

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. Date of issue: 05/28/2014 Revision date: 05/28/2014 Version: 1.0

SECTION 1: Identification of the substance	e/mixture and of the company	/undertakin	g
1.1. Product identifier			
	NRAY SUPER HEAVY DUTY DOT 3 BR	RAKE FLUID	
Product code : 601	2		
1.2. Relevant identified uses of the substance of			
Use of the substance/mixture : DO	Γ3 brake fluid.		
1.3. Details of the supplier of the safety data sh	eet		
The Penray Companies, Inc. 440 Denniston Ct. Wheeling, IL 60090 T (800) 373-6729 rotto@penray.com			
1.4. Emergency telephone number			
ĊHI)) 373-6729 EMTREC (800) 424-9300 EMTREC International +1 (703) 527-388	37 24 hr	
SECTION 2: Hazards identification			
2.1. Classification of the substance or mixture			
GHS-US classification			
Serious Eye Damage/Eye Irritation 1			
Acute Oral Toxicity 4			
2.2. Label elements			
GHS-US labelling			
Hazard pictograms (GHS-US) :			
Signal word (GHS-US) : DAI	NGER		
- 3	ises serious eye damage. Harmful if swa	allowed	
	sh thoroughly after handling. Do not eat,		when using this product. Wear eye
prot	ection/face protection.		
and	N EYES: Rinse continuously with water easy to do. Continue rinsing. Get imme WALLOWED: Call a POISON CENTER	diate medical a	dvice/attention.
	pose of contents/container to an approve		•
2.3. Other hazards			
No additional information available			
2.4. Unknown acute toxicity (GHS-US)			
27 % of the mixture consists of ingredient(s) of unknown	acute toxicity.		
SECTION 3: Composition/information on i	ngredients		
3.1. Substance			
Not applicable			
3.2. Mixture			
Name	Product identifier	%	GHS-US classification
Diethylene glycol	(CAS No) 111-46-6	15-25	Acute Tox. 4 (Oral)
Triethylene glycol monobutyl ether	(CAS No) 143-22-6	15-30	Eye Dam. 1

10-20

5-10

Diethylene glycol monobutyl ether

Ethanol, 2-(2-propoxyethoxy)-

(CAS No) 112-34-5

(CAS No) 6881-94-3

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Product identifier % **GHS-US classification** Name The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. SECTION 4: First aid measures **Description of first aid measures** 4.1. First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing First-aid measures after skin contact and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to First-aid measures after eye contact do, remove contact lenses, if worn. If irritation persists, get medical attention. First-aid measures after ingestion If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell. 4.2. Most important symptoms and effects, both acute and delayed Symptoms/injuries after inhalation : May cause respiratory irritation. Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Symptoms/injuries after eye contact Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. : May be harmful if swallowed. May cause stomach distress, nausea or vomiting. Symptoms/injuries after ingestion Indication of any immediate medical attention and special treatment needed 4.3. Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible). SECTION 5: Firefighting measures **Extinguishing media** 5.1. Suitable extinguishing media : Powder, water spray, foam, carbon dioxide. Unsuitable extinguishing media : Do not use a heavy water stream. 5.2. Special hazards arising from the substance or mixture Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. 5.3. Advice for firefighters : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory Protection during firefighting protection (SCBA). Use water spray to keep fire-exposed containers cool. SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Methods and material for containment and cleaning up 6.2. : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable For containment container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). : Scoop up material and place in a disposal container. Provide ventilation. Methods for cleaning up **Reference to other sections** 6.3. See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal. **SECTION 7: Handling and storage** Precautions for safe handling 7.1 Precautions for safe handling : Avoid contact with skin and eyes. Do not swallow. Avoid breathing gas/fumes/vapor/spray. Handle and open container with care. When using do not eat, drink or smoke. : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking. Hygiene measures 7.2. Conditions for safe storage, including any incompatibilities Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a well-ventilated place

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Diethylene glycol (111-46-6)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL	Not applicable.

Triethylene glycol monobutyl ether (143-22-6)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL	Not applicable.

3,6,9,12-Tetraoxahexadecan-1-ol (1559-34-8)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL	Not applicable.

8.2. Exposure controls	
Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable gloves.
Eye protection	: Safety glasses or goggles are recommended when using product.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	chemical properties
Physical state	: Liquid.
Appearance	: No data available.
Colour	: Amber.
Odour	: Mild.
Odour threshold	: No data available.
рН	: 8.6
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: <-50 °C (<-58 °F)
Boiling point	: >232 °C (>560 °F) @ 760 mm Hg
Flash point	: > 121 °C (> 250 °F)
Self ignition temperature	: 310 °C (590 °F)
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Not flammable.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: 1.06
Solubility	: Soluble in water.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.
9.2. Other information	

No additional information available

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SECT	SECTION 10: Stability and reactivity			
10.1.	Reactivity			
No dang	No dangerous reaction known under conditions of normal use.			
10.2.	Chemical stability			
Stable u	Stable under normal storage conditions.			
10.3.	Possibility of hazardous reactions			
No dan	gerous reaction known under conditions of normal use.			
10.4.	Conditions to avoid			
Incompatible materials. Sources of ignition.				
10.5.	Incompatible materials			
Oxidize	Oxidizers.			
10.6.	Hazardous decomposition products			

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information	on
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
6012	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	No data available.
Diethylene glycol (111-46-6)	
LD50 oral rat	12565 mg/kg
LD50 dermal rabbit	11890 mg/kg
Triethylene glycol monobutyl ether (143-22-6)
LD50 oral rat	5300 mg/kg
LD50 dermal rabbit	3480 mg/kg
3,6,9,12-Tetraoxahexadecan-1-ol (1559-34-8)	
LD50 oral rat	5175 mg/kg
LD50 dermal rat	> 4000 mg/kg
Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: May cause long-term adverse effects in the aquatic environment.
12.2. Persistence and degradability	
6012	

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12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	ns
13.1. Waste treatment methods	
Waste disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.
SECTION 14: Transport information	
In accordance with DOT	
14.1. UN number	
Not applicable	
14.2. UN proper shipping name	
Not applicable	
14.3. Additional information	
Other information	: No supplementary information available.

SECTION 15: Regulatory information
15.1. US Federal regulations
Diethylene glycol (111-46-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory			
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.		
Triethylene glycol monobutyl ether (143-22-6)			
Listed on the United States TSCA (Toxic Substan	nces Control Act) inventory		
EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.			
3,6,9,12-Tetraoxahexadecan-1-ol (1559-34-8)	3,6,9,12-Tetraoxahexadecan-1-ol (1559-34-8)		
Listed on the United States TSCA (Toxic Substan	nces Control Act) inventory		
15.2. US State regulations			
6012			
State or local regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.		
SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:			
IARC International Agence	International Agency for Research on Cancer.		
	1 - Carcinogenic to humans; 2A - Probably carcinogenic to humans;		

	2A - Probably carcinogenic to humans; 2B - Possibly carcinogenic to humans; 3 - Not classifiable; 4 - Probably not carcinogenic to humans.
NTP	National Toxicology Program.
	 Evidence of Carcinogenicity; Known Human Carcinogens; Reasonably anticipated to be Human Carcinogen; Substances delisted from report on Carcinogens; Twelfth Report - Items under consideration.

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SECTION 16: Other inform	ation		
Indication of changes	:	None.	
Date of issue	:	05/28/2014	
Other information	:	None.	
NFPA health hazard	:	2	
NFPA fire hazard	:	1	
NFPA reactivity	:	0	

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product