



ATOM Ventures, LLC. QFSS

MATERIAL SAFETY DATA SHEET

Material: R & RD SERIES BLENDS

File designation: SeriesRd\4600rd

Version:2

SECTION 1 -- PRODUCT AND COMPANY IDENTIFICATION

Material R & RD SERIES BLENDS (See page 6 for a listing of blend numbers covered by this document.)	Revision date 11-Nov-10
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Previous revision date 31-Aug-10	File designation SeriesRd\4600rd	Material use Various
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Manufacture's Name and issuing location THE INTERNATIONAL GROUP, INC. 50 SALOME DRIVE TORONTO, ONTARIO, CANADA M1S 2A8	EMERGENCY PHONE NUMBER 416 - 293 - 4151 day & night
Issuer's phone number 416 - 293 - 4151	

Manufacturing sites

50 Salome Dr. Toronto, ON Canada M1S 2A8	7106 Highway 146 North Baytown, TX 77520	2875 North Main St. Oshkosh, WI 54901	1100 East Main St. Titusville, PA 16354	45 Route 446 Smethport PA 16749	1140 Canal Boulevard Richmond, CA 94804
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SECTION 2 -- COMPOSITION / INFORMATION ON INGREDIENTS

No hazardous ingredients as defined by the Canadian Hazardous Products Act (BILL C70) or by OSHA 29 CFR 1910.1200.

Chemical name Not Applicable	Chemical family Petroleum Hydrocarbon	CAS No. Not Applicable
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SECTION 3 -- HAZARDS IDENTIFICATION

Emergency Overview

The material is a solid at room temperature exhibiting elevated temperature softening characteristics. Above its softening point, the material liquefies and flows more readily as the temperature increases. The material is used as a hot liquid for application purposes and requires caution in handling. At elevated temperatures well above the softening point and in contact with air, the generation of hydrocarbon vapors including possible oxidized products may be expected.

SKIN CONTACT	Contact with molten material can result in severe burns.
EYE CONTACT	Direct contact of molten product to the eyes will cause thermal burns and eye injury.
INHALATION	Breathing fumes in confined areas can cause respiratory discomfort and possible irritation.

Potential Health Effects

(HMIS Rating)

Fire Hazard: 1	Health Hazard: 0	Reactivity: 0	Personal Protection: See Section 8
0 = MINIMAL 1 = SLIGHT HAZARD 2 = MODERATE HAZARD 3 = SERIOUS HAZARD 4 = SEVERE HAZARD			



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SECTION 3 -- HAZARDS IDENTIFICATION (CONTINUED)

EYE CONTACT	Exposure to fumes, vapors or smoke from thermally degraded product can cause irritation to eyes.
INHALATION	Exposure to vapors, fumes, or smoke from molten material handled in confined areas can produce irritation of respiratory tracts, and possible physical discomfort to sensitive individuals.
INGESTION	This material is essentially inert and non-toxic. Regardless of this the material should be handled with care and not be ingested or put in mouth.
SKIN	Skin contact with molten material can cause severe burns.

SECTION 4 -- FIRST AID MEASURES

EYES	Exposure to fumes, vapors or smoke of over heated product can result in irritation to eyes. Direct contact of the molten material will cause eye injury and burns. When handling molten material eye shields must be worn at all times. Should an accident occur, flush eyes with generous amounts of water for at least 15 minutes. Administer prompt first aid measures. Call a physician to attend to the injury.
SKIN	Exposure to fumes, vapors or smoke of thermally degraded product can result in irritation to skin. Direct contact of the molten material will cause injury and burns. For burns apply running water injured area for 15 minutes. Do not attempt to remove any material bonded to skin. Call a physician to attend to the injury.
INHALATION	Remove individual to a well ventilated area for fresh air and call a physician if respiratory symptoms warrant medical attention.
INGESTION	Material is not acutely toxic by ingestion. If material is ingested, do not induce vomiting. Call a physician.

SECTION 5 -- FIRE FIGHTING MEASURES

Flammability YES [<input checked="" type="checkbox"/>] NO [<input type="checkbox"/>]	If yes, under which conditions? Will support a flame above flash point.
Means of extinction Use water fog, foam, dry chemical or CO ₂ extinguisher. Do not use direct water stream.	
Special procedures Use water to keep containers cool.	
FIRE and EXPLOSION DATA	
Flash point (ASTM D92) > 190°C	Upper explosion limit (% by volume) 7.0%
Auto ignition temperature Not Available	Lower explosion limit (% by volume) 0.9%
Sensitivity to impact Not Applicable	TDG flammability classification Not Dangerous
Rate of burning Not Applicable	Explosive power Not Applicable
Rate of burning Not Applicable	Sensitivity to static discharge Not Applicable
Rate of burning Not Applicable	Hazardous combustion products CO ₂ , CO (See Section 10)



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SECTION 6 -- ACCIDENTAL RELEASE MEASURES

SPILLS OR LEAKS	Handle as a thermoplastic. With molten spills, allow the material to solidify and cool. Keep material out of sewers and watercourses by diking or impounding. Recover and place into appropriate containers for recycling or disposal, according to prevailing local, state and federal laws.
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SECTION 7 -- HANDLING AND STORAGE

When kept in molten state, inert gas blanketing may be used to avoid material degradation. As a solid, avoid contamination by keeping in closed containers.

SECTION 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

This material will be utilized in molten form. Proper protective splash resistant clothing, thermal gloves, splash resistant shoes, and eye shields must be worn to prevent injury. Use molten material in well ventilated areas. When working in confined areas, use of appropriate respiratory gear is recommended.

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

Appearance White to dark amber	Odor None - intermediate petroleum odor	Physical state Solid @ 25°C	pH Not Applicable
Vapor pressure (mm Hg) < 0.01 @ 25°C	Vapor density (air = 1) > 5	Boiling point (IBP) > 300°C	Solubility in water (20°C) < 0.1%
Evaporation rate (Butyl acetate =1) < 0.01	Freezing point Not Applicable	Volatiles (By volume) < 1.0%	Specific gravity (25°C) 0.90-0.94
Coeff. water / oil distribution < 0.01	Melt point 46-95°C	Molecular weight Not Defined	Odor threshold (PPM) Not Available

SECTION 10 -- STABILITY AND REACTIVITY

Chemical stability YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	If no, which conditions?
Compatibility with other substances YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	If NO, which ones? Strong oxidizing agents, eg., peroxides, chlorine
Reactivity, and under what conditions Stable	
Hazardous decomposition products Carbon dioxide, carbon monoxide and other products such as aldehydes and ketones depending on conditions of oxidation.	

SECTION 11 -- TOXICOLOGICAL INFORMATION

Carcinogenicity Classification		Route of Entry	
IARC : Not listed	ACGIH: Not listed	Skin contact <input checked="" type="checkbox"/>	Inhalation acute <input checked="" type="checkbox"/>
OSHA: Not listed		Skin absorption <input type="checkbox"/>	Inhalation chronic <input checked="" type="checkbox"/>
NTP : Not listed		Eye contact <input type="checkbox"/>	Ingestion <input type="checkbox"/>

Effects of acute exposure to material
Wax fumes have been reported to be irritating to the respiratory tract, especially to sensitized persons. Molten product could cause thermal burns on contact with the skin.



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Effects of chronic exposure to material

In rats, chronic ingestion has shown accumulation in target organs (liver, spleen) with associated nonspecific immune response.

LD ₅₀ of material: Specify species & route Not Available	LC ₅₀ of material: Specify species Not Available	Exposure limit of material TLV/TWA 2 mg/m ³ for paraffin wax fume (A.C.G.I.H)	Irritancy of material TLV set to prevent irritancy
Sensitizing capability of material Not known	Carcinogenicity / Mutagenicity of material Not carcinogenic by studies to date. Ames negative.	Reproductive effects of material None known.	Synergistic materials None known.

SECTION 12 -- ECOLOGICAL INFORMATION

Material is not considered harmful to the environment. Nevertheless, material from spills and other generated waste must be disposed of properly in conformance with all local, state and federal laws.

SECTION 13 -- DISPOSAL CONSIDERATIONS

This material is not a RCRA hazardous waste material. Follow local regulatory laws for proper disposal.

SECTION 14 -- TRANSPORT INFORMATION

DOT proper shipping name	Not regulated
DOT hazardous classification	Not Applicable
DOT Haz. Mat table 172.101	Not listed
DOT appendix to sec. 172.101	Not listed
DOT labels required	None
DOT placards required	None for solid product. None for molten product shipped under 212°F/100°C. Hot molten product shipped over 212°F/100°C requires a class 9 "HOT" placard Bill of lading must carry the statement: Elevated temperature material, liquid, N.O.S. 9, UN3257, III (WAX).
TDG classification	Not controlled under TDG (Canada).

SECTION 15 -- REGULATORY INFORMATION

FDA status	See product's technical information sheet.
CERCLA reportable quantity	This material is not reportable under 40 CFR Part 302.4.
OSHA hazardous chemicals	None according to 29 CFR 1910.1200.
RCRA	This material is not a RCRA hazardous waste.
SARA status	Sections 311 and 312: Not Applicable Section 313: None
TSCA status	This product, or its ingredients as a mixture, appears on the toxic substances control act inventory.
WHMIS status	This is not a controlled material as defined by the Canadian Hazardous Products Act (Bill C70).
California Proposition 65 list	Carcinogens: None, Adverse reproductive effects: None
Massachusetts Substance list	None



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New Jersey Haz. Substance list	None
Pennsylvania Haz. Substance list	None
Canadian DSL status	Listed
CONEG	In compliance

SECTION 16 -- OTHER

Source used:

A.C.G.I.H. (Documentation of threshold values), RTECS, IARC Monographs, Oxford Toxicology Forum, Special Meeting on Hydrocarbons.

Prepared by

I. Davie

Signature

Ian Davie

Disclaimer

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0280	2534A	5148A			
0280B	2534B	5228A			
0536	2602A	5228B			
0565	2658A	5364A			
0605	2670A				
0673	2695A				
0700	2790A				
0740	2818A				
0799	2822A				
0805	2842A				
0953	2918A				
0999	3027A				
1056	3027B				
1077	3103A				
1121	3149A				
1251B	3149B				
1342	3150A				
1364	3369A				
1364B	3476A				
1380	3489A				
1485	3493A				
1489	3571B				
1489B	3598A				
1505	3884B				
1505B	4028A				
1516	4266A				
1516B	4318A				
1531	4365A				
1532	4405A				
1618	4408A				
1618B	4419A				
1686	4458A				
1928	4556F				
1945	4556G				
1957	4572A				
1960	4572B				
1974B	4693A				
1989	4714A				
2047	4744B				
2096	4833A				
2205	4870A				
2205B	4889A				
2275	4921A				
2290	4935A				
2343	4974A				
2354	4974B				
2354	4992A				
2473	5020A				
2505	5140A				