

SAFETY DATA SHEET

in accordance with REACH (1907/2006/EC, as amended by 2015/830/EU) 29 CFR 1910.1200 and WHMIS 2015

Revision date: 5 October 2018

Initial date of issue: 6 July 2007

SDS No. 168B-20

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

763 Rust Transformer® (Bulk)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Acid Base coating. Stops rusting and prevents further corrosive damage to metal and forms a sound base for primer coating.

1.3. Details of the supplier of the safety data sheet

Company:

A.W. CHESTERTON COMPANY
860 Salem Street
Groveland, MA 01834-1507, USA
Tel. +1 978-469-6446 Fax: +1 978-469-6785
(Mon. - Fri. 8:30 - 5:00 PM EST)
SDS requests: www.chesterton.com
E-mail (SDS questions): ProductMSDSs@chesterton.com
E-mail: customer.service@chesterton.com

Supplier:

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,
Unit 105, Burlington, Ontario L7L 4X8 – Tel. 905-335-5055
EU: Chesterton International GmbH, Am Lenzenfleck 23,
D85737 Ismaning, Germany – Tel. +49-89-996-5460

1.4. Emergency telephone number

24 hours per day, 7 days per week
Call Infotrac: 1-800-535-5053
Outside N. America: +1 352-323-3500 (collect)
NSW Poisons Information Centre (Australia): 13 11 26

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP]

Flammable liquid, Category 3, H226
Skin corrosion, Category 1B, H314
Serious eye damage, Category 1, H318
Specific target organ toxicity – repeated exposure, Category 2, H373 (kidneys, oral)

2.1.2. Classification according to 29 CFR 1910.1200 / WHMIS 2015

Same as section 2.1.1.

2.1.3. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.4. Additional information

For full text of H-statements: see SECTIONS 2.2 and 16.

2.2. Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms:



Signal word:

Danger

Hazard statements:	H226 H314 H373	Flammable liquid and vapour. Causes severe skin burns and eye damage. May cause damage to the kidneys through prolonged or repeated exposure if swallowed.
Precautionary statements:	P210 P233 P260 P280 P301/330/3331 P303/361/353 P305/351/338 P310 P314 P403/235	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Do not breathe vapours/spray. Wear protective gloves, protective clothing and eye/face protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Get medical advice/attention if you feel unwell. Store in a well-ventilated place. Keep cool.
Supplemental information:	Contains 12.5% of components with unknown hazards to the aquatic environment.	

2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015

Hazard pictograms:	Same as section 2.2.1.	
Signal word:	Same as section 2.2.1.	
Hazard statements:	Same as section 2.2.1.	
Precautionary statements:	P210 P233 P260 P264 P280 P301/330/3331 P303/361/353 P304/340 P305/351/338 P310 P314 P363 P403/235 P405 P501	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Do not breathe vapours/spray. Wash skin thoroughly after handling. Wear protective gloves, protective clothing and eye/face protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Get medical advice/attention if you feel unwell. Wash contaminated clothing before reuse. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container to an approved waste disposal plant.
Supplemental information:	Same as section 2.2.1.	

2.3. Other hazards

It will stain the skin after prolonged contact. The stain will fade in time or it can be removed by rinsing the hands with a dilute solution of bleach.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

Hazardous Ingredients ¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Ethylene glycol	15-25	107-21-1 203-473-3	NA	Acute Tox. 4*, H302 STOT RE 2, H373 (kidneys, oral)
Isopropanol	10-15	67-63-0 200-661-7	NA	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Tannic Acid	10-15	1401-55-4 215-753-2	NA	[Acute Tox. 5, H303]

Phosphinic Acid	1-5	6303-21-5 228-60-15	NA	Met. Corr. 1, H290 [Acute Tox. 5, H303] Skin Corr. 1B, H314 Eye Dam. 1, H318
Other ingredients:				
Phosphinic Acid, Barium Salt	1-5	14871-79-5 238-942-1	NA	Not classified
Any classification in brackets is a GHS building block that was not adopted by the EU, the US, Canada and Australia in their national implementations of GHS. For full text of H-statements: see SECTION 16.				
¹ Classified according to: <ul style="list-style-type: none"> • 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F) • 1272/2008/EC, GHS, REACH • WHMIS 2015 • Safe Work Australia 				
SECTION 4: FIRST AID MEASURES				
4.1. Description of first aid measures				
Inhalation:	Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.			
Skin contact:	Wash skin with plenty of water. Wash clothing before reuse. Consult physician.			
Eye contact:	Flush eyes for at least 30 minutes with large amounts of water. Consult physician.			
Ingestion:	Do not induce vomiting. If conscious, dilute stomach contents with large quantities of water. Contact physician immediately.			
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. Do not breathe mist/vapours. See section 8 for recommendations on personal protective equipment.			
4.2. Most important symptoms and effects, both acute and delayed				
Severe eye and skin irritant; may cause burns. Excessive inhalation of vapor may result in dizziness, headache and other central nervous system effects. Repeated overexposure to Ethylene Glycol can cause kidney and liver effects.				
4.3. Indication of any immediate medical attention and special treatment needed				
Treat symptoms.				
SECTION 5: FIREFIGHTING MEASURES				
5.1. Extinguishing media				
Suitable extinguishing media:	Carbon dioxide, dry chemical, foam, water fog or water spray			
Unsuitable extinguishing media:	High volume water jet			
5.2. Special hazards arising from the substance or mixture				
None				
5.3. Advice for firefighters				
Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.				
Flammability Classification:	-			
HAZCHEM Emergency Action Code:	3 Z			
SECTION 6: ACCIDENTAL RELEASE MEASURES				
6.1. Personal precautions, protective equipment and emergency procedures				
Evacuate area. Provide adequate ventilation. Utilize exposure controls and personal protection as specified in Section 8.				
6.2. Environmental Precautions				
Keep out of sewers, streams and waterways.				
6.3. Methods and material for containment and cleaning up				
Contain spill to a small area. Keep away from sources of ignition - No smoking. If removal of ignition sources is not possible, then flush material away with water. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in a suitable container for disposal.				
6.4. Reference to other sections				
Refer to section 13 for disposal advice.				

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Wash before eating, drinking or smoking. Utilize exposure controls and personal protection as specified in Section 8. Keep container closed when not in use.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated area.

7.3. Specific end use(s)

No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limit values**

Ingredients	OSHA PEL ¹		ACGIH TLV ²		UK WEL ³		AUSTRALIA ES ⁴	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Ethylene glycol	–	–	25 (vapor) STEL: 50	STEL: 10 (aerosol)	20 (vapor) STEL: 40	52 (vapor) 104 10 (aerosol)	20 (vapor) STEL: 40	52 (vapor) 104 10 (aerosol)
Isopropanol	400	980	200 STEL: 400	–	400 STEL: 500	999 1250	400 STEL: 500	983 1230
Tannic Acid	–	–	–	–	–	–	–	–
Phosphinic Acid	–	–	–	–	–	–	–	–
Phosphinic Acid, Barium Salt	(as Ba)	0.5	(as Ba)	0.5	–	0.5	–	0.5

*European Union Occupational Exposure Limit Value: Inhalable fraction and vapor: 20 ppm, 52 mg/m³ (8-hr TWA); 40 ppm, 104 mg/m³ (STEL)

¹ United States Occupational Health & Safety Administration permissible exposure limits

² American Conference of Governmental Industrial Hygienists threshold limit values

³ EH40 Workplace exposure limits, Health & Safety Executive

⁴ Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003]

Biological limit values

Isopropanol:

Control parameter	Biological specimen	Sampling Time	Limit Value	Basis
Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH

Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:**Workers**

Substance	Route of exposure	Potential health effects	DNEL
Isopropanol	Inhalation	Chronic effects, systemic	500 mg/m ³
	Dermal	Chronic effects, systemic	888 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:

Substance	Environmental protection target	PNEC
Isopropanol	Fresh water	140.9 mg/l
	Marine water	140.9 mg/l
	Water, intermittent release	140.9 mg/l
	Freshwater sediments	552 mg/kg dry wt.
	Marine sediments	552 mg/kg dry wt.
	Microorganisms in sewage treatment	2251 mg/l
	Soil (agricultural)	28 mg/kg dry wt.

8.2. Exposure controls**8.2.1. Engineering measures**

Use only in well-ventilated areas. If product is sprayed: 5 to 15 air changes per hour.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limits are exceeded, use approved organic vapor respirator (e.g., EN filter type A-P2).

Protective gloves: Chemical resistant gloves

Isopropanol:

Contact type	Glove material	Layer thickness	Breakthrough time*
Full	Nitrile rubber	0.40mm	>480 min.
Splash	Neoprene	0.65mm	>120 min.

*Determined according to EN374 standard.

Eye and face protection: Safety goggles.

Other: Impervious clothing as necessary to prevent skin contact.

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state	liquid	Odour	sweet odor
Colour	dark brown	Odour threshold	not determined
Initial boiling point	100°C (212°F)	Vapour pressure @ 20°C	not determined
Melting point	not determined	% Aromatics by weight	0%
% Volatile (by volume)	66%	pH	1.5
Flash point	34°C (93°F)	Relative density	1.07 kg/l
Method	PM Closed Cup	Weight per volume	8.9 lbs/gal.
Viscosity	not determined	Coefficient (water/oil)	> 1
Autoignition temperature	not determined	Vapour density (air=1)	> 1
Decomposition temperature	no data available	Rate of evaporation (ether=1)	< 1
Upper/lower flammability or explosive limits	not determined	Solubility in water	complete
Flammability (solid, gas)	not applicable	Oxidising properties	not applicable
Explosive properties	not applicable		

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid

Open flames and red hot surfaces.

10.5. Incompatible materials

Strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide and other toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Primary route of exposure under normal use: Inhalation, skin and eye contact.

Acute toxicity -

Oral: May be harmful if swallowed. ATE-mix = 4450 mg/kg.

Substance	Test	Result
Ethylene glycol	LD50, rat	7712 mg/kg
Ethylene glycol	Human lethal dose, estimated	1400 - 1600 mg/kg
Isopropanol	LD50, rat	5045 mg/kg
Isopropanol	Human lethal dose	3570 mg/kg
Tannic Acid	LD50, rat	2260 mg/kg
Tannic Acid	LD50, rabbit	5000 mg/kg
Phosphinic Acid	LD50, rat, read-across	> 2000 mg/kg
Phosphinic Acid	LD50, rat, OECD 401	<= 5000 mg/kg

Dermal:

Substance	Test	Result
Ethylene glycol	LD50 dermal, rabbit	> 22,300 mg/kg (20 ml/kg)
Isopropanol	LD50 dermal, rabbit	12800 mg/kg
Tannic Acid	LD50 dermal, mouse	5000 mg/kg

Inhalation:

Excessive inhalation of vapor may result in dizziness, headache and other central nervous system effects.

Substance	Test	Result
Ethylene glycol	LC50, rat	> 20 mg/l
Isopropanol	LC50 inhalation, rat, 4 hours	46.5 mg/l (vapor)

Skin corrosion/irritation: Severe skin irritant; may cause burns.

Substance	Test	Result
Phosphinic Acid	OECD 435	Corrosive

Serious eye damage/irritation:

Severe eye irritant; may cause burns.

Substance	Test	Result
Isopropanol	Eye irritation, rabbit	Moderate irritation

Respiratory or skin sensitisation:

Substance	Test	Result
Isopropanol	Skin sensitization, guinea pig (OECD 406)	Not sensitizing

Germ cell mutagenicity: Ethylene glycol, Isopropanol, Phosphinic Acid: based on available data, the classification criteria are not met. Tannic Acid, Phosphinic Acid, Barium Salt: data lacking.

Carcinogenicity: This product contains no carcinogens as listed by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or the European Chemicals Agency (ECHA).

Reproductive toxicity: Ethylene glycol, Isopropanol: based on available data, the classification criteria are not met. Tannic Acid, Phosphinic Acid, Phosphinic Acid, Barium Salt: data lacking.

STOT – single exposure: Isopropanol: may cause drowsiness or dizziness. Ethylene glycol, Phosphinic Acid, Phosphinic Acid, Barium Salt: based on available data, the classification criteria are not met. Tannic Acid: data lacking.

STOT – repeated exposure: Repeated overexposure to Ethylene Glycol can cause kidney and liver effects. Isopropanol, Phosphinic Acid: based on available data, the classification criteria are not met. Tannic Acid, Phosphinic Acid, Barium Salt: data lacking.

Aspiration hazard: Not classified as an aspiration toxicant.

Other information: None known

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

12.1. Toxicity

Many aquatic species are intolerant of pH levels below 4. Tannic Acid: 96 h LC50 (fish), 37 mg/l.

12.2. Persistence and degradability

Ethylene glycol, Isopropanol: oxidizes rapidly by photochemical reactions in air; inherently biodegradable. Phosphinic Acid, Phosphonic Acid, Barium Salt: inorganic substances.

12.3. Bioaccumulative potential

Ethylene glycol, Isopropanol: low potential for bioaccumulation (BCF < 100).

12.4. Mobility in soil

Liquid. Soluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Ethylene glycol, Isopropanol: expected to have very high mobility in soils.

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Incinerate or landfill absorbed material with a properly licensed facility. Treatment standards for ignitable, corrosive waste and barium must be met for disposal if applicable. Check local, state and national/federal regulations and comply with the most stringent requirement. This product is classified as a hazardous waste according to 2008/98/EC.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

ADR/RID/ADN/IMDG/ICAO:	UN2924
TDG:	UN2924
US DOT:	UN2924

14.2. UN proper shipping name

ADR/RID/ADN/IMDG/ICAO:	FLAMMABLE LIQUID, CORROSIVE N.O.S. (ISOPROPANOL / TANNIC ACID)
TDG:	FLAMMABLE LIQUID, CORROSIVE N.O.S. (ISOPROPANOL / TANNIC ACID)
US DOT:	FLAMMABLE LIQUID, CORROSIVE N.O.S. (ISOPROPANOL / TANNIC ACID)

14.3. Transport hazard class(es)

ADR/RID/ADN/IMDG/ICAO:	3, (8)
TDG:	3, (8)
US DOT:	3, (8)

14.4. Packing group

ADR/RID/ADN/IMDG/ICAO:	III
TDG:	III
US DOT:	III

14.5. Environmental hazards

NO ENVIRONMENTAL HAZARDS

14.6. Special precautions for user

NO SPECIAL PRECAUTIONS FOR USER

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

NOT APPLICABLE

14.8. Other information

US DOT: ERG NO. 132

May be shipped as Limited Quantities in packaging having a rated capacity gross weight of 66 lb. or less and in inner packages not over 5 Liters (49 CFR 173.150(b,3)).

IMDG: EmS F-E, S-C, IMDG segregation group 1-Acids

ADR: Classification code FC, Tunnel restriction code (D/E)

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU regulations**

Authorisations under Title VII: Not applicable

Restrictions under Title VIII: None

Other EU regulations: Directive 94/33/EC on the protection of young people at work. Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances (hazard category P5, Flammable Liquids).

15.1.2. National regulations**US EPA SARA TITLE III****312 Hazards:**

See section 2.1.2

313 Chemicals:

Ethylene glycol	107-21-1	15-25%
Phosphinic Acid, Barium Salt	14871-79-5	1-1.4%

Other national regulations: National implementations of the EC Directives referred to in section 15.1.1.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms: ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 ATE: Acute Toxicity Estimate
 BCF: Bioconcentration Factor
 cATpE: Converted Acute Toxicity point Estimate
 CLP: Classification Labelling Packaging Regulation (1272/2008/EC)
 ES: Exposure Standard
 GHS: Globally Harmonized System
 ICAO: International Civil Aviation Organization
 IMDG: International Maritime Dangerous Goods
 LC50: Lethal Concentration to 50 % of a test population
 LD50: Lethal Dose to 50% of a test population
 LOEL: Lowest Observed Effect Level
 N/A: Not Applicable
 NA: Not Available
 NOEC: No Observed Effect Concentration
 NOEL: No Observed Effect Level
 OECD: Organization for Economic Co-operation and Development
 PBT: Persistent, Bioaccumulative and Toxic substance
 (Q)SAR: Quantitative Structure-Activity Relationship
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)
 REL: Recommended Exposure Limit
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
 SDS: Safety Data Sheet
 STEL: Short Term Exposure Limit
 STOT RE: Specific Target Organ Toxicity, Repeated Exposure
 STOT SE: Specific Target Organ Toxicity, Single Exposure
 TDG: Transportation of Dangerous Goods (Canada)
 TWA: Time Weighted Average
 US DOT: United States Department of Transportation
 vPvB: very Persistent and very Bioaccumulative substance
 WEL: Workplace Exposure Limit
 WHMIS: Workplace Hazardous Materials Information System
 Other abbreviations and acronyms can be looked up at www.wikipedia.org.

Key literature references and sources for data: Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)
 Chemical Classification and Information Database (CCID)
 European Chemicals Agency (ECHA) - Information on Chemicals
 Hazardous Chemical Information System (HCIS)
 National Institute of Technology and Evaluation (NITE)
 Swedish Chemicals Agency (KEMI)
 U.S. National Library of Medicine Toxicology Data Network (TOXNET)

Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP]:

Classification	Classification procedure
Flam. Liq. 3, H226	On basis of test data
Skin Corr. 1B, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data
STOT RE 2, H373	Bridging principle "Dilution"

Relevant H-statements: H225: Highly flammable liquid and vapour.
H302: Harmful if swallowed.
May be harmful if swallowed.
Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H373: May cause damage to the kidneys through prolonged or repeated exposure if swallowed.

Hazard pictogram names: Flame, corrosion, health hazard

Changes to the SDS in this revision: Sections 1.4, 2.1, 2.2, 3, 4.1, 4.2, 5.1, 5.3, 7.1, 7.2, 8.1, 8.2.1, 11, 12.1, 12.2, 15.1, 16.

Date of last revision: 5 October 2018

Further information: None

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.