



CHEMICAL TECHNOLOGIES INC.

P.O. Box 91055  
TORONTO, ON  
M9C 5N5  
Tel: 416-848-3917  
Fax: 647-430-3455

# MATERIAL SAFETY DATA SHEET

## ORANGE SOLV

### SECTION 1 MATERIAL IDENTIFICATION

WHMIS CLASSIFICATION  
HMIS:

WHMIS CLASS A, B5, D-1A  
HEALTH 1, FLAMMABILITY 2, REACTIVITY 0,  
PERSONAL PROTECTION B  
MIXTURE  
NOT APPLICABLE  
CLEANER

CHEMICAL FORMULA  
MOLECULAR WEIGHT  
MATERIAL USE

### SECTION 2 HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENT  
APPROX. CONCENTRATION %  
CAS  
EXPOSURE LIMITS  
LD50/LC50/SPECIES/ROUTE

CITRUS TERPENE  
60-100  
5989-27-5  
NOT AVAILABLE  
NOT AVAILABLE

HAZARDOUS INGREDIENT  
APPROX. CONCENTRATION %  
CAS  
EXPOSURE LIMITS  
LD50/LC50/SPECIES/ROUTE

NONYLPHENOL ETHOXYLATE  
10-30  
127087-87-0  
NOT AVAILABLE  
NOT AVAILABLE

HAZARDOUS INGREDIENT  
APPROX. CONCENTRATION %  
CAS  
EXPOSURE LIMITS  
LD50/LC50/SPECIES/ROUTE

CARBON DIOXIDE  
1-5  
124-38-9  
500 PPM  
NOT AVAILABLE

### SECTION 3 PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE  
ODOUR AND APPEARANCE  
ODOUR THRESHOLD (PPM)  
SPECIFIC GRAVITY  
VAPOUR PRESSURE (MM)  
VAPOUR DENSITY (AIR =1)  
EVAPORATION RATE  
BOILING POINT (°C)  
SOLUBILITY IN WATER (20°C)  
% VOLATILE (BY VOL.)  
PH

AEROSOL  
CITRUS ODOUR, CLEAR LIQUID  
NOT AVAILABLE  
0.874  
78  
HEAVIER THAN AIR  
NOT AVAILABLE  
~323°F  
EMULSIFIABLE  
NOT AVAILABLE  
NOT APPLICABLE

**SECTION 4 FIRE AND EXPLOSION DATA**

FLAMMABILITY	FLAMMABLE
MEANS OF EXTINCTION	CARBON DIOXIDE, FOAM OR DRY CHEMICAL.
SPECIAL PROCEDURES	WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACE PIECE OPERATED IN THE POSITIVE PRESSURE MODE. USE WATER SPRAY TO KEEP CONTAINERS COOL.
FLASHPOINT (°C) AND METHOD	122°F
UPPER EXPLOSION LIMIT (% BY VOL.)	NOT AVAILABLE
LOWER EXPLOSION LIMIT (% BY VOL.)	NOT AVAILABLE
HAZARDOUS COMBUSTION PRODUCTS	NOT KNOWN

**SECTION 5 REACTIVITY DATA**

CHEMICAL STABILITY	STABLE
INCOMPATIBILITY? TO WHAT?	STRONG OXIDIZERS
HAZARDOUS DECOMPOSITION PRODUCTS	CARBON DIOXIDE, CARBON MONOXIDE

**SECTION 6 TOXICOLOGICAL PROPERTIES**

ROUTE OF ENTRY SKIN CONTACT Y/N	Y
ROUTE OF ENTRY EYE CONTACT Y/N	Y
ROUTE OF ENTRY INHALATION Y/N	Y
ROUTE OF ENTRY INGESTION Y/N	Y
EFFECTS OF ACUTE EXPOSURE	SKIN IRRITANT, WILL CAUSE DEFATTING OF THE SKIN. EYE IRRITANT, WILL CAUSE REDNESS AND BURNING SENSATION. EFFECTS OF INHALATION OVEREXPOSURE INCLUDE IRRITATION OF RESPIRATORY TRACT, HEADACHE, DIZZINESS, NAUSEA AND LOSS OF COORDINATION. ASPIRATION HAZARD IF SWALLOWED.
EFFECTS OF CHRONIC EXPOSURE	NONE KNOWN
SYNERGISTIC MATERIALS	NOT AVAILABLE
CARCINOGENICITY Y/N	N
REPRODUCTIVE EFFECTS Y/N	N
TERATOGENICITY Y/N	N
MUTAGENICITY Y/N	N

**SECTION 7 PREVENTIVE MEASURES**

GLOVES	RUBBER
EYEWEAR	SAFETY GLASSES OR GOGGLES
FOOTWEAR	NORMAL FOOTWEAR
CLOTHING	WEAR IMPERVIOUS PROTECTIVE CLOTHING.
ENGINEERING CONTROLS	GOOD VENTILATION SHOULD BE SUFFICIENT TO CONTROL AIRBORNE LEVELS.
LEAK AND SPILL PROCEDURE	SPILLS CAN BE HANDLED ROUTINELY. MAY BE ABSORBED WITH DIATOMACEOUS EARTH OR CLAY. COLLECT FOR RECOVERY OR DISPOSAL.
WASTE DISPOSAL	CONSULT YOUR LOCAL OR REGIONAL AUTHORITIES.
STORAGE REQUIREMENTS	KEEP IN A COOL WELL-VENTILATED PLACE. KEEP AWAY FROM HEAT, SPARKS AND FLAME. DO NOT PUNCTURE, INCINERATE, STORE THE CONTAINER AT TEMPERATURES ABOVE 49°C (120°F) OR IN DIRECT SUNLIGHT.

**SECTION 8 FIRST AID MEASURES**

SKIN	THOROUGHLY WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.
EYE	IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR AT LEAST 20 MINUTES, KEEPING EYELIDS OPEN. SEEK MEDICAL ATTENTION.
INHALATION	REMOVE TO FRESH AIR. IF SYMPTOMS PERSIST, CALL A PHYSICIAN.
INGESTION	DO NOT INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ATTENTION.

*VALIDATED BY YORK CHEMICAL TECHNOLOGIES INC ON 30/04/2010.*

*WHILE THE COMPANY BELIEVES THE DATA SET FORTH HEREIN ARE ACCURATE AS OF THE DATE HEREOF, THE COMPANY MAKES NO WARRANTY WITH RESPECT THERETO AND EXPRESSLY DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. SUCH DATA ARE OFFERED SOLELY FOR YOUR CONSIDERATION, INVESTIGATION AND VERIFICATION.*