

SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 453/2010/EC) and 29 CFR 1910.1200

Revision date: 20 May 2015

Initial date of issue: 6 July 2007

SDS No. 168B-19

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:

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)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

Flam. Liq. 3, H226
Skin Corr. 1B, H314
Acute Tox. 4, H302
STOT SE 2, H371
STOT RE 2, H373

2.1.2. Classification according to Directives 1999/45/EC and 1975/324/EEC

R10
Corrosive; C; R34
Harmful; Xn; R22-48/22-68

2.1.3. Classification according to WHMIS 1988

B2: Flammable liquids; E: Corrosive materials; D2A: Very toxic materials causing other effects

2.1.4. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.5. Additional information

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

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

Hazard pictograms:



Signal word:

Danger

Hazard statements:	H226 H314 H302 H371 H373	Flammable liquid and vapour. Causes severe skin burns and eye damage. Harmful if swallowed. May cause damage to organs. May cause damage to the kidneys through prolonged or repeated exposure.
Precautionary statements:	P210 P233 P260 P280 P301/330/3331 P303/361/353 P305/351/338 P310	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/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/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.
Supplemental information:	15.49% of the mixture consists of component(s) of unknown acute toxicity. Contains 12.5% of components with unknown hazards to the aquatic environment.	

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.	Classification (CLP/GHS)	Classification (67/548/EEC)
Ethylene glycol	15-25	107-21-1 203-473-3	NA	Acute Tox. 4*, H302 STOT RE 2, H373G	Xn; R22
Isopropanol	10-15	67-63-0 200-661-7	NA	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	F; R11 Xi; R36 R67
Tannic Acid	10-15	1401-55-4 215-753-2	NA	Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT SE 2, H371	Xn; R68 Xi; R36/38
Phosphinic Acid	1-5	6303-21-5 228-60-15	NA	Skin Corr. 1B, H314 Eye Dam. 1, H318	C; R34
Phosphinic Acid, Barium Salt	1-1.4	14871-79-5 238-942-1	NA	Acute Tox. 4, H302, H332	Xn; R20/22

Indications of danger acc. to 67/548/EEC: Xn: Harmful; F: Highly flammable; Xi: Irritant; C: Corrosive
For full text of H-statements and R-phrases: see SECTION 16.

¹ Classified according to: * 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), California Proposition 65
* 1272/2008/EC, 67/548/EEC, 99/45/EC, REACH
* WHMIS 2015
* Safe Work Australia [NOHSC: 1008 (2004)]

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.

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. Prolonged or repeated skin contact may defat the skin and cause dermatitis. 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: FIRE-FIGHTING MEASURES**5.1. Extinguishing media**

Carbon Dioxide, dry chemical or foam

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. Ground and bond product transfer. Utilize exposure controls and personal protection as specified in Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool, dry 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	–	–	(C)	100	20 STEL: 40	50 104	20 40	52 104
Isopropanol	400	980	200 STEL: 400	– –	400 500	999 STEL: 1250	400 STEL: 500	983 1230
Tannic Acid	–	–	–	–	–	–	–	–
Phosphinic Acid	–	–	–	–	–	–	–	–
Phosphinic Acid, Barium Salt	(as Ba)	0.5	(as Ba)	0.5	–	–	–	0.5

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 Executive⁴ Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

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

Use only in well-ventilated areas.

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 effects: Severe eye and skin irritant; may cause burns. Excessive inhalation of vapor may result in dizziness, headache and other central nervous system effects. ATE-mix oral: 1955 mg/kg. ATE-mix inhalation: 112.4 mg/l.

Substance	Test	Result
Ethylene glycol	LD50 oral, rat	4700 mg/kg
Ethylene glycol	Human lethal dose	786 mg/kg
Ethylene glycol	LC50 inhalation, rat	> 20 mg/l
Isopropanol	LD50 dermal, rabbit	12800 mg/kg
Isopropanol	LD50 oral, rat	5045 mg/kg
Isopropanol	Human lethal dose	3570 mg/kg
Isopropanol	LC50 inhalation, rat	46.5 mg/l/4h
Tannic Acid	LD50 oral, rat	2260 mg/kg
Tannic Acid	LD50 oral, rabbit	5000 mg/kg
Phosphinic Acid	LD50 oral, rat	> 2000 mg/kg

Chronic effects: Prolonged or repeated skin contact may defat the skin and cause dermatitis. Repeated overexposure to Ethylene Glycol can cause kidney and liver effects. Ethylene Glycol has produced birth defects in animals.

Carcinogenicity: As per 29 CFR 1910.1200 (Hazard Communication), 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 Regulation (EC) No 1272/2008.

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.

12.2. Persistence and degradability

Ethylene glycol, Isopropanol: oxidizes rapidly by photochemical reactions in air; inherently biodegradable

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.

European List of Wastes code: 11 01 98

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 92/85/EEC on the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

15.1.2. National regulations

US EPA SARA TITLE III		Hazardous Materials Identification System (HMIS)	
312 Hazards:	313 Chemicals:	4 = Severe Hazard	HEALTH 3
Immediate	Ethylene glycol 107-21-1 15-25%	3 = Serious Hazard	FLAMMABILITY 3
Delayed	Phosphinic Acid, Barium Salt 14871-79-5	2 = Moderate Hazard	PHYSICAL HAZARD 1
Fire	1-1.4%	1 = Slight Hazard	Personal Protection *
		0 = Minimal Hazard	
		* = See Section 8	

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
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
NOAEL: No Observed Adverse Effect Level
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)
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
STOT: Specific Target Organ Toxicity
TDG: Transportation of Dangerous Goods (Canada)
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 de la santé et de la sécurité du travail (CSST)
Chemical Classification and Information Database (CCID)
European Chemicals Agency (ECHA) - Information on Chemicals
Hazardous Substances Information System (HSIS)
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:

Classification	Classification procedure
Flam. Liq. 3, H226	On basis of test data
Skin Corr. 1B, H314	On basis of test data
Acute Tox. 4, H302	Calculation method
STOT SE 2, H371	Bridging principle "Dilution"
STOT RE 2, H373	Bridging principle "Dilution"

Relevant H-statements: H225: Highly flammable liquid and vapour.
H302: Harmful if swallowed.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H371: May cause damage to organs.
H373: May cause damage to the kidneys through prolonged or repeated exposure.

Relevant R-phrases: R11: Highly flammable.
R20: Harmful by inhalation.
R22: Harmful if swallowed.
R34: Causes burns.
R36: Irritating to eyes.
R38: Irritating to skin.
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R67: Vapours may cause drowsiness and dizziness.
R68: Possible risk of irreversible effects.

Hazard pictogram names: Flame, Corrosion, Health hazard, Exclamation mark

Changes to the SDS in this revision: Sections 2.1, 2.2, 3, 4.2, 8, 8.2.2, 11, 15.1, 16.

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.