

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BSL 338

PART NUMBER:

GENERAL USE: Refrigerant flush

PRODUCT DESCRIPTION: Colorless to pale yellow liquid, mild flora-like odor.



MANUFACTURER'S NAME

Bright Solutions International, LLC

DATE PREPARED: December 5, 2009

SUPERSEDES: January 6, 2008

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ADDRESS (NUMBER, STREET, P.O. BOX)

1738 Mapelawn Dr.

TELEPHONE NUMBER FOR INFORMATION

(248) 614-9063

(CITY, STATE AND ZIP CODE)

Troy, MI 48084

COUNTRY

USA

EMERGENCY TELEPHONE NUMBER

CHEM • TEL (800) 255-3924 Outside USA (813) 248-0585

## SECTION 2 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Pale yellow liquid. Flammable as defined by DOT and TDG for Air / Ocean transport. Classified by DOT as Combustible for ground transport in containers less than 120 gallons. Classified as Combustible by OSHA. Can cause serious or fatal complications if swallowed. Can cause eye and skin irritation upon contact. Hazard symbols for this product - Xn Risk Phrases - R10, 36/38, 65

### POTENTIAL HEALTH EFFECTS

INHALATION: High concentrations are irritating to the respiratory tract; may cause headache, dizziness, nausea, vomiting and malaise.

SKIN: Brief contact may cause slight irritation; prolonged contact may cause moderate irritation or dermatitis.

EYES: High vapor concentration or contact may cause irritation and discomfort.

INGESTION: May result in vomiting; aspiration of vomitus into the lungs must be avoided; DO NOT induce vomiting. Minute amounts aspirated into the lungs can produce severe lung injury, chemical pneumonitis, pulmonary edema or death.

CARCINOGENICITY

NTP?

No

IARC MONOGRAPHS?

No

OSHA REGULATED?

No

## SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	% (by weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES Full Text Section 16
C9-C11 Isoalkanes	> 90	68551-16-6	271-365-3	Xn	R-10, 36/38, 65
2,6-Dimethyl-7-octen-2-ol	5 - 10	18479-58-8	242-362-4	Xi	R-38

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**SECTION 4 - FIRST AID MEASURES**

**INHALATION:** Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.

**SKIN:** Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

**EYES:** Check for and remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

**INGESTION:** DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs; seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.

**SECTION 5 - FIRE FIGHTING MEASURES**

**GENERAL HAZARDS:** Product is considered combustible. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

**EXTINGUISHING MEDIA**  
Carbon dioxide, water fog, dry chemical, chemical foam.

**FIRE FIGHTING PROCEDURES**  
Firefighters must wear full facepiece self - contained breathing apparatus in positive pressure mode. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray can be used to keep fire - exposed containers cool.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**  
Closed containers can explode due to buildup of pressure when exposed to extreme heat. Do not use direct stream of water on pool fires as product may reignite on water surface. Caution - Material is combustible!

**HAZARDOUS COMBUSTION PRODUCTS**  
Smoke, fumes or vapors, oxides of carbon.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** COMBUSTIBLE - Evacuate and ventilate area; remove all sources of sparks, ignition and open flames; confine and absorb into approved absorbent; place material into approved containers for disposal; do not wash to sewer or waterway.

**SECTION 7 - HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** This material is combustible. It should be stored in tightly closed containers in a cool, well ventilated area. Vapor may form explosive mixtures in air. All sources of ignition should be controlled. This material may be classified as Flammable liquids, n.o.s. UN 1993 if transported by vessel or aircraft. Refer to 49 CFR 173.120. Keep this and other chemicals out of reach of children. Avoid inhaling concentrated fumes or vapors.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

HAZARDOUS COMPONENTS	NIOSH				ACGIH			
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
C9-C11 Isoalkanes	400				400			
2,6-Dimethyl-7-octen-2-ol		Not established				Not established		

**PERSONAL PROTECTION:**

**RESPIRATORY PROTECTION:** None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

**PROTECTIVE GLOVES:** Neoprene, butyl or nitrile rubber gloves with cuffs.

**EYE PROTECTION:** Chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Safety eyewash station nearby.

**WORK / HYGIENIC PRACTICES:** Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.



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**SECTION 15 - REGULATORY INFORMATION**

**TSCA (USA - Toxic Substance Control Act)**

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

**SARA TITLE III (USA - Superfund Amendments and Reauthorization Act)**

311/312 Hazard Categories  
Immediate health, fire hazard

313 Reportable Ingredients:  
None

**CERCLA (USA - Comprehensive Response Compensation and Liability Act)**

None

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986**

There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

**CPR (Canadian Controlled Products Regulations)**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: B3

**IDL (Canadian Ingredient Disclosure List)**

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 3.

**DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)**

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 3 unless otherwise indicated.

**EINECS (European Inventory of Existing Commercial Chemical Substances)**

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

WGK Water Quality Index: 1

VbK Index: A II

**RISK PHRASES:**

R10 Flammable  
R36/38 Irritating to eyes and skin.  
R65 Damaging to lungs when swallowed.

**SYMBOL(S) REQUIRED FOR LABEL**

Harmful



**SAFETY PHRASES:**

S24/25 Avoid contact with skin and eyes

**SECTION 16 - OTHER INFORMATION**

**Notes & full R-Phrase text**

R10 Flammable  
R36/38 Irritating to eyes and skin.  
R65 Damaging to lungs when swallowed.

**HMIS HAZARD RATINGS**

HEALTH	1	* = Chronic Health Hazard	2 = MODERATE
FLAMMABILITY	2	0 = INSIGNIFICANT	3 = HIGH
PHYSICAL HAZARD	1	1 = SLIGHT	4 = EXTREME

PERSONAL PROTECTIVE EQUIPMENT B Safety Glasses, Gloves

**REVISION SUMMARY:**

This MSDS has been revised in the following sections:  
Complete format revision

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.