

SECTION 8 - FIRE & EXPLOSION HAZARD

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FLAMMABLE / COMBUSTIBLE? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
If Yes, under what conditions? Extreme heat above 316 degrees C	
FLASH POINT & METHOD: N/A	IMPACT/SHOCK SENSITIVITY: N/A
UPPER FLAMMABLE LIMIT (% Volume): N/A	RATE OF BURNING: N/A
LOWER FLAMMABLE LIMIT (% Volume): N/A	SENSITIVITY TO STATIC DISCHARGE: N/A
AUTO IGNITION TEMP.: N/A	EXTINGUISHING MEDIA: Water, Carbon Dioxide, Foam, Dry Chemical
HAZARDOUS COMBUSTION PRODUCTS: Carbon Dioxide, CO, Hydrocarbons	
GENERAL FIRE HAZARDS: Molten material causes burns	
SPECIAL FIRE FIGHTING INSTRUCTIONS: None	

SECTION 9 - EXPOSURE CONTROLS & PERSONAL PROTECTION

ENGINEERING CONTROLS (Specify, e.g. Ventilation, Enclosed Process): None under normal conditions	
PERSONAL PROTECTION:	
Gloves (Specify): If material is heated	Eye (Specify): Safety glasses
Respiratory (Specify): None under normal conditions	Footwear (Specify): None
Clothing (Specify): None	
Other: None	
EXPOSURE LIMITS (ACGIH / TLV): N/A	

SECTION 10 - TRANSPORTATION INFORMATION

USA DOT (HM181): N/A	SHIPPING NAME: N/A
CANADIAN TDG: N/A	UN / NA #: N/A
HAZARD CLASS: None	PACKING GROUP: N/A
LABEL(S) REQUIRED? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	SPECIAL SHIPPING INFORMATION: None
INTERNATIONAL TRANSPORTATION REGULATIONS: N/A	

SECTION 11 - ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK RESPONSE: Sweep or pick up to avoid slipping hazard
TRANSPORTATION SPILLS: Sweep or pick up to avoid slipping hazard

SECTION 12 - STORAGE & HANDLING

RECOMMENDED STORAGE: Cool, dry place
PROCEDURES FOR HANDLING: None

SECTION 13 - DISPOSAL CONSIDERATIONS

HAZARDOUS WASTE? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
GENERAL PRODUCT INFORMATION: None
COMPONENT WASTE NUMBERS: N/A
DISPOSAL INSTRUCTIONS: Incineration or landfill in compliance with federal, state and local regulations

SECTION 14 - FIRST AID MEASURES

EYES: None
SKIN: None
INGESTION: None
INHALATION: None
NOTES TO PHYSICIAN: None

SECTION 15 - REGULATORY INFORMATION

USA - OSHA (Hazard Communication Standard): N/A			
EPA (Toxic Substances Control Act - TSCA): N/A			
CANADA - WHMIS (Workplace Hazardous Materials Information System): N/A			
CEPA (Canadian Environmental Protection Act): N/A			
EINECS No. (European Inventory of Commercial Chemical Substances): N/A			
NFPA RATINGS:			
Health: 0	Fire: 1	Reactivity: 0	Other:
HMIS RATINGS			
Health: 0	Fire: 1	Reactivity: 0	Other: A

SECTION 16 - OTHER INFORMATION

READ THIS MSDS SHEET BEFORE USING THIS PRODUCT.
LABEL INFORMATION:
Risk Phases: N/a
Precautionary Measures: N/A
MSDS SHEET PREPARED BY: J. Curtin
KEY / LEGEND: None
OTHER: None



MATERIAL SAFETY DATA SHEET

DRP75

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Code : DRP 75

MSDS Date : 05/01/2000

COMPANY IDENTIFICATION

Duraco, Inc.
7400 W. Industrial Drive
Forest Park, IL 60130

EMERGENCY TELEPHONE NUMBERS

CHEMTREC : 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>No</u>	<u>REG NO</u>	<u>CAS</u>
1		142-82-5
Heptane		
PCT BY WT: 8.4000 Vapor Pressure: 40.000 MMHG @ 68F		
Exposure Limit:		
ACGIH TLV – TWA 400 ppm		
ACGIH TLV – STEL 500 ppm		
OSHA PEL – TWA 500 ppm		
NIOSH REL – TWA 85 ppm		
NIOSH REL – CEILING 440 ppm 15-min TWA		
2		108-88-3
Toluene		
PCT BY WT: 33.3000 Vapor Pressure: 22.000 MMHG @ 68F		
Exposure Limit:		
ACGIH TLV – TWA 50 ppm – skin		
OSHA PEL – TWA 200 ppm		
OSHA PEL – CEILING 300 ppm, 500 ppm 10-min peak per 8-hour shift		
NIOSH REL – TWA 100 ppm		
NIOSH REL – STEL 150 ppm		
Other Limits:		
Hazardous Air Pollutant (HAP)		
Reproductive Toxin		

3. HAZARDS IDENTIFICATION

Emergency Overview

Extremely flammable liquid and vapors. Vapors may cause flash fire. Causes severe eye irritation. Inhalation may cause dizziness, headache and incoordination. Ingestion can cause dizziness, faintness, headache and incoordination. Ingestion may cause inflammation of the lungs. May cause moderate skin irritation. May cause respiratory tract irritation. May cause digestive tract irritation. Ingestion may cause nausea, vomiting, pain, upset stomach, and diarrhea. Inhalation may cause nausea, vomiting, and upset stomach. Prolonged contact might dry skin and cause irritation. See sections 3, 5, & 6.

Primary Routes Of Exposure

Eye. Skin. Inhalation (breathing).

Eye Contact

Causes severe irritation. May cause corneal opacity (clouding of the eye surface). Can cause burning sensation, tearing, and redness.

Skin Contact

May cause moderate irritation. Prolonged or repeated contact may dry the skin and lead to irritation (i.e. dermatitis). May be absorbed through the skin. Can cause redness, itching, and burning sensation.

Inhalation (Breathing)

Irritating to the eyes, nose, and respiratory tract. High concentrations may cause central nervous system depression with symptoms of dizziness, headaches, nausea and confusion.

Ingestion (Swallowing)

Irritating to the mouth, throat, and stomach. May cause nausea, vomiting, pain, and stomach upset (e.g., diarrhea). Can cause dizziness, faintness, headache, and in coordination. Possible aspiration hazard. May cause inflammation of the lungs.

Target Organs/Chronic Effects

Liver. Kidneys. Nervous system. Lungs and respiratory system. Eyes. Skin.

Conditions Aggravated By Exposure

Nervous system. Lungs and respiratory system. Skin.

Carcinogenicity

Based on the available information, this product is not expected to be carcinogenic in humans. This product contains no components in quantities greater than or equal to 0.1% by weight that is listed as proven or suspected carcinogens by IARC, NTP, or OSHA.

4. FIRST AID MEASURES

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Skin Contact

Immediately flush with water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Professionally wash clothing and shoes before re-use.

Inhalation (Breathing)

Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration.

Ingestion (Swallowing)

Seek immediate medical attention. Don't induce vomiting. Never give anything by mouth to an unconscious person.

Notes To Physicians

Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

5. FIRE FIGHTING METHODS

Flash Point	12.0 F	Seta
Explosive Limits	Lower 1.0 % Volume in Air	
	Upper 7.0 % Volume in Air	
Autoignition	399.0 F	

Hazardous Combustion And Decomposition Products

Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.). Hydrogen chloride.

Fire And Explosion Hazards

High temperatures can cause sealed containers to rupture due to a build up of internal pressure. Cool with water. Vapors can travel to a source of ignition (flame, electric motor, hot surface, cigarette, etc.) and flash back. During a fire, irritating and highly toxic gases may be generated during combustion or decomposition.

Extinguishing Media

Dry chemical, carbon dioxide, foam, water spray or fog, and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on the size of potential size of fire and circumstances related to the situation.

Dry chemical, carbon dioxide, and "multipurpose" foams are recommended. Water may be ineffective extinguishing agent unless used under favorable conditions by experienced fire fighters trained in fighting all types of flammable liquid fires.

Fire Fighting Procedures/Equipment

Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH-approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Evacuation

Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all sources of ignition.

Containment

Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewers or bodies of water.

Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. Depending on the size of the spill, pump or vacuum transfer contaminated absorbent to appropriately marked container for disposal.

Clean-Up/Personal Protection Equipment

Appropriate safety measures and protective equipment should be used. Use supplied air respirator or self-contained breathing apparatus in enclosed spaces or if airborne exposure limits can be exceeded.

Collection And Disposal

Stop discharge, if safe to do so. Use proper protective equipment. Use non-sparking tools and/or explosion-proof equipment. Stop ignition sources. Cover spills with absorbent clay or sawdust and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.

Reporting

Spills of this material in excess of a component's RQ must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations.

Methyl ethyl ketone	RQ = 5000 LB
Toluene	RQ = 1000 LB

7. HANDLING AND STORAGE

Storage Conditions

Store in cool, dry, well-ventilated area away from heat, ignition sources, and direct sunlight. Keep containers tightly closed. **WARNING:** Hot organic chemical vapors or mists can suddenly and without warning combust when mixed with air. Ignition can occur at typical elevated temperature process conditions. Any use in such processes should be evaluated thoroughly to assure safe operating conditions.

Transfer

Containers should be supported and grounded before opening, dispensing, mixing, pouring, and emptying. Open with non-sparking tools. If container is warm, open bung slowly to release internal pressure.

Personal Hygiene

Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles, faceshield, and gloves. Professionally launder contaminated clothing before re-use.

Empty Container Precautions

Attention! This is container hazardous when empty. Follow label warnings even after container is emptied since empty containers may retain product residues. Do not use heat, sparks, open flames, torches, and cigarettes on or near empty container. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls/Ventilation

Local exhaust ventilation is recommended when vapors, mists, or dusts can be released in excess of established airborne exposure limits (TLVs or PELs).

Eye Protection

Wear chemical splash goggles. An eye wash facility should be readily available.

Skin Protection

Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, consult glove manufacturer to determine the proper type for a specific operation. Neoprene gloves. Butyl rubber gloves. An emergency shower should be readily available.

Respiratory Protection

Avoid breathing vapor and/or mists. Wear NIOSH/MSHA-approved equipment. Determine the appropriate type by consulting the respirator manufacturer. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134. Organic vapor/mist respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear Amber
Odor	Solvent
Physical State.....	Liquid
Density.....	7.5754 lb/gl
Solubility	Negligible
Vapor Pressure.....	40.00 mmHg @ 68F
Vapor Density.....	3.50 Air = 1
Boiling Range.....	Lower 200.0 F Higher 232.0 F
Specific Gravity.....	0.910
Evaporation Rate.....	4.500 (n-Butyl Acetate = 1)
Volatile (% Weight).....	41.7000
Volatile (% Volume).....	45.7661
VOC (% Weight).....	47.7000
VOC (% Volume).....	45.7661
VOC (less water and exempt solvent).....	3.159 LB/GL 378.54 GM/L
VOC (less water and exempt solvent).....	

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal condition of use.

Hazardous Polymerization

Will not occur.

Conditions To Avoid

High temperatures. Ultraviolet light and/or sunlight.

Incompatibility With Other Materials

Oxidizing Agents. Strong Acids.

11. TOXICITY INFORMATION

No data for product.

12. ECOLOGICAL INFORMATION

No data are available on this product.

13. DISPOSAL CONSIDERATIONS

Disposal

Do not flush to sewer. Dispose of in accordance with all applicable federal, state or provincial, and local laws and regulations. RCRA hazardous material 40 CFR PART 260 et.seq.

General Statements

Federal regulations may apply to empty container. State and/or local regulations may be different.

General Recommendations

Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) recycle or rework, if feasible; (2) incinerate at an authorized facility; or (3) treat at an acceptable waste treatment facility.

Special Instructions

Be sure to contact the appropriate government environmental agencies if further guidance is required.

14. TRANSPORT INFORMATION

DOT HAZARD CLASS: 3
DOT PACKAGING GROUP:

15. REGULATORY INFORMATION

Federal Regulation

TSCA (U.S. Toxic Substances Control Act) Status:
The intentional ingredients of this product are listed.

SARA 313 INFORMATION

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Toluene
CAS# 108-88-3

PCT BY WT: 33.3000

State Regulations

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986.

WARNING: This product contains a chemical(s) known to the state of California to cause cancer.

WARNING: This product contains a chemical(s) known to the state of California to cause birth defects and / or other reproductive harm.

International Regulations

No data available for product.

16. OTHER INFORMATION

Hazard Rating		
	HMIS	NFPA
Health	2 *	2
Fire	3	3
Reactivity	0	0

* = Chronic

ABBREVIATIONS:

ACGIH = American Conference of Governmental Industrial Hygienists
OSHA = Occupational Safety and Health Administration
TLV = Threshold Limit Value
PEL = Permissible Exposure Limit
TWA = Time Weighted Average
STEL = Short-Term Exposure Limit
BAc = Butyl acetate
NIOSH = National Institute for Occupational Safety and Health
ppm = parts per million
IARC = International Agency for Research on Cancer.

The information contained herein relates only to the specific material identified. Duraco, Inc. believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. Duraco, Inc. urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.