

Material Safety Data Sheet



Nycote 88

1. Product and company identification

Product name	: Nycote 88
Material uses	: Not available.
Supplier/Manufacturer	: Nycote Laboratories Corporation 12750 Raymer St., Bldg. A-3 North Hollywood, California 91605 Tel: 1-(818)-764-8177
MSDS authored by	: KMK Regulatory Services Inc.
In case of emergency	: ChemTel 1-813-248-0585 1-800-255-3924

2. Hazards identification

Emergency overview

Physical state	: Liquid. [Clear.]
Odor	: Alcohol-like.
Signal word	: WARNING !
Hazard statements	: FLAMMABLE LIQUID AND VAPOR. CAUSES EYE AND SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Precautionary measures	: Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Keep container tightly closed. Wash thoroughly after handling.
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential acute health effects

Inhalation	: Moderately irritating to the respiratory system.
Ingestion	: Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin	: Irritating to skin. Can cause dermatitis.
Eyes	: Irritating to eyes.

Potential chronic health effects

Chronic effects	: May cause target organ damage, based on animal data.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Target organs	: Contains material which may cause damage to the following organs: blood, kidneys, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Over-exposure signs/symptoms

Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
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2. Hazards identification

- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
- Skin** : Adverse symptoms may include the following:
irritation
redness
- Eyes** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
Ethyl Alcohol	64-17-5	30 - 60
Toluene	108-88-3	10 - 30

Canada

Name	CAS number	%
Ethyl Alcohol	64-17-5	30 - 60
Toluene	108-88-3	10 - 30

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.
- Inhalation** : Move exposed person to fresh air. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call medical doctor or poison control center immediately.
- Notes to physician** : No specific treatment. Treat symptomatically.

5. Fire-fighting measures

- Flammability of the product** : Flammable liquid.
- Extinguishing media**
 - Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
 - Not suitable** : Do not use water jet.
- Special exposure hazards** : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

- Small spill** : Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Keep away from heat, sparks and flame.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. **Store between the following temperatures: 65°F (18.33°C) and 80°F (26.67°C). Keep from freezing.**

8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
Ethyl Alcohol	ACGIH TLV (United States, 2/2010). STEL: 1000 ppm 15 minute(s). NIOSH REL (United States, 6/2009). TWA: 1900 mg/m ³ 10 hour(s). TWA: 1000 ppm 10 hour(s). OSHA PEL (United States, 6/2010). TWA: 1900 mg/m ³ 8 hour(s). TWA: 1000 ppm 8 hour(s).
Toluene	NIOSH REL (United States, 6/2009). STEL: 560 mg/m ³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 375 mg/m ³ 10 hour(s). TWA: 100 ppm 10 hour(s). OSHA PEL Z2 (United States, 11/2006). AMP: 500 ppm 10 minute(s). CEIL: 300 ppm TWA: 200 ppm 8 hour(s).

8. Exposure controls/personal protection

ACGIH TLV (United States, 2/2010).
TWA: 20 ppm 8 hour(s).

Canada

<u>Occupational exposure limits</u>		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	Notations
Ethyl Alcohol	US ACGIH 2/2010	-	-	-	1000	-	-	-	-	-	
	AB 4/2009	1000	1880	-	-	-	-	-	-	-	
	BC 9/2010	-	-	-	1000	-	-	-	-	-	
	ON 7/2010	-	-	-	1000	-	-	-	-	-	
	QC 6/2008	1000	1880	-	-	-	-	-	-	-	
Toluene	US ACGIH 2/2010	20	-	-	-	-	-	-	-	-	
	AB 4/2009	50	188	-	-	-	-	-	-	-	[1]
	BC 9/2010	20	-	-	-	-	-	-	-	-	
	ON 7/2010	20	-	-	-	-	-	-	-	-	
	QC 6/2008	50	188	-	-	-	-	-	-	-	[1]

[1] Absorbed through skin.

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- Personal protection**
- Respiratory** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Use gloves appropriate for work or task being performed. Recommended: Natural rubber (latex).
- Eyes** : Safety eyewear should be used when there is a likelihood of exposure. Recommended: Safety glasses with side shields.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Lab coat.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

- Physical state** : Liquid. [Clear.]
- Flash point** : Open cup: 21°C (69.8°F) [Cleveland.]
- Odor** : Alcohol-like.
- Boiling/condensation point** : 170°C (338°F)
- Vapor pressure** : 0.013 kPa (0.1 mm Hg) [20°C]

10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not swallow.
- Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
- Hazardous decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethyl Alcohol	LC50 Inhalation Vapor LD50 Oral	Rat Rat	124700 mg/m ³ 7 g/kg	4 hours -
Toluene	LC50 Inhalation Vapor LD50 Oral	Rat Rat	49 g/m ³ 636 mg/kg	4 hours -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Ethyl Alcohol	Eyes - Moderate irritant Skin - Moderate irritant	Rabbit Rabbit	- -	- -	- -
Toluene	Eyes - Mild irritant Skin - Moderate irritant	Rabbit Rabbit	- -	- -	- -

Skin : Applicable.

Eyes : Applicable.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Ethyl Alcohol	A3	1	-	-	-	-
Toluene	A4	3	-	-	-	-

IDLH : Not available.

Synergistic products : Not available.

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Ethyl Alcohol	Acute EC50 17.921 mg/L Marine water Acute EC50 2000 ug/L Fresh water Acute LC50 25500 ug/L Marine water	Algae - Ulva pertusa Daphnia - Daphnia magna Crustaceans - Artemia franchiscana - Larvae	96 hours 48 hours 48 hours
Toluene	Acute LC50 42000 ug/L Fresh water Chronic NOEC <6.3 g/L Fresh water Acute EC50 12500 ug/L Fresh water Acute EC50 6000 ug/L Fresh water Acute LC50 15.5 ppm Marine water Acute LC50 5500 ug/L Fresh water Chronic NOEC 28000 ug/L Fresh water	Fish - Oncorhynchus mykiss Daphnia - Daphnia magna Algae - Pseudokirchneriella subcapitata Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) Crustaceans - Palaemonetes pugio - Adult Fish - Oncorhynchus kisutch - Fry - 1 g Daphnia - Daphnia magna - <=24 hours	4 days 48 hours 72 hours 48 hours 48 hours 96 hours 48 hours

Other adverse effects : No known significant effects or critical hazards.





13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1993	FLAMMABLE LIQUIDS, N.O.S. (Ethyl Alcohol)	3	II		-
TDG Classification	UN1993	FLAMMABLE LIQUIDS, N.O.S. (Ethyl Alcohol)	3	II		-
IMDG Class	UN1993	FLAMMABLE LIQUIDS, N.O.S. (Ethyl Alcohol, Toluene)	3	II		-
IATA-DGR Class	UN1993	FLAMMABLE LIQUIDS, N.O.S. (Ethyl Alcohol, Toluene)	3	II		-

PG* : Packing group

Exemption to the above classification may apply.

AERG : 128

15. Regulatory information

United States

HCS Classification : Flammable liquid
Irritating material
Target organ effects

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Ethyl Alcohol; Toluene
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Ethyl Alcohol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Toluene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: Toluene
Clean Water Act (CWA) 311: Toluene

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

15. Regulatory information

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Listed

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	Toluene	108-88-3	10 - 30
Supplier notification	Toluene	108-88-3	10 - 30

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Ethyl Alcohol; Toluene

New York : The following components are listed: Toluene

New Jersey : The following components are listed: Ethyl Alcohol; Toluene

Pennsylvania : The following components are listed: Ethyl Alcohol; Toluene

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	No.	Yes.	No.	7000 µg/day (ingestion) 13000 µg/day (inhalation)

Canada

WHMIS (Canada) : Class B-2: Flammable liquid
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI : The following components are listed: Ethyl alcohol; Toluene

CEPA Toxic substances : None of the components are listed.

Canada inventory : All components are listed or exempted.

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.

International regulations

International lists :

- Australia inventory (AICS):** All components are listed or exempted.
- China inventory (IECSC):** All components are listed or exempted.
- Japan inventory:** Not determined.
- Korea inventory:** All components are listed or exempted.
- New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.
- Philippines inventory (PICCS):** All components are listed or exempted.

16. Other information

Label requirements : FLAMMABLE LIQUID AND VAPOR. CAUSES EYE AND SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Hazardous Material Information System (U.S.A.) : **Health** : 1 * **Flammability** : 3 **Physical hazards** : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) : **Health** : 1 **Flammability** : 3 **Instability** : 0

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History

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



Dr. Luc Séguin, PhD chemist, 25 years as a professional in regulatory compliance



Global - Multilingual authoring services for all regulatory documents



Optimizing your company's GHS deployment

