SAFETY DATA SHEET

1. Product and Company Identification

Product identifier **Transflo - US only**

Other means of identification Not available

Recommended use Lubricant

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Irving Blending & Packaging

Address PO Box 1169
Saint John, NB E2L 4E6
Canada

Telephone Phone: 1.800.574.5823

E-mail Not available.

Emergency phone number Emergency Phone: 1.800.424.9300 (CHEMTREC)

2. Hazards Identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information Not applicable.

3. Composition/Information on Ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Base Oil		Trade Secret	60 - 80
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based		72623-86-0	10 - 30

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Composition comments US GHS: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. First Aid Measures

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Skin contact Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

Eye contact Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

Ingestion	Rinse mouth with water, then drink one or two glasses of water. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Fire Fighting Measures

Suitable extinguishing media	Dry chemical. Water fog. Foam. 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	During fire, gases hazardous to health may be formed.
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	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	No unusual fire or explosion hazards noted.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep out of low areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Precautions for safe handling	Avoid prolonged exposure. Use care in handling/storage.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Base Oil (CAS Trade Secret)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	TWA	5 mg/m3	Inhalable fraction.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

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

Ethyl acrylate (CAS 140-88-5) Can be absorbed through the skin.

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Safety glasses or goggles.
Skin protection	
Hand protection	Impervious gloves. Confirm with reputable supplier first.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Thermal hazards	Not applicable.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Red
Odor	Petroleum
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	-43.6 °F (-42 °C)
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	374.0 °F (190.0 °C) Cleveland Open Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive 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	Not available.
Solubility(ies)	Negligible
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	7.1 cSt @ 100°C 33.2 cSt @ 40°C
Other information	
Density	0.8503 @ 15°C

10. Stability and Reactivity

Reactivity	This product may react with oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.

Conditions to avoid	Contact with incompatible materials. Keep away from extreme heat.
Incompatible materials	Caustics.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Oxides of phosphorus.

11. Toxicological Information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause stomach distress, nausea or vomiting.
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**	**Test Results**
Base Oil (CAS Trade Secret)		
Acute		
Dermal		
LD50	Rabbit	> 4480 mg/kg
	Rat	> 2000 mg/kg
Oral		
LD50	Rat	> 2000 mg/kg
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
		> 2000 mg/kg
		> 2000 mg/kg, 24 Hours, ECHA
Inhalation		
LC50	Rat	< 5.7 mg/L, 4 Hours, ECHA
		> 5.5 mg/L, 4 Hours, ECHA
		> 5.3 mg/L, 4 Hours, ECHA
		> 5.2 mg/L, 4 Hours, ECHA
		> 4 mg/L, 4 Hours, ECHA
		> 3.9 mg/L, 4 Hours, ECHA
		2.2 mg/L, 4 Hours, ECHA
Oral		
LD50	Rat	> 2000 mg/kg, ECHA
		5000 mg/kg, ECHA

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Corneal opacity value	Not available.
Iris lesion value	Not available.
Conjunctival reddening value	Not available.
Conjunctival oedema value	Not available.
Recover days	Not available.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, NTP, or OSHA.

ACGIH Carcinogens

Base Oil (CAS Trade Secret)	A2 Suspected human carcinogen. A4 Not classifiable as a human carcinogen.
Ethyl acrylate (CAS 140-88-5)	A4 Not classifiable as a human carcinogen.
Ethylbenzene (CAS 100-41-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Ethylene glycol (CAS 107-21-1)	A4 Not classifiable as a human carcinogen.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	A4 Not classifiable as a human carcinogen.
Naphthalene (CAS 91-20-3)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Xylene (CAS 1330-20-7)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethyl acrylate (CAS 140-88-5)	Volume 39, Supplement 7, Volume 71 - 2B Possibly carcinogenic to humans.
Ethylbenzene (CAS 100-41-4)	Volume 77 - 2B Possibly carcinogenic to humans.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	Volume 33, Supplement 7 - 3 Not classifiable as to carcinogenicity to humans.
Naphthalene (CAS 91-20-3)	Volume 82 - 2B Possibly carcinogenic to humans.
Xylene (CAS 1330-20-7)	Volume 47, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Naphthalene (CAS 91-20-3)

US. National Toxicology Program (NTP) Report on Carcinogens

Base Oil (CAS Trade Secret)	Known To Be Human Carcinogen.
Naphthalene (CAS 91-20-3)	Reasonably Anticipated to be a Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful.
Long-term intensive exposure to oil mist may cause benign lung fibrosis.

Further information This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in general Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	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: Disposal instructions).
Contaminated packaging	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

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethyl acrylate (CAS 140-88-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Ethylene glycol (CAS 107-21-1)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Xylene (CAS 1330-20-7)	Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)
Naphthalene (CAS 91-20-3)
Xylene (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethyl acrylate (CAS 140-88-5)	High priority

Food and Drug Administration (FDA)	Not regulated.

US state regulations

US - Illinois Chemical Safety Act: Listed substance

Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)
Naphthalene (CAS 91-20-3)
Xylene (CAS 1330-20-7)

US - Louisiana Spill Reporting: Listed substance

Ethyl acrylate (CAS 140-88-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Ethylene glycol (CAS 107-21-1)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Xylene (CAS 1330-20-7)	Listed.

US - Michigan Critical Materials Register: Parameter number

Xylene (CAS 1330-20-7)	XYLENE (ALL ISOMERS)

US - Minnesota Haz Subs: Listed substance

Benzene, 1,2,4-trimethyl- (CAS 95-63-6)	TRIMETHYLBENZENE
Ethyl acrylate (CAS 140-88-5)	ETHYL ACRYLATE
Ethylbenzene (CAS 100-41-4)	ETHYL BENZENE
Ethylene glycol (CAS 107-21-1)	ETHYLENE GLYCOL, PARTICULATE AND VAPOR
Naphthalene (CAS 91-20-3)	NAPHTHALENE
Xylene (CAS 1330-20-7)	DIMETHYLBENZENE (SEE XYLENE) XYLENE (O-M-P-ISOMERS)

US - New Jersey RTK - Substances: Listed substance

Benzene, 1,2,4-trimethyl- (CAS 95-63-6)
Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)
Naphthalene (CAS 91-20-3)
Xylene (CAS 1330-20-7)

US - North Carolina Toxic Air Pollutants: Listed substance

Xylene (CAS 1330-20-7)

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Ethyl acrylate (CAS 140-88-5)

US - Washington Chemical of High Concern to Children: Listed substance

Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Benzene, 1,2,4-trimethyl- (CAS 95-63-6)
Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)
Naphthalene (CAS 91-20-3)
Xylene (CAS 1330-20-7)

US. New Jersey Worker and Community Right-to-Know Act

Benzene, 1,2,4-trimethyl- (CAS 95-63-6)
Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)
Naphthalene (CAS 91-20-3)
Xylene (CAS 1330-20-7)

US. Pennsylvania RTK - Hazardous Substances

Benzene, 1,2,4-trimethyl- (CAS 95-63-6)
Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)
Naphthalene (CAS 91-20-3)
Xylene (CAS 1330-20-7)

US. Pennsylvania Worker and Community Right-to-Know Law

Benzene, 1,2,4-trimethyl- (CAS 95-63-6)
Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)
Naphthalene (CAS 91-20-3)
Xylene (CAS 1330-20-7)

US. Rhode Island RTK

Benzene, 1,2,4-trimethyl- (CAS 95-63-6)
Ethyl acrylate (CAS 140-88-5)
Ethylbenzene (CAS 100-41-4)
Ethylene glycol (CAS 107-21-1)
Naphthalene (CAS 91-20-3)
Xylene (CAS 1330-20-7)

US. California Proposition 65

WARNING: This product can expose you to chemicals including Ethyl acrylate, which is known to the State of California to cause cancer, and Ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Ethyl acrylate (CAS 140-88-5)	Listed: July 1, 1989
Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004
Naphthalene (CAS 91-20-3)	Listed: April 19, 2002

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene glycol (CAS 107-21-1)	Listed: June 19, 2015

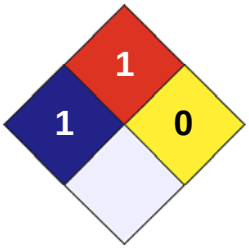
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



Disclaimer

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Version # 02

Further information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

Other information This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Prepared by Dell Tech Laboratories, Ltd. Phone: (519) 858-5021