Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/06/2015

1 Identification

· **Product identifier**

· **Trade name: ATR HI-FLASH**

· **Product description**
ATR HI-FLASH is a terpene based asphalt extraction solvent. It may be used in a lab as directed by AASHTO T164.

Product Name	Part No.	Packaging
ATR HI-FLASH	0117-55	55 Gal Drum
ATR HI-FLASH	0117-5	5 Gal Pail

· **Application of the substance** / **the mixture** Organic Solvent Degreaser

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Ecolink
2177 Flintstone Drive, Ste. A
Tucker, GA 30084
www.ecolink.com email: info@ecolink.com
800-886-8240 or 770-621-8240 (8-5 EST)
· **Emergency telephone number:**
Inside the U.S.: 800-535-5053 (INFOTRAC, 24 HOURS)
Outside the U.S.: 352-323-3500 (INFOTRAC, 24 HOURS)

2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Flam. Liq. 4 H227 Combustible liquid.

· **Label elements**
· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS07

· **Signal word** Warning
· **Hazard-determining components of labeling:**
d-limonene

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· **Hazard statements**
Combustible liquid.
Causes skin irritation.
May cause an allergic skin reaction.
· **Precautionary statements**
Keep away from flames and hot surfaces. – No smoking.
Avoid breathing fume/gas/mist/vapors/spray.
Wear protective gloves/eye protection/face protection.
Wear protective gloves.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
Wash contaminated clothing before reuse.
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
In case of fire: Use for extinction: CO2, powder or water spray.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Unknown acute toxicity:**
65 percent of the mixture consists of ingredient(s) of unknown toxicity.
· **Classification system:** NFPA1HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 2
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 1
Fire = 2
Reactivity = 0

· **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous Components:**
CAS: 5989-27-5 d-limonene 25-50%
RTECS: GW 6360000 Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317; Flam. Liq. 4, H227
CAS: 9016-45-9 Nonylphenoxypoly(ethyleneoxy)ethanol <5%
Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320

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4 First-aid measures

· **Description of first aid measures**
· **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
In case of unconsciousness, place patient securely on side position for transportation.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.
· **After eye contact:**
Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting.
If vomiting does occur, repeat fluid administration
If symptoms develop and1or persist, seek medical attention.
· **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.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Regular foam, water fog, carbon dioxide or dry chemical.
· **Special hazards arising from the substance or mixture**
Combustible liquid. Vapors can travel to a source of ignition and flash back.
Explosive mixtures may occur at temperatures at or above flashpoint.
If incinerated product will release the following toxic fumes: Carbon Oxides.
· **Advice for firefighters** Use water spray to cool unopened containers.
· **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment.
Keep unprotected persons away.
Ensure adequate ventilation
Keep people at a distance and stay upwind.
Avoid contact with skin, eyes and clothing.
Keep away from ignition sources

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
· **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**
Avoid contact with skin, eyes and clothing
Keep away from sources of ignition.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Keep receptacles tightly sealed.
· **Information about protection against explosions and fires:** Protect from heat.

· **Conditions for safe storage, including any incompatibilities**
Store away from strong acids, strong bases, strong oxidizing agents and strong reducing agents.
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a well ventilated place.
Store in a cool, dry place away from sparks and flame.
Do not store in direct sunlight.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Protect from heat and direct sunlight.
· **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 section 7.

· **Control parameters**
All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

· **Components with occupational exposure limits:**

5989-27-5 d-limonene

TWA Short-term value: 10 mg/m³

9016-45-9 Nonylphenoxypoly(ethyleneoxy)ethanol

PEL Short-term value: 1 mg/m³, 0.1 ppm

REL Short-term value: 1 mg/m³

TLV Short-term value: 1 mg/m³, 0.2 ppm

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· **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
· **Breathing equipment:**
Not necessary if room is well-ventilated.
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:**

Protective gloves

The glove material has to be impermeable and resistant to the product. Due to missing tests no recommendation to the glove material can be given for the product.
Select glove material based on penetration times, rates of diffusion and 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 cannot 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 determined and observed by the manufacturer of the protective gloves.
· **Eye protection:**

Goggles or safety glasses with side shields recommended during refilling.

· **Body protection:**

Protective work clothing

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Trade name: ATR HI-FLASH

9 Physical and chemical properties

· **Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**
Form: Liquid
Color: Water white
· **Odor:** Mild
· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**
Melting point/Melting range: Not determined.
Boiling point/Boiling range: 192-204°C (378-400°F)

· **Flash point:** 63 °C (145 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 255 °C (491 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Not determined.

· **Explosion limits:**
Lower: Not determined.
Upper: Not determined.

· **Vapor pressure @ 20 °C (68 °F):** 1.5 mm Hg

· **Density @ 20 °C (68 °F):** 0.860 g/cm³ (7.17 lbs/gal)
· **Relative density** Not determined.
· **Vapor density** >1 (air=1)
· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**
Water: Emulsifiable.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**
Dynamic: Not determined.
Kinematic: Not determined.

· **Solvent content:**
VOC content: 860 g/l
· **Other information** No further relevant information available.

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10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability** Stable under normal conditions.
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid**
Elevated temperatures; decomposes with heat. Sources of ignition such as sparks, hot spots, welding, flames.
· **Incompatible materials:**
Strong acids, strong bases, strong oxidizing agents and strong reducing agents.
· **Hazardous decomposition products:** Carbon Oxides.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**
· **LD/LC50 values that are relevant for classification:**
5989-27-5 d-limonene

Oral	LD50	4,400 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:**
Irritant to skin and mucous membranes.
May cause an allergic skin reaction.
· **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

· **Carcinogenic categories**
· **IARC (International Agency for Research on Cancer)**
Group 1 - Carcinogenic to humans
Group 2A - Probably carcinogenic to humans
Group 2B - Possibly carcinogenic to humans
Group 3 - Not classifiable as to its carcinogenicity to humans
Group 4 - Probably not carcinogenic to humans
5989-27-5 d-limonene 3

· **NTP (National Toxicology Program)**
None of the ingredients are listed.

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

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Trade name: ATR HI-FLASH

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:**
5989-27-5 d-limonene
EC50 0.36 mg/l (daphnia) (OECD Test Guideline 202)
9016-45-9 Nonylphenoxypoly(ethyleneoxy)ethanol
EC50 12 mg/l (ALG) (96 HOURS)
0.148 mg/l (daphnia) (48 hours)
· **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:** Generally not hazardous for water.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
ATR HI-FLASH liquid is to be disposed of according to local, state, and federal regulations. Incinerate. Treat as combustible liquid.

· **Uncleaned packagings:**
· **Recommendation:**
Dispose of as unused product.
Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**
· **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material

· **UN proper shipping name**
· **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material

· **Transport hazard class(es)**

· **DOT, ADR, ADN, IMDG, IATA**
· **Class** Non-Regulated Material

· **Packing group**
· **DOT, ADR, IMDG, IATA** Non-Regulated Material

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Trade name: ATR HI-FLASH

· **Environmental hazards:**	Not applicable.
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73178 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	-

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**
· **Section 355 (extremely hazardous substances):**
None of the ingredients are listed.
· **Section 313 (Specific toxic chemical listings):**
None of the ingredients are listed.
· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.
· **California Proposition 65**
· **Chemicals known to cause cancer:**
None of the ingredients are listed.
· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.
· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.
· **Chemicals known to cause developmental toxicity:**
None of the ingredients are listed.

· **Carcinogenic categories**
· **EPA (Environmental Protection Agency)**
None of the ingredients are listed.
· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients are listed.
· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients are listed.
· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**

GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**
d-limonene

· **Hazard statements**
Combustible liquid.
Causes skin irritation.
May cause an allergic skin reaction.

· **Precautionary statements**
Keep away from flames and hot surfaces. – No smoking.
Avoid breathing fume/gas/mist/vapors/spray.
Wear protective gloves / eye protection /face protection.
Wear protective gloves.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
Wash contaminated clothing before reuse.
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
In case of fire: Use for extinction: CO2, powder or water spray.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep cool.
Dispose of contents1container in accordance with local/regional/national/international regulations.

· **National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

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· **State Right to Know**

CAS: 5989-27-5	d-limonene	25-50%
RTECS: GW 6360000	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317; Flam. Liq. 4, H227	
CAS: 9016-45-9	Nonylphenoxypoly(ethyleneoxy)ethanol	<5%
	Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 28, H320	

All ingredients are listed.

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

16 Other information

Ecolink, Inc. believes the information contained herein is accurate. However, Ecolink makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained by the use thereof. Ecolink, Inc. assumes no responsibility for injury from the use of the product described herein.

· **Date of preparation / last revision** 05/06/2015

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
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
Flam. Liq. 4: Flammable liquids, Hazard Category 4
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 28: Serious eye damage/eye irritation, Hazard Category 2B
Skin Sens. 1: Sensitization - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1