



	1. Product and Company Ident	ification	
Product identifier	Rx11-Flush Aerosol (4300-08, 4300-09, 4300	D-10, 4300-11)	
Other means of identification	Not available		
Recommended use	Solvent cleaner for flushing AC and refrigeration systems		
Recommended restrictions	None known.		
Manufacturer information	Nu-Calgon 2611 Schuetz Road		
	St. Louis, MO 630473 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTF	REC)	
Supplier	See above.	- /	
	2. Hazards Identification	n	
Physical hazards	Gases under pressure	Liquefied gas	
Health hazards	Acute toxicity, oral	Category 4	
	Skin corrosion/irritation	Category 2	
	Serious eye damage/eye irritation	Category 2A	
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation	
Environmental hazards	Not classified.		
WHMIS 2015 defined hazards	Not classified		
Label elements			
	< <u>-</u>		
Signal word	Warning		
Hazard statement	Contains gas under pressure; may explode if heated. Causes serious eye irritation. Causes skin irritation. Harmful if swallowed. May cause respiratory irritation.		
Precautionary statement			
Prevention	Wash thoroughly after handling. Wear eye/face protection. Wear protective gloves. Do not eat, drink or smoke when using this product. Avoid breathing gas. Use only outdoors or in a well-ventilated area.		
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). If skir irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.		
	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.		
Storage	Protect from sunlight. Store in a well-ventilated Keep container tightly closed. Store locked up		
Disposal	Dispose of contents/container in accordance w	vith local/regional/national/international regulations.	
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known		
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	20% of the mixture consists of component(s) of unknown acute oral toxicity.		
	3. Composition/Information on In	aredients	

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
(E)-1,2-Dichloroethene		156-60-5	40 - 70
Ethane, 1,1,1,2-tetrafluoro-		811-97-2	10 - 30
Pentane, 1,1,1,2,2,3,4,5,5,5-decafluoro-		138495-42-8	10 - 30
Butane, 1,1,1,3,3-pentafluoro-		406-58-6	5 - 10
All concentrations are in percent by Composition comments	weight unless ingredient is a gas. Gas concent US GHS: The exact percentage (concentration secret in accordance with paragraph (i) of §19	n) of composition has been v	
	4. First Aid Measures		
Inhalation	IF INHALED: Remove person to fresh air and CENTER/doctor if you feel unwell.	keep comfortable for breath	ng. Call a POISON
Skin contact	IF ON SKIN: Wash with plenty of water. If skin off contaminated clothing and wash it before relabel).		
Eye contact	IF IN EYES: Rinse cautiously with water for se and easy to do. Continue rinsing. If eye irritation		
Ingestion	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.		e mouth.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, reduce a cause redness and pain.	ess, swelling, and blurred vi	sion. Skin irritation. May
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and trea give oxygen. Keep victim warm. Keep victim u		
General information	Ensure that medical personnel are aware of th protect themselves. In the case of accident or (show the label where possible). Show this sai contact with eyes and skin. Wear rubber glove reach of children. Do not puncture or incinerat 49°C.	if you feel unwell, seek med fety data sheet to the doctor and safety glasses with si	ical advice immediately in attendance. Avoid de shields. Keep out of
	5. Fire Fighting Measure	es .	
Suitable extinguishing media	Treat for surrounding material.		
Unsuitable extinguishing media	None known.		
Specific hazards arising from the chemical	Contents under pressure. Pressurized contain containers with flooding quantities of water un self-contained breathing apparatus.		
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing	g including self contained bre	eathing apparatus.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do risk. Cool containers with flooding quantities of water until well after fire is out. For may cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw burn out.		out. For massive fire in
Specific methods	Cool containers exposed to flames with water	until well after the fire is out	
Hazardous combustion products	May include and are not limited to: Oxides of o	carbon.	
	6. Accidental Release Meas	sures	
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwin spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing gas. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.		n-up. Do not touch tive clothing. Avoid lvised if significant
Methods and materials for containment and cleaning up	Extinguish all flames in the vicinity. Stop the flu gas has dispersed. Dike far ahead of spill for li divert vapor cloud drift. Prevent entry into wate Following product recovery, flush area with wa	ater disposal. Use water spr erways, sewer, basements o	ay to reduce vapors or r confined areas.
Environmental precautions	Prevent further leakage or spillage if safe to de drains, water courses or onto the ground.		

7. Handling and S	Storage	
Use only with adequate ventilation. Do not taste or swallow. Avoid breathing gas. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material.		
Store locked up. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Do not store at temperatures above 49 °C (120.2°F). Keep away from heat, open flames or other sources of ignition.		
8. Exposure Controls/Pers	sonal Protection	
cupational Health & Safety Code, Sche	dule 1, Table 2) Value	
••	793 mg/m3	
	-	
	200 ppm	
DELs. (Occupational Exposure Limits f is amended)	for Chemical Substances, Occupational Health and	
Туре	Value	
TWA	200 ppm	
eg. 217/2006, The Workplace Safety An Type	nd Health Act) Value	
TWA	200 ppm	
ntrol of Exposure to Biological or Che Type	emical Agents) Value	
STEL	990 mg/m3	
	250 ppm	
TWA	790 mg/m3 200 ppm	
	g the Quality of the Work Environment)	
Туре	Value	
TWA	Value 793 mg/m3	
TWA	793 mg/m3 200 ppm	
	793 mg/m3 200 ppm	
TWA for Air Contaminants (29 CFR 1910.10	793 mg/m3 200 ppm	
TWA for Air Contaminants (29 CFR 1910.10 Type	793 mg/m3 200 ppm 000) Value	
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TWA for Air Contaminants (29 CFR 1910.10 Type PEL t Values TWA o Chemical Hazards Type TWA TWA	793 mg/m3 200 ppm 200) Value 790 mg/m3 200 ppm Value 200 ppm Value 790 mg/m3 200 ppm	
	Use only with adequate ventilation. Do not taste or swallow. Avoid breath Avoid prolonged exposure. Wear app industrial hygiene practices. When us Wash thoroughly after handling. Use Store locked up. Keep container tight Store in a well-ventilated place. Store SDS). Keep out of reach of children. I away from heat, open flames or other 8. Exposure Controls/Pers 8. Exposure Controls/Pers 9. Controls (Controls (Controls) 9. Controls (Controls (Controls) 9. ELS. (Occupational Exposure Limits of s amended) 1. Type TWA 1. TWA 1. TWA	

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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	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Other	Wear appropriate chemical resistant clothing. As required by employer code.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
Thermal hazards	Not applicable.
General hygiene considerations	When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product. 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. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance	Clear
Physical state	Gas.
Form	Liquefied gas. Aerosol
Color	Colorless
Odor	slight ether
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	105.8 °F (41 °C)
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	> 5
Flammability limit - upper (%)	< 14.4
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	284 mm Hg
Vapor density	3.4 (air = 1)
Relative density	Not available.
Solubility(ies)	0.4 g/100g H2O @ 20°C
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Percent volatile	100 %
VOC (Weight %)	697 g/l
	10. Stability and Reactivity

Reactivity Possibility of hazardous reactions

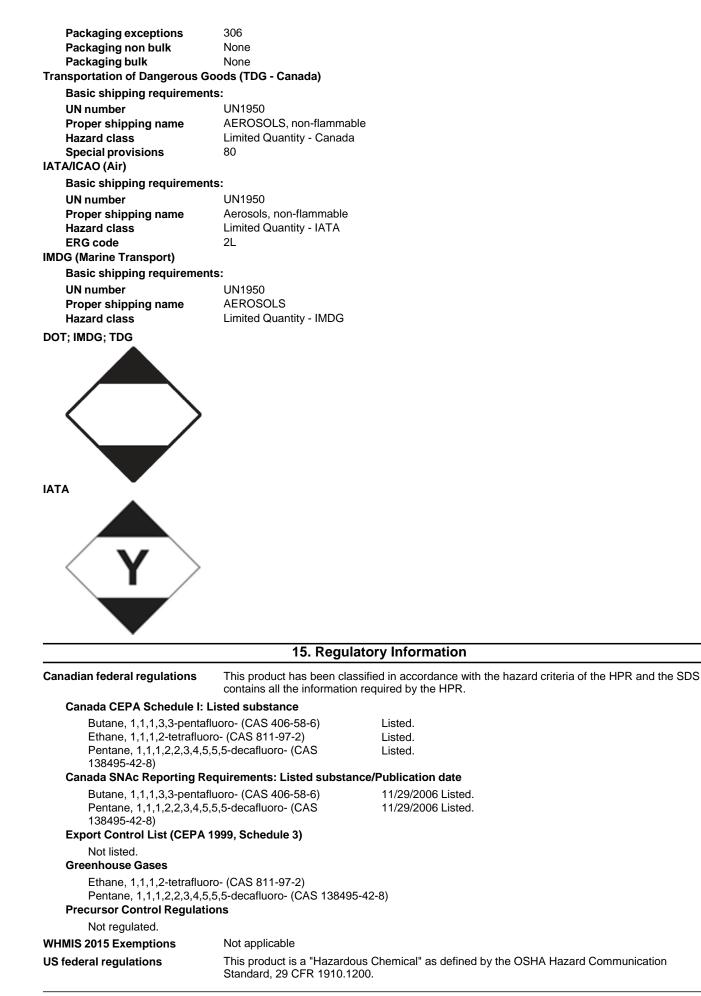
Powdered metal. This product may react with strong alkalies.

No dangerous reaction known under conditions of normal use.

containers are unstable at temperatures above 49°C
s of carbon. Hydrogen fluoride.
r

	11. Toxicological Info	rmation	
Routes of exposure	Inhalation. Ingestion. Skin contact. Eye c	ontact.	
Information on likely routes of	of exposure		
Ingestion	Harmful if swallowed.		
Inhalation	Prolonged inhalation may be harmful. Ma	ay cause irritation to the respiratory system.	
Skin contact	Causes skin irritation.		
Eye contact	Causes serious eye irritation.		
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, cause redness and pain.	redness, swelling, and blurred vision. Skin irritation. May	
Information on toxicological	effects		
Acute toxicity	Harmful if swallowed. May cause respirate	tory irritation.	
Components	Species	Test Results	
(E)-1,2-Dichloroethene (CAS 1	56-60-5)		
Acute			
Dermal			
LD50	Rabbit	5000 mg/kg	
Inhalation LC50	Mouse	21723 ppm, 6 Hours	
Oral			
LD50	Mouse	2220 mg/kg	
	Rat	1235 mg/kg	
Butane, 1,1,1,3,3-pentafluoro- Acute Inhalation LC50	(CAS 406-58-6) Rat	100000 ppm, 4 hours	
Oral			
LD50	Rat	> 2000 mg/kg	
Ethane, 1,1,1,2-tetrafluoro- (CA	AS 811-97-2)		
Acute			
Inhalation			
LC50	Rat	> 500000 ppm	
Oral			
LD50	Not available		
Pentane, 1,1,1,2,2,3,4,5,5,5-de	cafluoro- (CAS 138495-42-8)		
Acute			
Dermal	Dabhit	5 5000 mm//m	
LD50	Rabbit	> 5000 mg/kg	
Inhalation LC50	Rat	11100 ppm, 4 hours	
<i>Oral</i> LD50	Rat	> 5000 mg/kg	
Skin corrosion/irritation	Causes skin irritation.		
Exposure minutes	Not available.		
Erythema value	Not available.		
Oedema value	Not available.		
Serious eye damage/eye	Causes serious eye irritation.		
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	n		
Respiratory sensitization	Not available.		
Skin sensitization	Prolonged or repeated exposure can cause drying, defatting and dermatitis.		
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.		
Carcinogenicity	No ingredients listed by IARC, ACGIH, NTP or O	SHA.	
US. OSHA Specifically Regu Not listed.	ulated Substances (29 CFR 1910.1001-1050)		
Reproductive toxicity	Non-hazardous by WHMIS/OSHA criteria.		
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.		
Specific target organ toxicity - single exposure	Respiratory tract irritation.		
Specific target organ toxicity - repeated exposure	Not classified.		
Aspiration hazard	Not likely, due to the form of the product.		
Chronic effects	Prolonged inhalation may be harmful. Non-hazar	dous by WHMIS/OSHA criteria.	
	12. Ecological Information		
Ecotoxicity	See below		
Ecotoxicological data Components	Species	Test Results	
(E)-1,2-Dichloroethene (CAS 156-	·60-5)		
Aquatic			
Fish	LC50 Bluegill (Lepomis macrochirus)	120 - 160 mg/L, 96 hours	
Persistence and degradability	No data is available on the degradability of this p	roduct.	
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. ozo potential, endocrine disruption, global warming potential, endocrine disrupti		
	13. Disposal Considerations	S	
Disposal instructions	Consult authorities before disposal. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.		
Local disposal regulations	Dispose in accordance with all applicable regulat	ions.	
Hazardous waste code	The waste code should be assigned in discussion disposal company.		
Waste from residues / unused products	Dispose of in accordance with local regulations. I product residues. This material and its container Disposal instructions).		
Contaminated packaging	Empty containers should be taken to an approver Since emptied containers may retain product resi emptied.	d waste handling site for recycling or disposal. idue, follow label warnings even after container is	
	14. Transport Information		
Transport of Dangerous Goods (TDG) Proof of Classification	In accordance with Part 2.2.1 (SOR/2014-152) of Regulations, we certify that the classification of the second seco	the Transportation of Dangerous Goods his product is correct as of the SDS date of issue.	
U.S. Department of Transportati Basic shipping requirement			
UN number	UN1950		
Proper shipping name Hazard class	Aerosols, non-flammable, (each not exceeding 1 Limited Quantity - US	L capacity)	



138495-42-8)	,5-decafluoro- (CAS	1.0 % One-Lime	Export Notification only.	
CERCLA Hazardous Substar		Lists d		
(E)-1,2-Dichloroethene (C US. OSHA Specifically Regul	,	Listed. 910-1001-1050)		
Not listed.		,		
perfund Amendments and Rea	authorization Act of 1986 (S	ARA)		
Hazard categories	Immediate Hazard - Yes			
	Delayed Hazard - No Fire Hazard - No Pressure Hazard - Yes Reactivity Hazard - No			
SARA 302 Extremely hazardous substance	No			
SARA 311/312 Hazardous chemical	No			
SARA 313 (TRI reporting) Chemical name		CAS number	% by wt.	
(E)-1,2-Dichloroethene		156-60-5	40 - 70	
her federal regulations		-		
Clean Air Act (CAA) Section Not regulated. Clean Air Act (CAA) Section			68.130)	
Not regulated.				
state regulations				
US - California Hazardous Su	ubstances (Director's): Liste	ed substance		
(E)-1,2-Dichloroethene (C	,	Listed.		
US - Illinois Chemical Safety (E)-1,2-Dichloroethene (C				
US - Louisiana Spill Reportin	ig: Listed substance			
(E)-1,2-Dichloroethene (C US - Minnesota Haz Subs: Li	,	Listed.		
(E)-1,2-Dichloroethene (C		Listed.		
Ethane, 1,1,1,2-tetrafluoro US - New Jersey RTK - Subs	tances: Listed substance	Listed.		
(E)-1,2-Dichloroethene (C US - Texas Effects Screening				
(E)-1,2-Dichloroethene (C	-	Listed.		
Butane, 1,1,1,3,3-pentaflu		Listed.		
	o- (CAS 811-97-2)	Listed.		
Pentane, 1,1,1,2,2,3,4,5,5	,5-decafluoro- (CAS	Listed.		
		Listed.		
Pentane, 1,1,1,2,2,3,4,5,5 138495-42-8) US. Massachusetts RTK - Su (E)-1,2-Dichloroethene (C	Ibstance List AS 156-60-5)			
Pentane, 1,1,1,2,2,3,4,5,5 138495-42-8) US. Massachusetts RTK - Su (E)-1,2-Dichloroethene (C US. New Jersey Worker and (E)-1,2-Dichloroethene (C	Ibstance List AS 156-60-5) Community Right-to-Know AS 156-60-5)	Act		
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Pentane, 1,1,1,2,2,3,4,5,5 138495-42-8) US. Massachusetts RTK - Su (E)-1,2-Dichloroethene (C US. New Jersey Worker and (E)-1,2-Dichloroethene (C US. Pennsylvania Worker an (E)-1,2-Dichloroethene (C US. Rhode Island RTK (E)-1,2-Dichloroethene (C US. California Proposition 65 Not Listed.	Ibstance List AS 156-60-5) Community Right-to-Know AS 156-60-5) d Community Right-to-Know AS 156-60-5) AS 156-60-5)	Act		
Pentane, 1,1,1,2,2,3,4,5,5 138495-42-8) US. Massachusetts RTK - Su (E)-1,2-Dichloroethene (C US. New Jersey Worker and (E)-1,2-Dichloroethene (C US. Pennsylvania Worker an (E)-1,2-Dichloroethene (C US. Rhode Island RTK (E)-1,2-Dichloroethene (C US. California Proposition 65 Not Listed.	Ibstance List AS 156-60-5) Community Right-to-Know AS 156-60-5) d Community Right-to-Know AS 156-60-5) AS 156-60-5)	Act		On inventory (ves/no
Pentane, 1,1,1,2,2,3,4,5,5 138495-42-8) US. Massachusetts RTK - Su (E)-1,2-Dichloroethene (C US. New Jersey Worker and (E)-1,2-Dichloroethene (C US. Pennsylvania Worker an (E)-1,2-Dichloroethene (C US. Rhode Island RTK (E)-1,2-Dichloroethene (C US. California Proposition 65 Not Listed.	Ibstance List AS 156-60-5) Community Right-to-Know AS 156-60-5) d Community Right-to-Know AS 156-60-5) AS 156-60-5) 5	Act w Law		
Pentane, 1,1,1,2,2,3,4,5,5 138495-42-8) US. Massachusetts RTK - Su (E)-1,2-Dichloroethene (C US. New Jersey Worker and (E)-1,2-Dichloroethene (C US. Pennsylvania Worker an (E)-1,2-Dichloroethene (C US. Rhode Island RTK (E)-1,2-Dichloroethene (C US. California Proposition 65 Not Listed. rentory status Country(s) or region	Ibstance List AS 156-60-5) Community Right-to-Know AS 156-60-5) d Community Right-to-Know AS 156-60-5) AS 156-60-5)	Act w Law DSL)		On inventory (yes/no Ye N

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Disclaimer

HEALTH / 1	
PHYSICAL HAZARD 1	
PERSONAL X	

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

	in this document.
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Prepared by	Nu-Calgon Technical Service Phone: (314) 469-7000
Other information	For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.