

MATERIAL SAFETY DATA SHEET: CLEAR GUARD AEROSOL

Section I - General Information

(0000000-0000000- - 5687)

Date of Issue:

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Chemical Name & Synonyms:

N/A

Chemical Family:

Aliphatic/Aromatic hydrocarbon blend

Manufacturer Name:

CHEMSEARCH DIV. OF NCH CORP.

Manufacturer Address:

BOX 152170

IRVING, TX 75015

Prepared By:

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Trade Name & Synonyms:

CLEAR GUARD AEROSOL

Formula is a mixture: [√]

Product Code Number:

5687

Emergency Phone Number:

800-424-9300

Section II - Hazardous Ingredients

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)	Hazard	TLV	PEL	STEL	CAS #
XYLENE	IRR/FLAM	100 ppm 1	100 ppm 2	N/E	1330-20-7
STYRENE POLYMER WITH 1,3 BUTADIENE	IRRITANT	N/E 1	N/E 2	N/E	9003-55-8
N-HEXANE	IRR/FLAM	50 ppm \$1	500 ppm 2	N/E	110-54-3
PROPANE	FLAM/ASPHY	1000 ppm*1	1000 ppm 2	N/E	74-98-6
BUTANE	FLAM/ASPHY	1000 ppm*1	N/E 2	N/E	106-97-8
ACETONE	IRR/FLAM	500 ppm 1	1000 ppm 2	750 ppm 1	67-64-1
TOLUENE	IRR/FLAM	20 ppm 1	200 ppm 2	300 ppm 2	108-88-3
\$ SKIN					
* Aliphatic hydrocarbon gases					

Section III - Physical Data

Boiling Point (°F):N/E	Specific Gravity (H ₂ O=1):0.77
Vapor Pressure (mm Hg):<75 psi	Color:Colorless-Lt yellow
Vapor Density (Air=1):>1	Odor:Aromatic solvent
pH @ 100% :N/A	Clarity:Transparent-hazy
% Volatile by Volume:88	Evaporation Rate (BuAc=1):<1
H ₂ O Solubility:Negligible	Viscosity:Semi-viscous

Section IV - Fire and Explosion Hazard

Flash Point: -10°F	Method Used: Setaflash
Flammable Limits: Product mixture	UEL: 12.8%
LEL: 0.9%	Aerosol Level (NFPA 30B): 3

Extinguishing Media:
[] Foam [] Alcohol Foam [√] CO2
[√] Dry Chemical [√] Water Spray [√] Other

NFPA 704 Hazard Rating:
4-Extreme Health: 2
3-High Flammability: 4
2-Moderate Instability: 0
1-Slight Special:
0-Insignificant

Special Fire Fighting Procedures:

Firefighters should wear a self-contained breathing apparatus and full protective gear. Cool fire-exposed containers with water spray to prevent bursting.

Unusual Fire and Explosion Hazards:

Vapors are heavier than air and may travel to distant and/or low-lying sources of ignition and flashback. Product may produce a floating fire hazard as liquid floats on water. The use of water spray (fog), while effective, may cause frothing and foaming. Never use a water jet as this will just spread the fire. Use care as spills may be slippery. Flame extension is >30 inches, burnback is 6 inches.

Section V - Health and Hazard Data

Threshold Limit Value:

Not Established for Mixture. See Section II.

Effects of Overexposure:

Acute: (Short Term Exposure)

EYE CONTACT: Causes irritation seen as tearing and redness.
SKIN CONTACT: May cause irritation seen as itching and redness. Product may be absorbed through the skin in harmful amounts. Prolonged or repeated contact as from clothing wet with material may cause drying, defatting, and cracking of the skin.
INHALATION: May cause respiratory irritation seen as coughing and sneezing. At low vapor concentrations, no harmful effects are expected. At high vapor concentrations, inhalation may cause central nervous system effects such as headache, dizziness, drowsiness, weakness, unconsciousness, possible anesthetic effects from central nervous system depression, and may be fatal.
INGESTION: May cause irritation with possible nausea, vomiting, and diarrhea. May cause central nervous system effects similar to inhalation.

Chronic: (Long Term Exposure)

Chronic inhalation may cause damage to liver and kidneys. Chronic inhalation of solvents like Xylene and Toluene have caused heartbeat irregularity, heartbeat increase, and permanent central and peripheral nervous system damage, resulting in decreased learning ability, loss of memory, personality changes, and disturbances in gait. A condition known as "painter's syndrome" can occur causing a loss of sensation in the arms and hands (peripheral neuropathy). Prolonged or repeated exposure may cause cardiac sensitization. Chronic skin contact may promote dermatitis and oil acne. In rarer cases, an increased sensitivity to sunlight (photosensitivity) may occur. Medical conditions aggravated by exposure are pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis, preexisting neurological conditions, hepatic and renal conditions, cardiovascular, and auditory system conditions. Target organs: Central and peripheral nervous systems, heart, kidneys, liver, blood, and auditory system. The primary routes of exposure are skin and eye contact.

Primary Routes of Entry

[√] Inhalation [√] Ingestion [√] Absorption

Emergency First Aid Procedures:

Inhalation:
Remove from the area to fresh air. If not breathing, clear the airway and start mouth to mouth artificial respiration. Get immediate medical attention.

Eye Contact:
Rinse the eyes with water. Remove any contact lenses and continue flushing with plenty of water for several minutes. Seek medical attention if irritation develops.

Skin Contact:
Wash affected areas with plenty of soap and water for several minutes. Seek medical attention if irritation develops.

Ingestion:
Give 3 to 4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Seek medical attention if discomfort occurs.

Notes to Physician:
There is no specific antidote. Treat the patient symptomatically.

Section VI - Toxicity Information

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:				
<input type="checkbox"/> IARC	<input type="checkbox"/> NTP	<input type="checkbox"/> OSHA	<input type="checkbox"/> ACGIH	<input type="checkbox"/> Other

VOC content: 88% by weight, 792 g/L
MIR content: 1.50

XYLENE
 ORL-RAT LD₅₀: 4300 mg/kg 3.
 IHL-RAT LC₅₀: 5000 ppm/4h 3.
 IHL-HMN LC_{L0}: 1000 ppm/6h 3.
 SKN-RBT LD₅₀: >1700 mg/kg 3.
 SKN-RBT SDT: 500 mg/24h moderate 3.
 EYE-RBT SDT: 5 mg/24h severe 3.

Xylene causes hearing loss, cardiac stimulation, and arrhythmia (irregular heart beat) in laboratory animals. 4.

STYRENE POLYMER WITH 1,3 BUTADIENE
 EYE-RBT SDT: 500 mg/24h mild 3.

N-HEXANE
 ORL-RAT LD₅₀: 25 gm/kg 4.
 IHL-RAT LC₅₀: 48,000 ppm/4h 6.
 IHL-HMN TC_{L0}: 190 ppm/8w 4.
 SKN-RBT LD₅₀: 3000 mg/kg 6.
 EYE-RBT-SDT: 10 mg mild 4.

This material may adversely affect the male reproductive system (decreased sperm counts and degenerative changes in the testes) based on testing in laboratory animals. 3.

Kidney effects in male rats were observed in laboratory animals exposed to a similar material. Effects were consistent with male rats hyaline droplet nephropathy which is of questionable significance to human health. In animals, repeated exposure to high concentrations of a similar solvent has caused a decrease in the red blood cell count. 3.

Causes fetotoxicity in animals at doses which are maternally toxic. 3.

PROPANE
 IHL-LC₅₀ >40% by volume 4.

N-BUTANE
 IHL-RAT LC₅₀: 658 g/m³/4h 3.
 IHL-MUS LC₅₀: 680 g/m³/4h 3.

Human volunteers exposed repeatedly to gases of similar hydrocarbon mixtures ranging from 250 to 1000 ppm exhibited no cardiac or pulmonary function abnormalities. 4.

No apparent ill effects in breathing concentrations of 5% for 2 hours. 4.
 Causes drowsiness in short time in concentrations of 1%. 4.

ACETONE
 EYE-RBT SDT: 20 mg severe 4.
 SKN-RBT SDT: 500 mg/24h mild 4.
 SKN-GPG LD₅₀: >9400 uL/kg 4.
 ORL-RAT LD₅₀: 5800 mg/kg 4.
 IHL-RAT LC₅₀: 50,100 mg/m³/8h 4.
 ORL-RAT TD_{L0}: 273 g/kg/13w-c 4.

TOLUENE
 EYE-RBT SDT: 870 ug mild 3.
 SKN-RBT SDT: 20 mg/24h moderate 3.
 SKN-RBT LD₅₀: 8390 mg/kg 6.
 ORL-HMN LD_{L0}: 50 mg/kg 3.
 ORL-RAT LD₅₀: 636 mg/kg 3.
 IHL-RAT LC₅₀: 12.5 mg/L/4h 6.

Animal studies have shown that repeated inhalation of high levels produced histological changes in the brain, degeneration of the heart tissue, cardiac sensitization and possible immune system suppression. Intentional abuse of toluene vapors has been linked to damage of the brain, kidney, and liver. 4.

Many case studies involving abuse during pregnancy indicate that toluene can cause birth defects, growth retardation and learning difficulties. 4.

Section VII - Reactivity Data

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<div>Stability</div> <div><div><div><div><div><div></div></div><div>[V] Stable</div></div><div><div></div><div>[] Unstable</div></div></div></div></div> <div>Conditions to Avoid:</div> <div>Avoid heat, hot surfaces, sparks, and open flames.</div>	<div>Hazardous Polymerization</div> <div><div><div><div><div><div></div></div><div>[V] Will not occur</div></div><div><div></div><div>[] May occur</div></div></div></div></div> <div>Conditions to Avoid:</div> <div>N/A</div>
<div>Incompatibility (Materials to Avoid):</div> <div>Strong oxidizing agents such as Chlorine bleach and concentrated Hydrogen Peroxide.</div>	
<div>Hazardous Decomposition Products:</div> <div>Oxides of Carbon.</div>	

Section VIII - Spill Or Leak Procedures

<div>Steps to be Taken if Material is Released or Spilled:</div> <div>Eliminate ignition sources of electrical, static, or frictional sparks. Ventilate the contaminated area and avoid creating dusty conditions. Wear appropriate protective clothing. Transfer solid using non-sparking equipment into a properly labeled container for re-use or disposal. If necessary, wash area with water. Prevent product from contaminating soil or from entering sewage, drainage systems, and bodies of water.</div>	
<div>Waste Disposal Method(s):</div> <div>Dispose of in accordance with all Federal, state, and local regulations. Typical disposal is to wrap the empty aerosol container in several layers of newspaper and dispose of in the trash. Aerosol recycling programs are available in many areas. Do not puncture or incinerate this container.</div>	
<div>Neutralizing Agent:</div> <div>N/A</div>	

Section IX - Special Protection Information

<div>Required Ventilation:</div> <div>Local ventilation is recommended to control exposure from operations that can generate excessive levels of mists or vapors. Local ventilation is preferred, because it prevents dispersion into work areas by controlling it at its source.</div>	
<div>Respiratory Protection:</div> <div>Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-facepiece respirator equipped with appropriate chemical cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in publication No. 87-116 or ANSI Z88.2-1992.</div>	
<div>Glove Protection:</div> <div>Neoprene or nitrile rubber gloves should be worn. Ensure compliance with OSHA's personal protective equipment (PPE) standard for hand protection, 29 CFR 1910.138.</div>	
<div>Eye Protection:</div> <div>Safety glasses with side shields if the method of application presents the likelihood of eye contact. Ensure compliance with OSHA's Personal Protective Equipment (PPE) standard for eye and face protection, 29 CFR 1910.133.</div>	
<div>Other Protection:</div> <div>Wear protective clothing when handling. A safety shower and an eyewash station should be available. Remove soaked clothing and shoes. Wash clothing and clean shoes before re-use.</div>	

Section X - Storage and Handling Information

<div>Storage Temperature</div> <div><div><div>Max: 120°F</div><div>Min: 35°F</div></div></div>	<div>Storage Conditions</div> <div><div><div><div><div><div></div></div><div>[V] Indoors</div></div><div><div></div><div>[] Outdoors</div></div><div><div></div><div>[] Heated</div></div><div><div></div><div>[] Refrigerated</div></div></div></div></div>
<div>Precautions to be Taken in Handling and Storing:</div> <div>Use with caution around heat, sparks, pilot lights, static electricity, and open flame.</div>	
<div>Other Precautions:</div> <div>Keep out of reach of children. Read the entire label before using the product. Follow the label directions.</div>	

Section XI - Regulatory Information

Chemical Name	CAS Number	Upper % Limit
XYLENE	1330-20-7	10
HEXANE	110-54-3	50

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Please call 1-800-527-9919 for additional information if you are a California customer. This MSDS is not intended for users in the state of California.

Section XII - References

1. Threshold Limit Values for chemical substances and physical agents and biological exposure indices, ACGIH, 2007.
2. OSHA PEL.
3. Vendor's MSDS.
4. Registry of toxic effects of chemical substances, CCINFOWeb, 2007.
5. European Chemical Substances Information System (ESIS), International Uniform Chemical Information Database (IUCLID) Chemical Data Sheets.
6. ChemADVISOR, Inc. Database Release: 2007-4.
All the components of this product are in compliance with the Toxic Substances Control Act (TSCA) and are either listed on the TSCA inventory or otherwise exempted from listing.

IRR: Irritant, OSHA: Occupational Safety & Health Administration, IARC: International Agency for the Research on Cancer, TOX: Toxic, NFPA: National Fire Protection Association, ppm: Parts Per Million, UEL: Upper Explosion Limit, STEL: Short-term Exposure Limit, HMN: Human, mg/m3, IHL: Inhalation, COMB: Combustible, CORR: Corrosive, MUT: Mutagenic, CARC: Carcinogenic, N/A: Not Applicable, TLV: Threshold Limit Value, N/E: Not Established, ORL: Oral, FLAM: Flammable, ASPHYX: Asphyxiant, C.O.C.: Cleveland Open Cup, PNOR: Particles Not Otherwise Regulated, LEL: Lower Explosion Limit, mg/L: Milligrams per Liter, PNOS: Particles Not Otherwise Specified, g/L: Grams per Liter, PMCC: Pensky-Martin Closed Cup, NTP: National Toxicology Program, ug/L: Micrograms per Liter, TCC: Tagliabue Closed Cup, SEV: Severe, RBT: Rabbit, INV: Intravenous, ACGIH: American Conference of Governmental Industrial Hygienists, PEL: Permissible Exposure Limit, MOD: Moderate, IPT: Intraperitoneal, gm/kg: Grams per Kilogram, C.C.C.: Cleveland Closed Cup, SKN: Skin, Milligrams per Cubic Meter, mg/kg: Milligrams per Kilogram, VOC: Volatile Organic Compound, SDT: Standard Draize Test, MSE: Mouse, GPG: Guinea Pig.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORMULATION. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING

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