is no any respective information.

## 13. Disposal instructions

### · 13.1 Waste processing techniques

#### · Recommendation:

Elimination (removal) according to the instructions of administrative services.

#### · European waste list:

Waste classification No. is assigned according to place of origin and recycling method.

#### · Contaminated tare:

#### · Recommendation:

Do not collect with household waste. Give a contaminated container to the subjects that have received waste collection, recycling, and neutralization permission from competent body.

## 14. Transport data

		ADR/RID	IMDG	IATA
14.1	UN Number	1139	1139	1139
14.2	UN Shipping Name	COATING SOLUTION		
14.3	Transport Classification	3	3	3
14.4	Packing Group	II	II	II
14.5	Environmental threat: · Marine pollutant:	None	None	None
14.6	Special precautions for users: Do not carry together with Category 1; Category 4.2; Category 4.3; and Category 5 materials. Do not use open flame, do not smoke			

## 15. Prescriptions

### · 15.1 Safety standards, workplace safety rules and ecological regulations or standards, applicable for substance or mixture

#### · National prescriptions:

#### · Information on use limitation:

Teenager employment limitations must be considered.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16. Miscellaneous

The data is based on the up-to-date knowledge but it is not a guaranty of any specific properties of the product and establishes no legally effective contractual relations.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
RID:	Regulations Concerning the International Transport of Dangerous Goods by Rail
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)
REACH:	Registration Evaluation and Authorisation of Chemicals
DNEL:	Derived No-Effect Level (REACH)
PNEC:	Predicted No-Effect Concentration (REACH)
NOEC:	No Observed Effect Concentration
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
Flam. Liq. 2	Flammable liquids, Hazard Category 2
Asp. Tox. 1	Aspiration hazard, Hazard Category 1
Skin Irrit. 2	Skin corrosion/irritation, Hazard Category 2
STOT SE 3	Specific target organ toxicity, Hazard Category 3
Repr. 2	Reproductive toxicity, Hazard Category 2
STOT RE 2 *	Specific target organ toxicity — Repeated exposure, Hazard Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Hazard Category 2
Flam. Liq. 3	Flammable liquids, Hazard Category 3
Acute Tox. 4 *	Acute toxicity, Hazard Category 4
Flam. Liq. 3	Flammable liquids, Hazard Category 3
GHS02	Hazard icon: flame
GHS07	Hazard icon: exclamation point
GHS08	Hazard icon: Health hazard
GHS09	Hazard icon: Environment
Wng	Warning
Dgr	Danger
H225:	Highly flammable liquid and vapour.
H226:	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways.
H312:	Harmful in contact with skin
H315:	Causes skin irritation.
H319	Causes serious eye irritation.
H332:	Harmful if inhaled
H336:	May cause drowsiness or dizziness
H361d:	Suspected of damaging the unborn child
H373:	May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H411	Toxic to aquatic life with long lasting effects
EUH066	Repeated exposure may cause skin dryness or cracking.