

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/28/2015 Version: 2.0

## **SECTION 1: Product and Company Identification**

#### 1.1. Product identifier

Product name : Spot Magic

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

Use of the substance/mixture : Dry cleaning fluids and detergents

#### 1.3. Details of the supplier of the safety data sheet

ROYALTONE, Inc. 7211 N. Harrison Ave. Shawnee, OK 74804 - USA T 1-405-878-0537 Royaltone@royaltone.com

#### 1.4. Emergency telephone number

Emergency number : 1-405-878-0577

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification (GHS)

Flam. Liq. 4 H227 Skin Irrit. 2 H315 Eye Irrit. 2A H319 Muta. 2 H341 Carc. 1B H350 STOT SE 3 H336

Full text of H-phrases: see section 16

### 2.2. Label elements

## **GHS** labeling

Hazard pictograms (GHS)





GHS07

GHS

Signal word (GHS) : Danger

Hazard statements (GHS) : H227 - Combustible liquid

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness H341 - Suspected of causing genetic defects

H350 - May cause cancer

Precautionary statements (GHS) : P201 - Obtain special instructions before use

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

P210 - Keep away from open flames, sparks. - No smoking

P261 - Avoid breathing mist, spray

P264 - Wash hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, protective clothing, protective gloves P302+P352 - If on skin: Wash with plenty of soap, water

P332+P313 - If skin irritation occurs: Get medical advice/attention

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P312 - Call a doctor if you feel unwell

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P337+P313 - If eye irritation persists: Get medical advice/attention P308+P313 - If exposed or concerned: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse

P370+P378 - In case of fire: Use Foam, powder, carbon dioxide (CO2), water spray to

extinguish

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

05/28/2015 EN (English US) Page 1

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P405 - Store locked up

P501 - Dispose of contents/container to an approved waste disposal plant

#### 2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

Component	CAS (Chemical Abstracts Service) number	%	Classification (GHS)
Trichloroethylene	79-01-6	20 - 30	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Muta. 2, H341 Carc. 1B, H350 STOT SE 3, H336
Ethylene glycol butyl ether	111-76-2	10 - 20	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Hydrocarbon solvent*		10 - 20	Flam. Liq. 3, H226 Asp. Tox. 1, H304
Surfactant*		< 10	Eye Irrit. 2A, H319
n-amyl acetate	628-63-7	< 10	Flam. Liq. 3, H226

<sup>\*</sup>Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation

or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

## 5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Reactivity : Stable : Not reactive when mixed with water.

## 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

05/28/2015 EN (English US) 2/9

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No

smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing Vapors.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Keep away from

flames or sparks. - No smoking.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Avoid breathing spray, mist, vapors. Use only outdoors or in a well-ventilated

area

Hygiene measures : Wash hands thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Sources of

ignition, Direct sunlight. Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Storage temperature : 5 - 35 °C

## 7.3. Specific end use(s)

No additional information available

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

Spot Magic			
ACGIH	Not applicable		
OSHA	Not applicable		
Surfactant			
ACGIH	Not applicable		
OSHA	Not applicable		
Trichloroethylene (79-01-6)			
ACGIH	ACGIH ACGIH TWA (ppm) 10 ppm		
ACGIH	ACGIH STEL (ppm)	25 ppm	
ACGIH	Remark (ACGIH)	CNS impair; cognitive decrements	
OSHA	Remark (OSHA)	(2) See Table Z-2.	

05/28/2015 EN (English US) 3/9

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

n-amyl acetate (62	8-63-7)		
ACGIH	ACGIH TWA (ppm)	50 ppm	
ACGIH	ACGIH STEL (ppm)	50 ppm	
OSHA	OSHA PEL (TWA) (mg/m³)	525 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	100 ppm	
Hydrocarbon solve	ent	<u>'</u>	
ACGIH	Not applicable	Not applicable	
OSHA	Not applicable	Not applicable	
Ethylene glycol bu	ityl ether (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm	
ACGIH	Remark (ACGIH)	Eye & URT irr	
OSHA	OSHA PEL (TWA) (mg/m³)	240 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	50 ppm	

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses. Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended.

Other information : Do not eat, drink or smoke during use.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Light yellow

Odor : Characteristic

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : < 0 °C Boiling point : 95 °C Flash point : 60.5 °C : 60.5 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : < 20 mg HG @ 25 °C

Relative vapor density at 20 °C : > 1 (air = 1)Relative density : 1.02

Specific gravity / density : 1.026 g/ml @ 25  $^{\circ}$ C

Solubility : Moderately soluble in water.

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : 1.1 - 7.5 vol %

05/28/2015 EN (English US) 4/9

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Stable: Not reactive when mixed with water.

## 10.2. Chemical stability

Combustible liquid. May form flammable/explosive vapor-air mixture.

## 10.3. Possibility of hazardous reactions

Not established.

## 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

## 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

Fumes. Carbon monoxide. Carbon dioxide. May release flammable gases.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

National Toxicology Program (NTP) Status

Ethylene glycol butyl ether (111-76-2)

IARC group

Acute toxicity : Not classified

4920 mg/kg (Rat)
> 20000 mg/kg (Rabbit)
66 mg/l/4h (Rat)
12000 ppm/4h (Rat)
4920.000 mg/kg body weight
12000.000 ppmV/4h
66.000 mg/l/4h
66.000 mg/l/4h
6500 mg/kg (Rat)
> 5000 mg/kg (Rabbit)
6500.000 mg/kg body weight
> 2000 mg/kg (Rat)
470 mg/kg
450 ppm/4h
470.000 mg/kg body weight
1100.000 mg/kg body weight
450.000 ppmV/4h
1.500 mg/l/4h
: Causes skin irritation.
: Causes serious eye irritation.
: Not classified
: Suspected of causing genetic defects.
: May cause cancer.
2A - Probably carcinogenic to humans

05/28/2015 EN (English US) 5/9

3 - Not classifiable

3 - Reasonably anticipated to be Human Carcinogen

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Trichloroethylene (79-01-6)

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms

: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Trichloroethylene (79-01-6)		
LC50 fish 1	40.7 mg/l (96 h; Pimephales promelas)	
LC50 other aquatic organisms 1	20 mg/l (48 h; Plankton)	
EC50 Daphnia 1	39 - 51 mg/l (48 h; Daphnia pulex; Static system)	
LC50 fish 2	45 mg/l (96 h; Lepomis macrochirus)	
EC50 Daphnia 2	20.8 mg/l (48 h; Daphnia magna)	
TLM fish 1	100 - 1000,96 h; Pisces	
TLM other aquatic organisms 1	100 - 1000,96 h	
Threshold limit other aquatic organisms 1	20 mg/l (48 h; Plankton)	
Threshold limit algae 1	> 100 mg/l (Scenedesmus quadricauda)	
Threshold limit algae 2	63 mg/l (Microcystis aeruginosa)	
n-amyl acetate (628-63-7)		
LC50 fish 1	650 ppm (96 h; Lepomis macrochirus)	
LC50 other aquatic organisms 1	10 - 100 mg/l (96 h)	
EC50 Daphnia 1	180 mg/l (Daphnia magna; Nocivity test)	
EC50 other aquatic organisms 1	120 mg/l (Algae; Nocivity test)	
LC50 fish 2	10 ppm (96 h; Carassius auratus)	
TLM fish 1	65 mg/l (96 h; Gambusia affinis)	
TLM fish 2	10 ppm (96 h; Carassius auratus)	
Threshold limit other aquatic organisms 1	10 - 100,96 h; Protozoa; Toxicity test	
Threshold limit other aquatic organisms 2	226 mg/l (72 h)	
Threshold limit algae 1	80 mg/l (168 h; Scenedesmus quadricauda; Toxicity test)	
Threshold limit algae 2	63 mg/l (192 h; Microcystis aeruginosa; Toxicity test)	
Ethylene glycol butyl ether (111-76-2)		
LC50 fish 1	220 mg/l	

#### 12.2. Persistence and degradability

Spot Magic		
Persistence and degradability	Not established.	
Trichloroethylene (79-01-6)		
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil. Biodegradable in the soil under anaerobic conditions.	
n-amyl acetate (628-63-7)	•	
Persistence and degradability	Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	0.31 g O₂/g substance	
ThOD	2.34 g O₂/g substance	
BOD (% of ThOD)	(20 day(s)) 0.72	
Hydrocarbon solvent		
Persistence and degradability	Biodegradability in water: no data available.	

05/28/2015 EN (English US) 6/9

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 12.3. Bioaccumulative potential

Spot Magic			
Bioaccumulative potential	Not established.		
Trichloroethylene (79-01-6)	Trichloroethylene (79-01-6)		
BCF fish 1	17 (336 h; Lepomis macrochirus)		
BCF fish 2	90 (72 h; Leuciscus idus; Fresh water)		
BCF other aquatic organisms 1	3440 (120 h; Selenastrum capricornutum)		
BCF other aquatic organisms 2	4270 (120 h; Scenedesmus quadricauda)		
Log Pow	2.29 - 2.42 (Experimental value)		
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).		
n-amyl acetate (628-63-7)			
BCF fish 1	31.0 (QSAR)		
Log Pow	2.3		
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).		
Hydrocarbon solvent			
Bioaccumulative potential	No bioaccumulation data available.		

## 12.4. Mobility in soil

Trichloroethylene (79-01-6)	
Surface tension 0.03 N/m	
n-amyl acetate (628-63-7)	
Surface tension	0.012 N/m (30 °C)

## 12.5. Other adverse effects

Other information : Avoid release to the environment.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to an approved waste disposal plant.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

## **SECTION 14: Transport information**

In accordance with US Dept. of Transportation (DOT)

Transport document description : UN1710 Trichloroethylene mixture, 6.1, III

UN-No.(DOT) : UN1710

Proper Shipping Name (DOT) : Trichloroethylene

mixture

Department of Transportation (DOT) Hazard

Classes

: 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

Hazard labels (DOT) : 6.1 - Poison inhalation hazard

6

Packing group (DOT) : III - Minor Danger

05/28/2015 EN (English US) 7/9

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102)

: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum.

T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 153
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Quantity Limitations Passenger aircraft/rail : 60 L
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

**Additional information** 

Other information : Limited Quantity Shipping:

When shipped by ground transport in inner packagings not over 4.0 L (1 gallon) net capacity, this product may be shipped under the US Dept. of Transportation (DOT) 'Limited Quantity

Exception' per 49CFR§172.315.

Hazard label (DOT): LTD QTY - Limited quantity



## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

Spot Magic	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
	Fire hazard
	Immediate (acute) health hazard

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory

Trichloroethylene (79-01-6)	
Listed on United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)  100 lb	
n-amyl acetate (628-63-7)	
Not listed on the United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists) 5000 lb	

#### 15.3. US State regulations

Trichloroethylene (79-01-6)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	14

05/28/2015 EN (English US) 8/9

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## Trichloroethylene (79-01-6)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

#### n-amyl acetate (628-63-7)

- U.S. New Jersey Right to Know Hazardous Substance List U.S. Pennsylvania RTK (Right to Know) List

## Ethylene glycol butyl ether (111-76-2)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

## **SECTION 16: Other information**

#### Full text of H-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4	
Asp. Tox. 1	Aspiration hazard Category 1	
Carc. 1B	Carcinogenicity Category 1B	
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A	
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B	
Flam. Liq. 3	Flammable liquids Category 3	
Flam. Liq. 4	Flammable liquids Category 4	
Muta. 2	Germ cell mutagenicity Category 2	
Skin Irrit. 2	Skin corrosion/irritation Category 2	
STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
H226	Flammable liquid and vapor	
H227	Combustible liquid	
H302	Harmful if swallowed	
H304	May be fatal if swallowed and enters airways	
H312	Harmful in contact with skin	
H315	Causes skin irritation	
H319	Causes serious eye irritation	
H320	Causes eye irritation	
H332	Harmful if inhaled	
H336	May cause drowsiness or dizziness	
H341	Suspected of causing genetic defects	
H350	May cause cancer	
	·	

HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 2 Moderate Hazard Physical : 0 Minimal Hazard

Personal protection : H

Royaltone SDS US (GHS HazCom 2012)

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

05/28/2015 EN (English US) 9/9