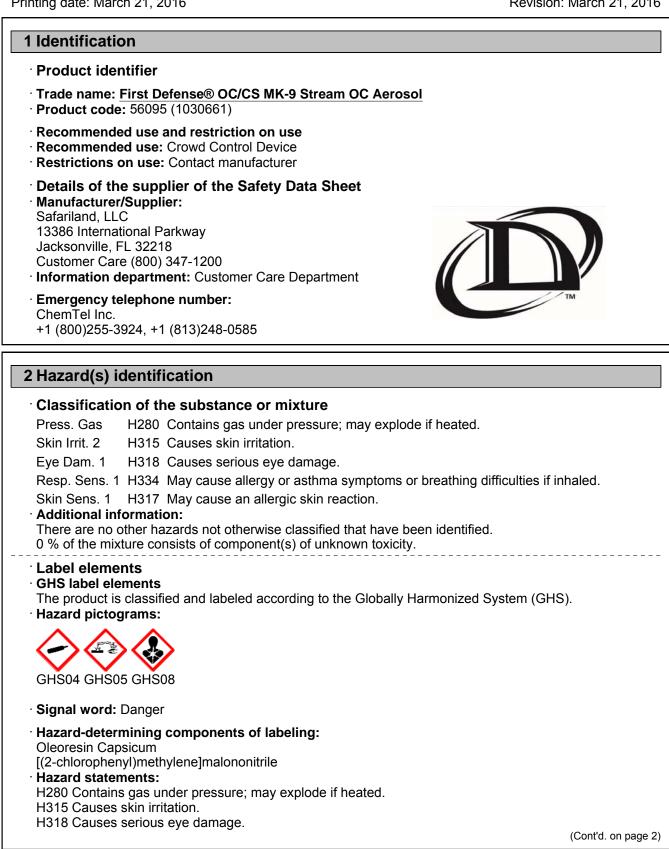
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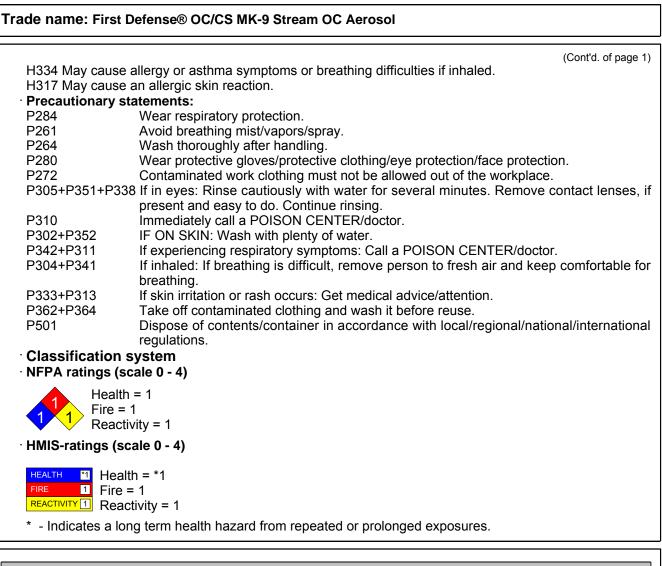
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· Chemical characterization: Mixtures		
· Componer	nts:	
112-34-5	2-(2-butoxyethoxy)ethanol	60-80%
	Eye Irrit. 2, H319	
57-55-6	Propylene Glycol	10-20%
8023-77-6	Oleoresin Capsicum	<u>≤10%</u>
	Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315	

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(Cont 7727-37-9 nitrogen	d. of page 2)
Press. Gas, H281	
2698-41-1 [(2-chlorophenyl)methylene]malononitrile Acute Tox. 3, H301; Acute Tox. 2, H330 Resp. Sens. 1, H334 Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	1-2.5%
Additional information:	

For the wording of the listed Hazard Statements refer to section 16. For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

First-aid measures	
Description of first aid measures	
General information:	
Position and transport stably on side.	
Immediately remove any clothing soiled by the product.	
Symptoms of poisoning may even occur after several hours; therefore medical o	bservation for at least
hours after the accident.	
Take affected persons out into the fresh air.	
After inhalation:	
Supply fresh air.	
Seek immediate medical advice.	
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.	
Provide oxygen treatment if affected person has difficulty breathing.	
In case of unconsciousness place patient stably in side position for transportation	۱.
After skin contact:	
Immediately wash with water and soap and rinse thoroughly.	
If skin irritation continues, consult a doctor.	
After eye contact:	
Protect unharmed eye.	
Remove contact lenses if worn.	
Rinse opened eye for several minutes under running water. If symptoms persist,	consult a doctor.
After swallowing:	
Rinse out mouth and then drink plenty of water.	
Do not induce vomiting; immediately call for medical help.	
Most important symptoms and effects, both acute and delayed:	
Asthma attacks	
Nausea	
Gastric or intestinal disorders	
Breathing difficulty	
Coughing	
Allergic reactions	
Strong irritant with the danger of severe eye injury.	
Irritating to respiratory system and skin.	
Disorientation	
Danger:	
Danger of impaired breathing.	
	(Cont'd. on page

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Causes serious eye damage.

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Possible risk of irreversible effects. • Indication of any immediate medical attention and special treatment needed:

Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary edema.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

Contains [(2-chlorophenyl)methylene]malononitrile. May produce an allergic reaction.

If medical advice is needed, have product container or label at hand.

In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

5 Fire-fighting measures

[•] Extinguishing media

• Suitable extinguishing agents: Use fire fighting measures that suit the environment.

- For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

Danger of receptacles bursting because of high vapor pressure if heated.

- Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

• Additional information:

Evacuate area and fight fire from from the upwind side.

Cool endangered product with water spray.

6 Accidental release measures

[•] Personal precautions, protective equipment and emergency procedures:

Use respiratory protective device against the effects of fumes/dust/aerosol.

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTEL AT 1-800-255-3924. Spills of this material should be handled carefully. Do not subject materials to mechanical shock or extreme heat. A spill of this material will normally not require emergency response team capabilities.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Isolate area and prevent access.

Environmental precautions: No special measures required.

Methods and material for containment and cleaning up:

Allow to evaporate.

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

Reference to other sections:

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

• Handling

· Precautions for safe handling:

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

Information about protection against explosions and fires:

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities Storage

· Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurized containers. Provide ventilation for receptacles.

· Information about storage in one common storage facility: Store away from foodstuffs.

· Further information about storage conditions:

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

• Specific end use(s): No relevant information available.

8 Exposure controls/personal protection

[·] Control parameters

Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

112-34-5 2-(2-b	112-34-5 2-(2-butoxyethoxy)ethanol		
TLV (USA)	Long-term value: 67.5* mg/m ³ , 10* ppm *Inhalable fraction and vapor		
57-55-6 Propyle	ene Glycol		
WEEL (USA)	Long-term value: 10 mg/m ³		
EV (Canada)	Long-term value: 155* 10** mg/m³, 50* ppm *vapour and aerosol;**aerosol only		
7727-37-9 nitro	gen		
TLV (USA)	withdrawn TLV, see App. F; simple asphyxiant		
EL (Canada)	Simple asphyxiant		
LMPE (Mexico)	Asfixiante simple		
2698-41-1 [(2-chlorophenyl)methylene]malononitrile			
PEL (USA)	Long-term value: 0.4 mg/m ³ , 0.05 ppm		
	(Cont'd. on page 6)		

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REL (USA)	Ceiling limit value: 0.4 mg/m³, 0.05 ppm Skin
TLV (USA)	Ceiling limit value: 0.39 mg/m³, 0.05 ppm Skin
EL (Canada)	Ceiling limit value: 0.05 ppm Skin
EV (Canada)	Ceiling limit value: 0.4 mg/m³, 0.05 ppm Skin
LMPE (Mexico)	Ceiling limit value: 0.05 ppm A4, PIEL

• Exposure controls

• Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

• Engineering controls: No relevant information available.

· Breathing equipment:

Wear positive pressure NIOSH or European EN149 vapor respirators when deploying product in large quantities.

For spills, respiratory protection may be advisable.

Protection of hands:



Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Follow relevant national guidelines concerning the use of protective eyewear.

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· Body protection: Protective work clothing Protection may be required for spills. • Limitation and supervision of exposure into the environment No relevant information available.

Information on basic physical an	nd chemical properties	
Appearance:		
Form:	Aerosol	
Color:	Transparent	
Odor:	Pungent, makes eyes water	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Melting point/Melting range: Boiling point/Boiling range:	Not applicable, as aerosol. Not applicable, as aerosol.	
Flash point:	Not applicable, as aerosol.	
Flammability (solid, gaseous):	Not applicable.	
Auto-ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not self-igniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidizing properties:	Non-oxidizing.	
Vapor pressure:	Not determined.	
Density:	Not determined.	
Relative density:	Not determined.	
Vapor density:	Not determined.	
Evaporation rate:	Not applicable.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wate	r): Not determined.	
Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	

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[•] Other information

No relevant information available.

10 Stability and reactivity

· Reactivity: No relevant information available.

Chemical stability:

• Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

• Possibility of hazardous reactions:

Danger of receptacles bursting because of high vapor pressure if heated. Reacts with strong oxidizing agents.

Toxic fumes may be released if heated above the decomposition point.

· Conditions to avoid: No relevant information available.

· **Incompatible materials:** No relevant information available.

Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Halogenated hydrocarbons

· Infor	cological information mation on toxicological effects toxicity:
	C50 values that are relevant for classification:
112-3	4-5 2-(2-butoxyethoxy)ethanol
Oral	LD50 5660 mg/kg (rat)
Derma	al LD50 4000 mg/kg (rabbit)
8023-	77-6 Oleoresin Capsicum
Oral	LD50 3000 mg/kg (rat)
Derma	al LD50 >2500 mg/kg (mouse)
2698-	41-1 [(2-chlorophenyl)methylene]malononitrile
Oral	LD50 178 mg/kg (rat)
· On th · On th	ry irritant effect: e skin: Irritant to skin and mucous membranes. e eye: Strong irritant with the danger of severe eye injury. tization: Contains [(2-chlorophenyl)methylene]malononitrile. May produce an allergic reaction.
·IARC	(International Agency for Research on Cancer):
None	of the ingredients are listed.
· NTP (National Toxicology Program):
None	of the ingredients are listed.
·OSHA	A-Ca (Occupational Safety & Health Administration):
None	of the ingredients are listed.

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Probable route(s) of exposure: Inhalation.
Eye contact.
Skin contact.
Acute effects (acute toxicity, irritation and corrosivity): Causes serious eye damage. Irritating to skin.
Irritating to respiratory system.
Repeated dose toxicity: May cause sensitisation by inhalation and skin contact.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
STOT-single exposure: May cause respiratory irritation.

• Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

[·] Toxicity

· Aquatic toxicity

2698-41-1 [(2-chlorophenyl)methylene]malononitrile

EC50 0.2-0.3 mg/kg (Oncorhynchus mykiss)

• Persistence and degradability No relevant information available.

· Bioaccumulative potential: No relevant information available.

• Mobility in soil: No relevant information available.

· Additional ecological information

· General notes: Generally not hazardous for water

Results of PBT and vPvB assessment

· **PBT:** Not applicable.

• **vPvB:** Not applicable.

· Other adverse effects: No relevant information available.

13 Disposal considerations

[·] Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

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[·] Uncleaned packagings

Recommendation:

Packagings that cannot be cleansed are to be disposed of in the same manner as the product. • **Recommended cleansing agent:** Water, if necessary with cleansing agents.

UN-Number	
DOT, ADR, IMDG, IATA	UN1950
UN proper shipping name	
DOT	AEROSOLS, non-flammable, containing substances Division 6.1, Packing Group I or II (Tear Gas Device
ADR	1950 AEROSOLS (Tear Gas Devices)
	AEROSOLS (Tear Gas Devices)
ΙΑΤΑ	AEROSOLS, non-flammable, containing substances Division 6.1, Packing Group I or II (Tear Gas Devic (CARGO AIRCRAFT ONLY)
Transport hazard class(es)	
DOT	
SQC TOXOC 1	
Class	2.2
Label	2.2, 6.1
ADR	
Class	2 5T Gases
Label	2.2+6.1
IMDG	
Class	2.2
Label	2.2/6.1

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IATA	
Class	2.2
· Label	2.2 (6.1)
Packing group	
· DOT, ADR, IMDG, IATA	Not regulated.
Environmental hazards	
Marine pollutant:	No
Special precautions for user	Warning: Gases
· Danger code (Kemler): · EMS Number:	- F-D,S-U
	· · ·
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	I of Not applicable.
Transport/Additional information:	
•	
· DOT · Quantity limitations	On passenger aircraft/rail: Forbidden
	On cargo aircraft only: Forbidden
ADR	
 Excepted quantities (EQ) 	Code: E0
	Not permitted as Excepted Quantity
·IMDG	
 Excepted quantities (EQ) 	Code: E0
	Not permitted as Excepted Quantity

Regulatory information
Safety, health and environmental regulations/legislation specific for the substance or mixture United States (USA) SARA
Section 355 (extremely hazardous substances):
None of the ingredients are listed.
Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.
TSCA (Toxic Substances Control Act)
All ingredients are listed.
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 Proposition 65 (California) 	· · · ·
· Chemicals known to cause cancer:	
None of the ingredients are listed.	
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients are listed.	
· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients are listed.	
· Chemicals known to cause developmental toxicity:	
None of the ingredients are listed.	
· Carcinogenic categories	
· EPA (Environmental Protection Agency):	
None of the ingredients are listed.	
· IARC (International Agency for Research on Cancer):	
None of the ingredients are listed.	
· NIOSH-Ca (National Institute for Occupational Safety and Health):	
None of the ingredients are listed.	
· Canada · Canadian substance listings	
· Canadian Domestic Substances List (DSL):	
All ingredients listed on DSL or NDSL.	
· Canadian Ingredient Disclosure list (limit 0.1%):	
None of the ingredients are listed.	
· Canadian Ingredient Disclosure list (limit 1%):	
112-34-5 2-(2-butoxyethoxy)ethanol	
57-55-6 Propylene Glycol	
2698-41-1 [(2-chlorophenyl)methylene]malononitrile	

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation / last revision 03/21/2016 / -

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals ACGIH: American Conference of Governmental Industrial Hygienists

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(Cont'd. of page 12) CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative Press. Gas: Gases under pressure: Compressed gas Press. Gas: Gases under pressure: Refrigerated liquefied gas Acute Tox. 3: Acute toxicity, Hazard Category 3 Acute Tox. 4: Acute toxicity, Hazard Category 4 Acute Tox. 2: Acute toxicity, Hazard Category 2 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Eve Irrit. 2A: Serious eve damage/eve irritation, Hazard Category 2A Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com