

MSDS **Material Safety Data Sheet**

THE PENRAY COMPANIES, INC.

Penray Starting Fluid-5301

MSDS Number: 5301

Revision Date: 03/13/2010

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1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

The Penray Companies
440 Denniston Court

WHEELING, IL 60090

Contact: EH&S Department
Telephone Number: 847-459-5041
FAX Number: 847-459-5043
E-Mail:
Web

Product Name: Penray Starting Fluid-5301
Revision Date: 03/13/2010
Version: 2
MSDS Number: 5301
Common Name: AEROSOL STARTING FLUID CONTAINING BLEND OF SOLVENT AND ETHER
RCRA Number: D001
Product Use: STARTING FLUID IN A DOT 2Q AEROSOL CAN

EMERGENCY CONTACT TELEPHONE NUMBERS 24hrs/7

Adverse Medical: 1-800-752-7869 (24hr poison control call center)

Transport Response:

CHEMTREC 1-800-424-9300. CHEMTREC International 703-527-3887 (collect)
CANUTEC (Canada only) 613-996-666, or *666 on cellular phone

2 HAZARDS IDENTIFICATION

Route of Entry: Ingestion; Inhalation; Skin; Aspiration, Eyes
Target Organs: Not given
Inhalation: In normal working conditions, inhalation of vapors may cause loss of consciousness. According to dose, exposure via this route of entry may cause pulmonary edema, also known as dry-land-drowning, and or pulmonary burns.
Skin Contact: Prolonged exposure via this route of entry may cause serious burns
Eye Contact: Direct contact with material will cause ocular burns and or blindness.
Ingestion: Aspiration hazard. Exposure via this route of entry will cause pulmonary injury, thermal burns or death according to exposure.

HMIS II-ratings (scale 0-4): Health = 2, Fire = 4, Reactivity = 0

HMIS® Rating H2/F4/PH0

NFPA-ratings (scale 0-4): Health = 3, Fire = 4, Reactivity = 0

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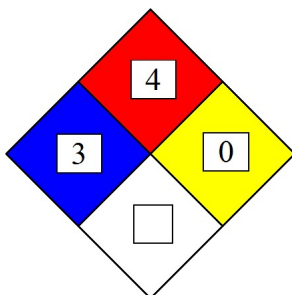
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Signal word: DANGER

HAZARD OVERVIEW: Extremely flammable aerosol. Vapor will cause flash fire. Vapors are noxious, severely irritating, and inhalation may cause anesthetic effects and loss of consciousness.

HEALTH	2
FLAMMABILITY	4
REACTIVITY	0
PPE	x



Unprotected exposure to this product will severely damage skin. Material sprayed in eyes will cause permanent damage to eyes.

Carcinogen listing by: National Toxicology Program (NTP)

I.A.R.C - (NO)

OSHA (NO)

ACGIH (NO)

This product does NOT require a cancer hazard warning in accordance with the OSHA Hazard Communication Standard.

Burning product may produce colorless vapor. Heated vapors in the presence of an ignition source can be explosive if confined. When burned, the product will produce carbon monoxide and other noxious asphyxiates during combustion.

CANADA WHMIS classification: CONTROLLED PRODUCT

D1A- Materials causing serious or immediate effects.

B5- Flammable Aerosol



NOT INTENDED FOR HOUSEHOLD USE!

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THE INFORMATION IN THE MATERIAL SAFETY DATA SHEET (MSDS) SHALL BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THE PENRAY COMPANIES INC. ENCOURAGES AND EXPECTS THE USER, DISTRIBUTOR, HANDLER TO READ THE ENTIRE MSDS, AND CONSULT APPROPRIATE EXPERTISE AS NECESSARY, TO BECOME AWARE OF AND FULLY UNDERSTAND THE INFORMATION CONTAINED IN THE MSDS AND OF ANY OCCUPATIONAL HAZARDS ASSOCIATED WITH THIS PRODUCT USE IN THE WORKPLACE.

3 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT MATERIALS CONSIDERED HAZARDOUS PER FEDERAL, STATE OR PROVINCIAL OCCUPATIONAL HEALTH, AND REGULATORY BODIES

Ingredients:

Cas #	Percentage	Chemical Name
142-82-5	60-100%	n- Heptane
60-29-7	15-40%	Diethyl Ether

OSHA Regulatory Status:

This MSDS contains valuable information critical to the safe handling and proper use of this product. This MSDS should be retained and available for employees and other users of this product.

4 FIRST AID MEASURES

- Inhalation:** Move victim to well ventilated area, and seek medical attention according to symptoms. If victim loses consciousness, treat with supplied oxygen until revived, and seek emergency medical attention at a level-one trauma center.
- Skin Contact:** Upon direct exposure to skin, cover effected area with sterile dry cotton or cloth material and seek medical attention.
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Seek emergency medical attention.
- Ingestion:** Drink fluids
SEEK emergency medical attention at a level-one trauma center, and INDUCE

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controlled vomiting ONLY under the supervision of a physician after administration of a gastric lavage

5 FIRE FIGHTING MEASURES

Flash Point: GHS category I, extremely flammable aerosol FP< 20 F degrees F
Flash Point Method: UN/SCETDG/35/INF.11 criteria
Burning Rate: NA
Autoignition Temperature: 662 degrees F
LEL: 1.4%
UEL: 48.0%
Flammability Classification: NFPA, level III flammable aerosol, WHMIS- controlled classification

Wear self contained breathing apparatus and other protective clothing.

Use any standard agent - choose the one most appropriate for type of surrounding fire.

AEROSOL CONTAINERS MAY EXPLODE AS MISSILES IN FIRE!

6 ACCIDENTAL RELEASE MEASURES

Release Measures:

Extinguish any open flames and remove heat sources.

CONTAIN, ABSORB, CONTROL THE SPILLAGE WITH THE SAFEST MOST EFFECTIVE MEANS AT YOUR DISPOSAL.

This material will float on water and will be transported by stormwater runoff. Soils to the ground should be immobilized and removed immediately. Spills to watercourse such as storm drains, sewers, ditches, streams.

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

* Information about ingredient percentages of product, according to RQ (Reportable Quantity), :Available upon request in the event of major uncontrolled release.

7 HANDLING AND STORAGE

Handling Precautions:

Handle with care and avoid spillage on the floor (slippage).
DO NOT SMOKE WHILE IN USE!
Do not expose containers to open flame, excessive heat, or direct sunlight.
Use proper bonding and grounding techniques.

STATIC ACCUMULATOR AND IGNITION POTENTIAL.

DO NOT WEAR CONTACT LENSES WHILE IN USE!

Storage Requirements:

CONTAINER UNSAFE TO PUNCTURE IN OPEN AIR, EVEN WITH NONSPARKING PIN!
Store in cool/dry area;
AEROSOL CONTAINERS MAY RUPTURE IN AIR TEMPERATURES GREATER THAN 150 degrees F !

Suitable packing materials
Store in areas designated for the storage of flammable aerosol according to NFPA 30B (Flammable and Combustible Aerosol Code)

EMPTY CONTAINER WARNING!

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"Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH

Do not attempt to refill or clean containers since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner in accordance with governmental regulations.

For work on tanks, refer to OSHA regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or contemplated operations.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use mechanical (general) ventilation for storage areas. All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94) and NFPA 30B standards

Protective Equipment:

Sealed monogoggles or faceshield, Gloves such as butyl-Nitrile or Neoprene high cuff, NIOSH approved and N95 OV rated respirator if misting of product occurs.

HMIS PP, X | Consult your supervisor for special instructions

If there is likelihood of splashing, chemical impervious clothing should be worn. Never wear oil chemical clothing. Affix warning labels on containers in accordance with 29 CFR 1910.1200 (Hazard Communication Standard)

Exposure Guidelines/Other:

Exposure Limits: OSHA permissible exposure limit

Diethyl Ether-ACGIH TLV, 500 ppm

(Inhalation)

Heptane - PEL, 400 ppm

(Inhalation)

USA OSHA (TWA₅)/PEL): See above

ACGIH (TWA/TLV): consult NIOSH pocket guide

Respiratory Protection: X- consult supervisor

Ventilation: X- consult supervisor

Protective Gloves: X- consult supervisor

Eye Protection: X- consult supervisor

Other Protective Equipment: X- consult supervisor

Note: PERSONAL PROTECTIVE EQUIPMENT (ppe) REQUIREMENTS ARE RELATED TO CONDITIONS OF USE, WHICH CANNOT BE SUITABLY PREDICTED BY THE PRODUCT MANUFACTURER. DETERMINATION OF NECESSARY (ppe) IS THE RESPONSIBILITY OF THE EMPLOYER/ USER, BASED ON ASSESSMENT

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AND KNOWLEDGE OF THE EMPLOYER'S INDUSTRIAL PROCESSES AND WORKPLACE ENVIRONMENT. IN EVERY CIRCUMSTANCE OF CHEMICAL EXPOSURE, THE EMPLOYER SHALL LIMIT WORKER EXPOSURES TO THIS PRODUCT FIRST BY IMPLEMENTING EFFECTIVE ENGINEERING CONTROLS, AND SECOND BY IMPLEMENTING ADMINISTRATIVE CONTROLS. PERSONAL PROTECTIVE EQUIPMENT (ppe) SHALL BE USED DILIGENTLY BY WORKERS WHEN ENGINEERING AND ADMINISTRATIVE CONTROLS DO NOT FULLY PREVENT OCCUPATIONAL EXPOSURE TO THIS PRODUCT.

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear to Opaque	Boiling Point:	56 degrees C
Physical State:	Aerosoled liquid	Freezing/Melting Pt.:	-25 degrees F,
Odor:	None	Solubility:	Complete in water
pH:	11.0	Spec Grav./Density:	0.78
Vapor Pressure:	60 PSIG mmHg @ 70 degrees F		
Vapor Density:	2		
Heat Value:	N/A		
VOC:	100%		
Evap. Rate:	N/A		
Bulk Density:	N/A		
Octanol:	N/A		
Molecular Weight:	NA		
Particle Size:	N/A		
Softening Point:	N/A		
Viscosity:	515.0 SUS at 100 degrees F		
Percent Volatile:	100%		
Sat. Vap. Concentrat.:	N/A		
Molecular Formula:	N/A		

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STABILITY AND REACTIVITY

Stability:	Product is stable under normal conditions, becomes unstable in high heat conditions.
Conditions to avoid:	Heat, ALL ignition sources,
Materials to avoid (incompatibility):	Oxidizing Agents. Peroxides, Acids, Carbon dioxide, and UV energy
Hazardous Decomposition products:	Combustion will produce carbon dioxide and, possibly toxic vapors such as carbon monoxide, Ammonia, and Nitrogen oxides.
Hazardous Polymerization:	Will not occur.

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TOXICOLOGICAL INFORMATION

IMMEDIATE (ACUTE) EFFECTS:

ACUTE STUDIES : Very high order, Contains Hematopoietic Toxicant which will impair oxygen carrying capacity of red blood cells according to dose. Vapors are toxic and noxious by inhalation in small doses, and may cause lose of consiousness

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ACUTE SKIN: Skin contact with prolonged exposure may cause permanent soft tissue damage. However, based on human experience and toxicological data, product is not judged to be "corrosive" by OSHA criteria.

EYE EFFECTS: Serious effects. Product contacting eyes will cause serious burns, damage and or permanent loss of vision. Draize eye data not available for this mixture.

ACUTE ORAL : Product very high a order of acute toxicity, amounts aspirated into the lungs during ingestion or vomiting will cause mild severe pulmonary injury, thermal burns or death in even a small dose.

ACUTE INHALATION: Product has a very high order of acute toxicity, even small amounts aspirated into the lungs during ingestion or vomiting will cause severe pulmonary injury including thermal burns, loss of consciousness, chemical pneumonitis, pulmonary edema/hemorrhage and possibly death..

Carcinogeny-NTP/IARC: There is no available evidence known, to state that this chemical product poses a carcinogenic risk in humans under normal conditions of handling and industrial use.

Specific L/D 50 data about product: NOT AVAILABLE

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ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS

If applied to leaves, this product will kill grass and small plants by interfering with transpiration and respiration. This product is toxic to fish and will affect gill structures resulting in suffocation if spilled in shallow, stagnate water. Product may be toxic to amphibians by preventing dermal respiration. This product will cause gastrointestinal distress to birds and mammals through ingestion during pelage grooming.

ENVIRONMENTAL FATE

This product is somewhat biodegradable. Biodegradation is possible within 90 to 120 days in aerobic environments at temperatures above 70 degrees F.

IN GENERAL, PRODUCT DEMONSTRATES NEGLIGIBLE WATER SOLUBILITY

WHEN EXPOSED TO THE NATURAL ENVIRONMENT.

Specific L/C 50 data in aquatic environments, about product: NOT AVAILABLE

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DISPOSAL CONSIDERATIONS

DISPOSAL

Product, as supplied DOES meet the characteristics of a hazardous waste as defined in 40 CFR 261.21-24. If mixed with other products, waste mixture must be characterized. DO NOT dispose of this product in drains or storm sewers. DO NOT dispose of this product in a landfill.

Dispose of in accordance with local regulations at a suitable waste-disposal site approved by local, state/ provincial authorities.

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14 TRANSPORT INFORMATION

DOT:ORM-A, Consumer Commodity, level III Flammable Aerosol, noxious, class 9 (Fp < 20 degrees F) TOC (Ground transport in U.S.A only)

TDG:UN 1950, Flammable Aerosol, (contains Diethyl Ether) class 2.1,PG I, (Fp < 20 degrees F) TOC

IATA: UN 1950 Flammable Aerosol,(contains Diethyl Ether) class 2.1, PG I, (Fp < 20 degrees F) TOC (**FORBIDDEN ON PASSENGER AIRCRAFT**)

IMDG: UN 1950, Flammable Aerosol,(contains Diethyl Ether) class 2.1, PG I, (Fp < 20 degreesF) t Limited Quantities, EmS F-E, S-D. Category B

ADR: UN 1950, Flammable Aerosol,(contains Diethyl Ether) class 2.1, PG I, (Fp <20 degrees F) Ccc

** Product is packaged in a DOT 2Q rate container

THIS SECTION IS PROVIDED FOR GENERAL INFORMATION ONLY. THE SHIPPING DESCRIPTION ABOVE MAY NOT REPRESENT REQUIREMENTS FOR ALL MODES OF TRANSPORTATION, PACKAGING, SHIPPING METHODS, OR LOCATIONS OUTSIDE OF THE GEOGRAPHIC BOUNDARIES OF THE U.S.A.

Other party shipper: For more complete transportation regulatory information; please refer to the appropriate dangerous goods code of regulations, in order to complete necessary shipping documents.

15 REGULATORY INFORMATION

COMPLIANCE * Information about product ingredient percentages: available upon request

U.S. FEDERAL REGULATORY INFORMATION (SARA/ EPCRA Title III, 42 U.S.C 11001)
Chemicals in this product are subject to the reporting requirements EPCRA.

EPCRA section 301-303- Threshold Planning Quantity: Y

EPCRA section 304 -Reportable Quantity: Y

EPCRA section 311

Categories: Immediate (Acute Health effects)- Y

Delayed Chronic effects- N

Fire Hazard-Y

Sudden Release of pressure-Y

Reactivity Hazard-N

EPCRA section 312- Threshold Planning Quantity: Y

EPCRA section 313- Y

USEPA/ TSCA Inventory: The components of this product are listed on the USEPA/TSCA (Toxic Substances Control Act) inventory of chemicals, 15 U.S.C. 2601.

COMPREHENSIVE ENVIRONMENTAL REPOSE, COMPENSATION AND LIABILITY ACT (CERCLA 42 U.S.C 9601):
Chemicals in this product are subject to the reporting requirements CERCLA section 103

OSHA Hazard Communication Standard: This product has been evaluated and determined to be hazardous as defined in

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OSHA's Hazard Communication Standard.

STATE and COMMUNITY Right-To-Know regulations (RTK);
LA,CA,NJ,PA,MA,FL,MI,IL,RI,ME,ID,MN,DE
Components Listed in sec 3- Yes

Extremely, Extraordinarily, and Special Hazardous Substance- NJ,MA,PA,NY,WA,WV,WI
Components Listed in sec 3- Yes

CALIFORNIA PROPOSITION 65: This product DOES NOT contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

CANADIAN REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations(CPR) and the MSDS contains all the information required by the Controlled Products Regulations.

This products contents are listed on the Canadian Domestic Substances List (DSL)

THE INFORMATION PROVIDED HEREIN THIS SECTION MAY NOT INCLUDE THE IMPACT OF ADDITIONAL REGULATORY REQUIREMENTS (e.g., for materials meeting the definition of hazardous waste under RCRA, hazardous substances under CERCLA, and/of marine pollutants (MARPOL) under CWA or similar federal, state, provincial or laws regulations, within or outside the geographic boundaries of the U.S.A.

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OTHER INFORMATION

STATEMENTS DENOTED BELOW THIS TYPE SCRIPT ARE MEANT AS DISCLAIMER*****

ACKNOWLEDGEMENT UPON PURCHASE

USERS RESPONSIBILITY; THIS MSDS IS INTENDED TO MEET THE SPECIFIC REQUIREMENTS OF 29 CFR1910.1200 (U.S.A), HAZARDOUS PRODUCTS ACT AND CONTROLLED PRODUCTS REGULATIONS (CANADA), NOM 018 STPS 2000 (MEXICO), AND ANSIZ400.1-200, AND SHOULD BE USED ACCORDINGLY. WHILE THE INFORMATION HAS BEEN OBTAINED FROM SOURCES BELIEVED TO BE ACCURATE AND RELIABLE, NO WARRANTY, EXPRESSED OR IMPLIED, CAN BE MADE WITH REGARD TO ITS ACCURACY, COMPLETENESS OR CORRECTNESS. THIS MSDS IS OFFERED INTO THE WORKPLACE FOR YOUR CONSIDERATION, INVESTIGATION AND CONCLUSIONS DRAWN HEREIN FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE PRODUCT. SINCE CONDITIONS NECESSARY FOR THE SAFE USE OF THE PRODUCT ARE NOT UNDER CONTROL OF THE MANUFACTURER, IT IS THE BUYERS, DISTRIBUTORS AND USERS LEGAL RESPONSIBILITY TO DETERMINE THE CONDITIONS NECESSARY FOR THE SAFE USE OF THE CHEMICAL PRODUCT. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE LEGAL RESPONSIBILITY OF THE BUYERS, DISTRIBUTORS, USERS OF THIS PRODUCT. ANY USERS, DISTRIBUTORS, HANDLERS OF THIS PRODUCT WHO ARE NOT UNDER THE DIRECT, LEGALLY DEFINED CONTROL OF THE PENRAY COMPANIES INC., ARE RESPONSIBLE FOR EVALUATING THIS INFORMATION IN LIGHT OF THE PARTICULAR WORKPLACE ENVIRONMENT, AND ARE RESPONSIBLE FOR ALL LOSSES, DAMAGES OR EXPENSES THAT RESULT WHILE THIS PRODUCT IS UNDER THEIR CONTROL. IT IS ALSO THE RESPONSIBILITY OF THE USERS, DISTRIBUTORS, HANDLERS OF THIS PRODUCT TO OBSERVE ANY AND ALL LAWS AND REGULATIONS (FEDERAL, STATE, PROVINCIAL,AND LOCAL) CONCERNING THE TRANSPORTATION, USE, HANDLING, STORAGE, AND DISPOSAL OF THIS PRODUCT.

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Physicians, Toxicologists,

*A full disclosure MSDS is available upon request for valid health and environmental emergency incidents only, by contacting (847) 459-5041 during regular business hours.

Prepared by: (GAW) EHS Department, The Penray Companies Inc. Wheeling, IL. U.S.A

END OF MSDS.

END OF MSDS DOCUMENT