SAFETY DATA SHEET

1. Identification

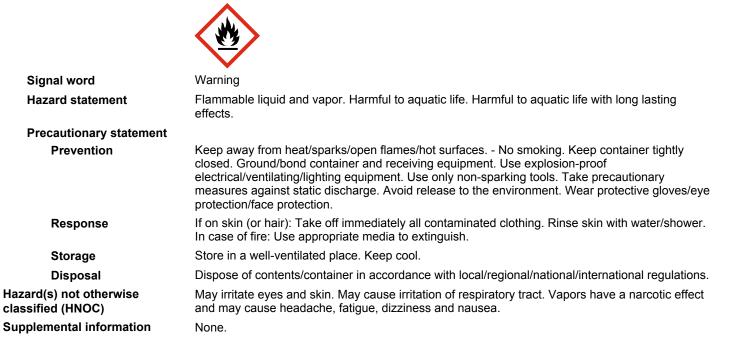
Motorcrat

Product identifier	Spot and Stain Remover / Upholstery Spot and Stain Remover
Other means of identification	
FIR No.	124473
Recommended use	Spot and stain remover for vehicle fabric interiors
Recommended restrictions	None known.
Manufacturer/Importer/Supplier	/Distributor information
Supplier	
Company Name	Ford Motor Company
Address	Attention: MSDS Information, P.O. Box 1899
	Dearborn, Michigan 48121
	USA
Telephone	1-800-392-3673
MSDS Information	1-800-448-2063
	msds@brownart.com
Emergency telephone numbers	
	Poison Control Center: USA and Canada: 1-800-959-3673 INFOTRAC (Transportation): USA and Canada 1-800-535-5053

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Not classified.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements



3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
1-Butoxypropan-2-ol		5131-66-8	5 - < 10
Naphtha (petroleum), hydrotreated heavy		64742-48-9	1 - < 3
PROPAN-2-OL		67-63-0	1 - < 3
		25155-30-0	1 - < 3

DODECYLBENZENESULFONATE

Specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures	
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Do not induce vomiting. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.
General information	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
	De net vers verten ist en en extinencialen en this will ense ad the fire

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapors. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.	
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water.	
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.	
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.	
7. Handling and storage		
Precautions for safe handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.	
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).	

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)	PEL	400 mg/m3	
		100 ppm	
PROPAN-2-OL (CAS 67-63-0)	PEL	980 mg/m3	
		400 ppm	
US. ACGIH Threshold Limit Value	S		
Components	Туре	Value	
PROPAN-2-OL (CAS 67-63-0)	STEL	400 ppm	
,	TWA	200 ppm	
US. NIOSH: Pocket Guide to Cher	nical Hazards		
Components	Туре	Value	
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)	TWA	400 mg/m3	
		100 ppm	
PROPAN-2-OL (CAS 67-63-0)	STEL	1225 mg/m3	
		500 ppm	
	TWA	980 mg/m3	
		400 ppm	

Biological limit values ACGIH Biological Expos	ure Indices			
Components	Value	Determinant	Specimen	Sampling Time
PROPAN-2-OL (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
* - For sampling details, pl	ease see the source	document.		
Appropriate engineering controls	concentrations I and/or mist, use	pelow the exposure lim	nits/guidelines. If cal exhaust vent	Use adequate ventilation to control airborne user operations generate a vapor, dust ilation, or other engineering controls to ure limits/guidelines.
Individual protection measured	res, such as persona	al protective equipme	ent	
Eye/face protection	Wear safety gla	sses with side shields	(or goggles).	
Skin protection				
Hand protection	features and is be worn when the	different from one proc ne potential exists for p	lucer to the other prolonged or repe	and on its material but also on other quality r. Suitable chemical protective gloves shoul eated skin exposure. Nitrile gloves are atex or butyl rubber gloves are
Other	Wear suitable p	rotective clothing. Wea	ar appropriate ch	emical resistant clothing if applicable.
Respiratory protection Thermal hazards	limits (where ap been establishe airborne concer respirator must the requirement Standard CSA 2	plicable) or to an acce d), an approved respir trations to a level whic be worn. Respirator se s of OSHA Respirator	ptable level (in c ator must be wor th is adequate to election, use and y Protection Stan	ntrations below recommended exposure ountries where exposure limits have not rn. If engineering controls do not maintain protect worker health, an approved maintenance should be in accordance with odard 29 CFR 1910.134 and/or Canadian cessary.
General hygiene considerations	after handling th		eating, drinking,	onal hygiene measures, such as washing and/or smoking. Routinely wash work ants.

9. Physical and chemical properties

9. Physical and chemical	properties
Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Amber.
Odor	Characteristic.
Odor threshold	Not available.
рН	9.2 ASTM D1293
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	127.9 °F (53.3 °C) PMCC
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.01 - 1.03
Relative density temperature	68 °F (20 °C)
FIR No.: 124473	
Version: 01	

Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
VOC (Weight %)	8 % CAM310

10. Stability and reactivity

Reactivity Chemical stability Possibility of hazardous reactions	The product is stable and non-reactive under normal conditions of use, storage and transport. Material is stable under normal conditions. Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful. May cause irritation to the respiratory system. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Skin contact	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.
Information on toxicological effects	

Acute toxicity

Components	Species	Calculated/Test Results
Naphtha (petroleum), hydrotreat	ed heavy (CAS 64742-48-9)	
Acute		
Inhalation		
LC50	Rat	61 mg/l, 4 Hours
Oral		
LD50	Rat	> 25 ml/kg
PROPAN-2-OL (CAS 67-63-0)		
Acute		
Dermal		
LD50	Rabbit	12800 mg/kg
Oral		
LD50	Dog	4797 mg/kg
	Mouse	3600 mg/kg
	Rabbit	5.03 g/kg
	Rat	4.7 g/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	

Respiratory or skin sensitization	n			
Respiratory sensitization	Not a respirat	Not a respiratory sensitizer.		
Skin sensitization	This product i	s not expected to cause skin sensitization		
Germ cell mutagenicity	No data availa mutagenic or	able to indicate product or any component genotoxic.	s present at greater than 0.1% are	
Carcinogenicity	This product i	s not considered to be a carcinogen by IA	RC, ACGIH, NTP, or OSHA.	
OSHA Specifically Regulate	d Substances	(29 CFR 1910.1001-1050)		
Not listed.				
Reproductive toxicity	This product i	s not expected to cause reproductive or de	evelopmental effects.	
Specific target organ toxicity - single exposure	Not classified			
Specific target organ toxicity - repeated exposure	Not classified			
Aspiration hazard	Not an aspirat	tion hazard.		
Chronic effects	Prolonged inh	alation may be harmful.		
	-			
12. Ecological information				
Ecotoxicity	Harmful to aq	uatic life with long lasting effects.		
Ecotoxicity				
Components		Species	Calculated/Test Results	
Naphtha (petroleum), hydrotre	eated heavy (CA	AS 64742-48-9)		
Aquatic				
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours	
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours	
			8.8 mg/l, 96 hours	
PROPAN-2-OL (CAS 67-63-0))			
Aquatic				
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours	
SODIUM DODECYLBENZEN Aquatic	IESULFONATE	(CAS 25155-30-0)		
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	3.26 - 14.51 mg/l, 48 hours	
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	3.2 - 5.6 mg/l, 96 hours	
Persistence and degradability	No data is ava	ailable on the degradability of this product.		
Bioaccumulative potential				
Partition coefficient n-octan		0.05		
PROPAN-2-OL		· · -		
SODIUM DODECYLBENZEN		0.45		
	No data availa			

13. Disposal considerations

Local disposal regulationsDispose in accordance with all applicable regulations.Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste disposal company.Waste from residues / unused productsDispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).	Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Waste from residues / unused productsdisposal company.Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:	Local disposal regulations	Dispose in accordance with all applicable regulations.
products product residues. This material and its container must be disposed of in a safe manner (see:	Hazardous waste code	5
		product residues. This material and its container must be disposed of in a safe manner (see:

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	
<unspecified></unspecified>	
UN number	UN1993
UN proper shipping name	FLAMMABLE LIQUIDS, N.O.S. (POLYETHYLENE GLYCOL UNDECYL ETHER)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	
	Read safety instructions, SDS and emergency procedures before handling.
ΙΑΤΑ	
<unspecified></unspecified>	
UN number	UN1993
UN proper shipping name	FLAMMABLE LIQUIDS, N.O.S. (POLYETHYLENE GLYCOL UNDECYL ETHER)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	
Environmental hazards	No.
Other information	Read safety instructions, SDS and emergency procedures before handling.
	Forbidden.
Passenger and cargo aircraft	Folbidden.
Cargo aircraft only	Forbidden.
IMDG	
<unspecified></unspecified>	
UN number	UN1993
UN proper shipping name	FLAMMABLE LIQUIDS, N.O.S. (POLYETHYLENE GLYCOL UNDECYL ETHER)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	
the IBC Code	
DOT	





15. Regulatory information

US federal regulations	This product is a "Hazardou Standard, 29 CFR 1910.120		ned by the OSHA Hazard Communication
TSCA Section 12(b) Export	Notification (40 CFR 707, Su	ıbpt. D)	
Not regulated.			
CERCLA Hazardous Subst			
PROPAN-2-OL (CAS 67 SODIUM DODECYLBEI 25155-30-0)	7-63-0) NZENESULFONATE (CAS	Listed. Listed.	
SARA 304 Emergency release	ase notification		
Not regulated.			
OSHA Specifically Regulat Not listed.	ed Substances (29 CFR 1910	.1001-1050)	
Superfund Amendments and R	eauthorization Act of 1986 (S		
Hazard categories	Immediate Hazard - No Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No	, and y	
SARA 302 Extremely hazar Not listed.	rdous substance		
SARA 311/312 Hazardous chemical	No		
SARA 313 (TRI reporting) Chemical name		CAS number	% by wt.
PROPAN-2-OL		67-63-0	1 - < 3
Other federal regulations			
	n 112 Hazardous Air Polluta	nts (HAPs) List	
Not regulated. Clean Air Act (CAA) Sectio	n 112(r) Accidental Release I	Prevention (40 CFR	68.130)
Not regulated.			
Safe Drinking Water Act (SDWA)	Not regulated.		
US state regulations			
US. California Controlled S	ubstances. CA Department o	of Justice (Californi	a Health and Safety Code Section 11100)
Not listed.			
US. Massachusetts RTK - S	Substance List		
PROPAN-2-OL (CAS 67 SODIUM DODECYLBEI	NZENESULFONATE (CAS 25	155-30-0)	
-	d Community Right-to-Know		
PROPAN-2-OL (CAS 67	rdrotreated heavy (CAS 64742 7-63-0) NZENESULFONATE (CAS 25		
	and Community Right-to-Kno		
Naphtha (petroleum), hy PROPAN-2-OL (CAS 67	vdrotreated heavy (CAS 64742 7-63-0)	-48-9)	
FIR No.: 124473			S

SODIUM DODECYLBENZENESULFONATE (CAS 25155-30-0)

US. Rhode Island RTK

PROPAN-2-OL (CAS 67-63-0) SODIUM DODECYLBENZENESULFONATE (CAS 25155-30-0)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

16. Other information, including date of preparation or last revision

Issue date Version # HMIS® ratings	05-12-2015 01 Health: 1 Flammability: 2 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 2 Instability: 0
Preparation Information and Disclaimer	This document was prepared by FCSD-Toxicology, Ford Motor Company, Diagnostic Service Center II, 1800 Fairlane Drive, Allen Park, MI 48101, USA, based in part on information provided by the manufacturer. The information on this data sheet represents our current data and is accurate to the best of our knowledge as to the proper handling of this product under normal conditions and in accordance with the application specified on the packaging and/or technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user. To the extent that there are any differences between this product's Safety Data Sheet (SDS) and the consumer packaged product labels, the SDS should be followed.
Part number(s)	ZC-14