THINNER 3 **4353**

Safety Data Sheet

Section 1: Product and Company Identification

Product Identifier and Other Means of Identification

Product Name: Thinner 3 **MSDS Code:** 4353

Related Part #: 4353-945ML, 4353-1G, 4353-20L, 4353-200L

Recommended Use and Restriction on Use

Use: Coating and paint thinner and paint remover

Uses Advised Against: Not available

Details of Manufacturer or Importer

Manufacturer

MG Chemicals
1220 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA

☎ 1-800-340-0772
FAX 1-800-340-0773
E-MAIL: support@mgchemicals.com
WEB www.mgchemicals.com

MG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA

☎ 1-905-331-1396
FAX 1-905-331-2682
E-MAIL: info@mgchemicals.com

E-MAIL (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents
USA or CANADA: Call CHEMTREC ☎: ***1-800-424-9300***

For emergencies involving dangerous goods; Collect 24/7
CANADA: Call CANUTEC ☎: ***1-613-996-6666*** or ****666*** on cellular phones

Section 2: Hazards Identification

WHMIS Classification

B2 – Flammable Liquid; D2A – Very Toxic Material (Teratogenicity/Embryotoxicity);
D2B – Toxic Material (Skin/eye irritation)

GHS Categories

Criteria		Category	Signal Word	Pictograms
Flammable Liquid		2	Danger	
Aspiration Hazard		1	Danger	
Reproductive Toxicity		2	Warning	
Specific Target Organ Toxicity	Repeated Exposure	2	Warning	
Eye Irritation		2	Warning	
Skin Irritation		2	Warning	
Specific Target Organ Toxicity	Single Exposure	3	Warning	
Acute Toxicity	Oral	4	Warning	
Aquatic environmental hazard	Acute	2	*None*	No Symbol Mandated

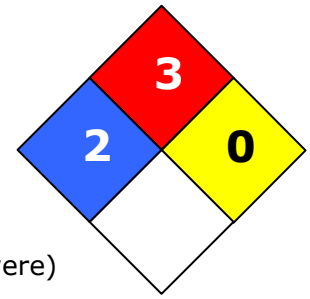
Other Classifications

HMIS® RATING

HEALTH:	**2**
FLAMMABILITY:	**3**
PHYSICAL HAZARD:	**0**
PERSONAL PROTECTION:	

Approximate HMIS and NFPA Risk Ratings Legend:
0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

NFPA® 704 CODES



THINNER 3 **4353**

Label Elements

Signal Word	**DANGER**
Pictograms	**Hazard Statements**
	H225: Highly flammable liquid and vapor
	H315: Causes skin irritation H320: Causes eye irritation H302: Harmful if swallowed H336: May cause drowsiness and dizziness
	H304: May be fatal if swallowed and enters airways H361: Suspected of damaging fertility or the unborn child H373: May cause damage to organs (affected organ: central nervous system) through prolonged or repeated exposure
No Symbol Mandated	H401: Toxic to aquatic life
	Precautionary Statements
	P102: Keep out of reach of children. P202: Do not handle until all safety precautions have been read and understood. P280: Wear protective gloves/eye protection P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking. P260 + P271: Do not breathe fume/gas/vapors/spray. Use only outdoors or in well ventilated area. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302 + P361 + P352: IF ON SKIN: Take off immediately all contaminated clothing. Wash with plenty of water. P301 + P310: IF SWALLOWED: Immediately call a POISON CENTRE/doctor. P331: Do NOT induce vomiting.

Other Hazards

Repeated exposure may cause skin dryness or cracking

Exposure Routes and Symptoms Summary

Eyes	Causes moderate eye irritation.
Skin	Causes moderate skin irritation.
Inhalation	May cause irritation of nose and throat, and may lead to cardiac arrythmia.
Ingestion	Not classifiable. See inhalation symptoms.
Chronic	Prolonged or repeated exposure may cause skin dryness and cracking, defat skin, and local redness and discomfort. Chronic inhalation or ingestion of large doses may cause central nervous system depression. Ingestion or inhalation of during pregnancy may increase the chances of development defects.

Section 3: Hazardous Ingredients

CAS #	Chemical Name	Wt%
108-88-3 78-93-3	toluene 2-butanone [a)]	65–75% 25–35%

a) Commonly known as MEK (methyl ethyl ketone)

Section 4: First Aid Measures

Exposure Condition	*GHS Code: Precautionary Statement*
IF IN EYES	P305
Symptoms	Immediate: *moderate to severe irritation, redness, pain*
Response	P351: Rinse cautiously with water for several minutes. P338: Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists	P310: Get medical advice/attention
IF ON SKIN	P302
Symptoms	Immediate: *irritation, dry skin*
Response	P352: Wash with plenty of water. P362+P364: Take off contaminated clothing and wash before reuse.
If skin irritation or rash occurs	P310: Get medical advice/attention
IF INHALED	P304
Symptoms	Immediate: *irritation, headache, drowsiness, dizziness, cough, nausea, vomiting* Delayed: *breathing difficulty*
Response	P340: Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing.
If feeling unwell	P312: Call a POISON CENTRE/doctor
IF SWALLOWED	P301 (*Not a likely route of exposure under normal use*)
Symptoms	Immediate: *Irritation, burning sensation, nausea, vomiting abdominal pain, unconsciousness*
Response	P310: Immediately call a POISON CENTRE/doctor P331: Do NOT induce vomiting. P330: Rinse mouth.

Section 5: Fire Fighting Measures

Autoignition Temperature [a]	≥505 °C [≥941 °F]	**Flash Point** [b]	-1 °C [30 °F]	**LFL [LEL]** [c]	1.6% (v)
				UFL [UEL]	11.2% (v)

In case of fire	P370
Response	P378: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish. Use water spray to cool containers.
Combustion Products	Produces CO and CO_2.
Fire-Fighter	Wear self-contained breathing apparatus for fire fighting
General Information	Vapors may accumulate in low-lying areas. They can cause flash fire or ignite explosively. Material may float and ignite on surface of water.

a) Based on the 2-butanone literature value
b) Tag closed cup value
c) LFL = Lower Flammability [or Explosion] Limit (in volume %);
UFL = Upper Flammability [or Explosion] Limit (in volume %)

Section 6: Accidental Release Measures

Personal Protection: See Section 8. Avoid breathing the mist/vapors.

Containment Remove all sources of ignition.

Cleaning Collect liquid in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe up further residue with paper towel and place dirty towels in container. Wash spill area with soap and water to remove the last traces of residue.

RECOMMENDATION: Use a grounded stainless steel or carbon steel container.

Disposal Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P262: Do not get in eye, on skin, or on clothing.

P260 + P271 + P284: Do not breath fume/gas/vapors/spray. Use only outdoors or in well ventilated area. In cases of inadequate ventilation wear respiratory protection.

P270: Do not eat, drink, or smoke when using this product.

Handling P280: Wear protective gloves/clothing/eye protection.

P242 + P243: Use non-sparking tools. Take precautionary measures against static discharge.

RECOMMENDATION: Wear neoprene, butyl rubber, nitrile or other impervious gloves with breakthrough time greater than intended use period.

P264: Wash hands thoroughly after handling.

Storage P403 + P233+ P235: Keep container tightly closed. Store in a well-ventilated area. Keep cool.

RECOMMENDATION: Keep in a dry and clean area, away from incompatible substances.

Note: The GHS codes and the GHS precaution statements are used.

Section 8: Exposure Controls/Personal Protection

Routes of Entry

Eyes, ingestion, inhalation, and skin

Substances with Occupational Exposure Limit Values

Chemical Name	Country	Long Term Exposure Limits		Short Term Exposure Limits (STEL)
		ACGIH TWA	PEL	
toluene	U.S.	20 ppm	100 ppm	150 ppm
	Canada AB		50 ppm	—
	Canada BC		20 ppm	—
	Canada ON		50 ppm	—
	Canada QC		100 ppm	150
2-butanone	U.S.	200 ppm	200 ppm	300 ppm
	Canada AB		200 ppm	300 ppm
	Canada BC		50 ppm	100 ppm
	Canada ON		200 ppm	300 ppm
	Canada QC		150 ppm	300 ppm

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH[2], OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database[1] of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

Engineering Controls

Ventilation Keep airborne concentrations below exposure limits.

Personal Protective Equipment

Eye protection Wear appropriate protective eyeglasses or chemical safety goggles.

RECOMMENDATION: Use safety glasses with lateral protection (side shields).

Skin Protection Wear appropriate protective clothing to prevent skin contact.

RECOMMENDATION: Use of protective gloves in butyl rubber, fluorinated rubber, or other chemically resistant gloves.

Continued on the next page

Respiratory Protection If exposed to mist, wear respirator such as a half-mask respirator.

RECOMMENDATION: Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this MSDS, and that the respirator is fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

Section 9: Physical and Chemical Properties

Physical State	Liquid	**Appearance**	Clear
Odor	aromatic and acetone like	**Odor Threshold**	~2.9 ppm
pH	Not available	**Specific Gravity**	0.83
Solubility in Water	Partially soluble	**Melting Point**	Not available
Boiling Point	82 °C [180 °F]	**Evaporation Rate**	3.77 (ButAc = 1)
Flash Point [a)]	-1°C [30 °F]	**Vapor Pressure @ 20 °C**	Not available
Lower Flammability Limit	1.6%	**Upper Flammability Limit**	11.2%
Auto-ignition Temperature	≥505 °C [≥941 °F]	**Decomposition Temperature**	Not available
Viscosity @40 °C	<20.5 mm^2/s	**Vapor Density**	4 (Air = 1)
Partition Coefficient	Not available		

a) Tag closed cup flash.

Section 10: Stability and Reactivity

Stabilities	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Ignition sources, excessive heat, and incompatible substances. Vapors may form explosive mixture with air.
Incompatibilities	Nitrates, strong oxidizing agents, strong reducing agents, strong acids, strong bases
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5

Section 11: Toxicological Information

Routes of Entry

Eyes, ingestion, inhalation, and skin

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation	TCLo inhalation
toluene	636 mg/kg Rat	12,124 mg/kg Rabbit	49 g/m^3 4 h Rat	200 ppm Human
2-butanone	2,737 mg/kg Rat	6,480 mg/kg Rabbit	23,500 mg/m^3 8h Rat	100 ppm 5 m Human

Note: Representative toxicity data from by RTECS database of the Canadian Centre for Occupational Health and Safety (CCOHS)[1] data from supplier MSDS were also consulted.

Skin corrosion/irritation	Causes skin irritation based on Draize tests on animals. Prolonged or repeated skin contact may cause dermatitis
Serious eye damage/irritation	Causes severe eye irritation based on Draize tests on animals.
Sensitization (allergic reactions)	No data available
Carcinogenicity (risk of cancer)	Not classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP
Mutagenicity (risk of heritable genetic effects)	No data available
Reproductive Toxicity (risk to sex functions)	Spermatogenisis was observed in male rat by inhalation of toluene.

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Teratogenicity (risk of fetus malformation)	Fetotoxicity is observed in animal studies for inhalation and oral exposures for toluene.
STOT-single exposure	Toluene and 2-butanone can affect the central nervous system by inhalation causing drowsiness or dizziness.
STOT-repeated exposure	Contains 70% toluene, which is a Cat 2 STOT repeated exposure hazard for the central nervous system.
Aspiration hazard	Aspiration toxicant mixture containing more than 10% toluene (Cat 1) and having a viscosity <20.5 mm^2/s.

Section 12: Ecological Information

The IMDG Code criteria and the raw-material MSDS along with supporting data for the classification of registered substances from the European Chemical Agency database (http://echa.europa.eu) were used.

Toluene is an acute category 2 environmental toxicant (with minimal LC50 of 7.63 mg/L for Oncorhhynchus mykiss (rainbow trout); 8.9 mg/L 24 h Daphnia magna (water flea); 10 mg/L 24 h Pseudokirchneriella subcapitata (green algae)).

The 2-butanone ingredient is not classified as an environmental hazard under GHS thresholds.

Acute Ecotoxicity

Category 2

GHS Code: Hazard Statement

H401: Toxic to aquatic life

P273: Avoid release to the environment

P391: Collect spillage

Chronic Ecotoxicity

Not data available

Biodegradability

Not data available

Other Effects

VOC (EPA, WHIMS, and Europe) = 100% (830 g/L)

**VOC = Regulated Volatile Organic Content*

Section 13: Disposal Information

P501: Dispose of contents in accordance with all local, regional, national, and international regulations.

Section 14: Transport Information

Ground

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations); **USA CFR 49 Regulations** (Parts 100 to 185). **ADR** (European Agreement Concerning the International Carriage of Dangerous Goods by Road, and **ADN** (Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways).

Sizes 5 liter and under

Limited Quantity

Sizes greater than 5 liter

UN number: UN1263
Shipping Name: PAINT RELATED MATERIAL, Flammable Liquid
Class: 3
Packing Group: II
Marine Pollutant: No

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

All sizes

UN number: UN1263
Shipping Name: PAINT RELATED MATERIAL, Flammable Liquid
Class: 3
Packing Group: II
Marine Pollutant: No

Continued on the next page

Sea

Refer to IMDG regulations.

Sizes 5 liter and under

Limited Quantity

Sizes greater than 5 liter

UN number: UN1263
Shipping Name: PAINT RELATED MATERIAL, Flammable Liquid
Class: 3
Packing Group: II
Marine Pollutant: No

Note: Component supplier SDS transportation sections and labeling were consulted. All involved staff of shipper must be appropriately trained before involvement with the transport of this product, or work under direct supervision of a trained person.

Section 15: Regulatory Information

Canada

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL/NDSL.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

Continued on the next page

USA

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product contains toluene that is listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45

This product contains toluene (CAS# 108-88-3; reportable quantity = 1000 lb) and 2-butanone (CAS# 78-93-3, reportable quantity = 5000 lb), which are subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, Sept 2, 2011 revision, USA).

This product contains toluene, which is listed as reproductively toxic.

SCAQMD Rule 1143 (California South Coast District)

Within the boundaries of the South Coast Air Quality Management District (in California), this product is for commercial and industrial use only, and must not be displayed for retail sale to consumers.

Europe

RoHS

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

MSDS Prepared by Michel Hachey

Date of Issue 05 May 2013

Supersedes 01 May 2013

Reason for Changes: Correct wrong use of cancer hazard statements in Section 2.

Continued on the next page

Reference

1) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

2) ACGIH *2011 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices*, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2011).

Abbreviations

ACGIH American Conference of Governmental Industrial Hygienists
GHS: Globally Harmonized System of Classification of Labeling of Chemicals
LC50 Lethal Concentration 50%
LCLo Lowest published lethal concentration
LD50 Lethal Dose 50%
N/A Not Applicable
N/E Not Estimated
PEL Permissible Exposure Limit
STEL Short-Term Exposure Limit
TCLo Lowest published toxic concentration
TWA Time Weighted Average
VOC Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

Email: support@mgchemicals.com

Mailing Addresses

Manufacturing & Support
1210 Corporate Drive
Burlington, Ontario, Canada
L7L 5R6

Head Office
9347–193rd Street
Surrey, British Columbia, Canada
V4N 4E7

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