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Safety Data Sheet
Flap Disc

1. Identification

Product identifier	Flap Disc
Product code	N.Av.
Other means of identification	N.Av.
Recommended use of the chemical and restrictions on use	Use for abrasive and grinding work with metal and stainless steel surfaces.
Manufacturer	Stanley Black & Decker Canada Corp. 6935 Picard Street St-Hyacinthe, QC Canada J2S 1H3 Tel. 450-774-4660 www.stanleyblackanddecker.com
Emergency phone number	450-774-4660

2. Hazard identification

Summary	This product is not regulated according to the Canadian Hazardous Products Act (HPA) and Hazardous Products Regulations (HPR) (or WHMIS 2015/GHS) and to OSHA 29CFR Part 1910.1200 (HazCom 2012). Avoid breathing dust. Avoid contact with eyes. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

WHMIS 2015/OSHA HCS 2012/GHS

Not Regulated under WHMIS 2015/GHS

P260: Do not breathe dust.
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves, protective clothing and eye protection.
P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+313: If eye irritation persists: Get medical advice or attention.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Aluminum oxide	1344-28-1	20 - 30 %
Limestone	1317-65-3	8 - 13 %
Zirconium Dioxide	1314-23-4	8 - 13 %
Trisodium hexafluoroaluminate (cryolite)	13775-53-6	1 - 8 %
Ethylene glycol	107-21-1	1 %
Potassium tetrafluoroborate	14075-53-7	1 - 8 %

4. First-aid measures

Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
Skin contact	Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.
Eye contact	IMMEDIATELY flush with plenty of water. Flush with water for at least 15 minutes. Remove contact lenses. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If ingestion of a large amount does occur, seek medical attention or contact a Poison Centre immediately.
Other	Grinding may create elevated sound levels (during grinding) which may affect hearing and pre-existing hearing condition(s). If a problem develops or persists, seek medical attention.
Symptoms	Dust and powder may irritate throat and respiratory system and cause coughing. Dusts from this product may cause mechanical irritation to skin and eyes.
Notes to the physician	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Use appropriate extinguisher for surrounding fire.
Specific hazards arising from the chemical	No hazard listed.
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask.
Special protective actions for fire-fighters	No additional information.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	DO NOT throw dust into drains or waterways.
Methods and materials for containment and cleaning up	Ventilate the area well. Vacuum or sweep up dust and place in an appropriate waste disposal container. Avoid generating dusty conditions.

7. Handling and storage

Precautions for safe handling	Handle abrasive cutting off wheels and grinding wheels carefully to prevent damage from shock, heat, etc. Use all abrasive cutting off wheels and grinding wheels in accordance with all applicable federal and state safety codes and as directed in ANSI B7.1: Safety Requirements for the Use, Care, and Protection of Abrasive Wheels. Also consult ANSI B.1: Safety Requirements for the Use, Care, and Protection of Abrasive Wheels. Use only in well ventilated area. Avoid breathing dust. Use in a maner that avoids generating dust. Avoid contact with eyes. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound. Remove contaminated clothing and wash before reuse.
Conditions for safe storage, including any incompatibilities	Store in dry protected area free from humidity, freezing temperatures or extreme temperature changes.
Storage temperature	18 to 25°C (64.4 to 77°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	Zirconium oxide : 25 mg/m3, value as zirconium. Trisodium hexafluoroaluminate (cryolite): 250 mg/m3, value as F (fluoride). Potassium tetrafluoroborate: 250 mg/m3, value as F (fluoride).

Aluminum oxide	TWA (8h)	Respirable Dust		1 mg/m^3	ACGIH , BC
		Total Dust		10 mg/m^3	ON , RSST
Limestone	STEL	Total Dust		20 mg/m^3	BC
	TWA (8h)	Total Dust		10 mg/m^3	ACGIH , BC, ON, RSST
Zirconium Dioxide	STEL	Value as Metal		10 mg/m^3	ACGIH , BC, ON, RSST
	TWA (8h)	Value as Metal		5 mg/m^3	ACGIH , BC, ON, RSST
Ethylene glycol	Ceiling			100 mg/m^3	ON
		Aerosol	39.4 ppm	100 mg/m^3	ACGIH , BC
			50 ppm	125 mg/m^3	BC
			50 ppm	127 mg/m^3	RSST (RP)
Potassium tetrafluoroborate	TWA (8h)			2.5 mg/m^3	ACGIH , BC, ON, RSST
Trisodium hexafluoroaluminate (cryolite)	TWA (8h)	Value as Metal		1 mg/m^3	ACGIH , BC, ON

Appropriate engineering controls	Provide sufficient mechanical (general and/or local exhaust) to keep the airborn concentrations of dust below their respective occupational exposure limits. It is recommended to reduce the sound level in order not to exceed the standards OSHA 29CFR 1910.95, ANSI S3.19 and/or CSA Z94.2 (Canada) for hearing protection devices. In addition, the hearing protection devices must be selected based to the sound spectrum emitted in the workplace.
Individual protection measures	
Eye	Wear safety glasses. If risk of contact with eyes or the face, wear a face shield.
Hands	Wear leather gloves.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. If necessary, wear an apron or long-sleeve protective coverall suit.
Respiratory	A respirator is not required in a well-ventilated area. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA. For nuisance exposures use type N95 particle respirator.
Feet	Wear safety shoes.


Leather Glove


Safety glasses

9. Physical and chemical properties

Physical state	Solid wheel	**Flammability**	Non-flammable.
Colour	Various colors	**Flammability limits**	N/Ap.
Odour	Odourless	**Flash point**	N/Ap.
Odour threshold	N/Av.	**Auto-ignition temperature**	N/Av.
pH	N/Ap.	**Sensibility to electrostatic charges**	No
Melting point	N/Av.	**Sensibility to sparks and/or friction**	No
Freezing point	N/Av.	**Vapour density**	N/Av. (Air = 1)
Boiling point	N/Ap.	**Relative density**	Variable (Water = 1)
Solubility	Insoluble in water.	**Partition coefficient n-octanol/water**	N/Ap.
Evaporation rate	N/Ap.	**Decomposition temperature**	N/Av.
Vapour pressure	N/Ap.	**Viscosity**	N/Ap.
Percent Volatile	0%	**Molecular mass**	N/Ap.

N/Av.: Not Available N/Ap.: Not Applicable Und.: Undetermined N/E: Not Established

10. Stability and reactivity

Reactivity	None reported.
Chemical stability	Stable under normal conditions of use.
Possibility of hazardous reactions (including polymerizations)	Hazardous polymerization will not occur under recommended storage.
Conditions to avoid	None reported.
Incompatible materials	None reported.
Hazardous decomposition products	In use, the grinding wheel will generate dust and odors. In most cases, the material removed from the work piece will be significantly greater than that generated from the grinding wheel. Coolants, if used, may produce other decomposition products.

11. Toxicological information

Numerical measures of toxicity	Aluminum oxide	Ingestion	>5000 mg/kg	Rat	LD50
		Inhalation	>2.6 mg/l/4h	Rat	LC50
		Skin	>2000 mg/kg	Rabbit	LD50
	Limestone	Ingestion	6450 mg/kg	Rat	LD50
	Zirconium Dioxide	Ingestion	>8800 mg/kg	Mouse	LD50
		Skin	>2000 mg/kg	Rabbit	LD50
	Ethylene glycol	Ingestion	1550 mg/kg	Human	
			4700 mg/kg	Rat	LD50
		Inhalation	>0.2 mg/l/4h	Rat	LC50
		Skin	10600 mg/kg	Rabbit	LD50
	Trisodium hexafluoroaluminate (cryolite)	Ingestion	>5000 mg/kg	Rat	LD50
		Inhalation	4.47 mg/l/4h	Rat	LC50
		Skin	>2000 mg/kg	Rabbit	LD50
	Potassium tetrafluoroborate	Ingestion	5851 mg/kg	Rat	LD50
		Inhalation	>5.3 mg/l/4h	Rat	LC50

Likely routes of exposure	Skin, eyes, inhalation.	
Delayed, immediate and chronic effects	**Eye contact**	Exposure to dust may cause redness and irritation to eyes.
	Skin contact	Exposure to dust may cause redness and irritation of the skin.
	Inhalation	Inhalation of dust is harmful. Dust and powder may irritate throat and respiratory system and cause coughing. Repeated and prolonged occupational overexposure to dusts may cause lung damage.
	Ingestion	Not a likely route of exposure. Exposure to dust may cause gastrointestinal irritation.
	Respiratory or skin sensitization	Ingredients present at levels greater than or equal to 0.1% of this product are not skin or respiratory sensitizers.
	IARC/NTP Classification	No ingredients listed.
	Carcinogenicity	Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.
	Specific target organ toxicity - single exposure	Respiratory system, lungs.
	Specific target organ toxicity - repeated exposure	Lungs.
Interactive effects	No information available for this product.	
Other information	No additional information.	

12. Ecological information

Ecological toxicity	Fish LC50 N.Av.
Persistence	May persist in the environment.
Degradability	The term biodegradability, as such, is not applicable to inorganic compounds.
	No bioaccumulation.

Bioaccumulative potential	
Mobility in soil	The product has no mobility in the soil. However, some ingredients (listed fluorides) are slightly soluble in water and have moderate mobility in wet soil.
Other adverse effects	This chemical does not deplete the ozone layer.

13. Disposal considerations

Container 	Important! Prevent waste generation. Use in full. Waste product may be send to landfill. Empty containers can be treated (recycled) wherever there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

14. Transport information

UN Number	UN
UN Proper Shipping Name	Not regulated by TDG (Canada) and 49 CFR DOT (USA).
Environmental hazards	This material is not listed as a marine pollutant.
Special precautions for user	No information available for this product.
TDG - Transportation of Dangerous Goods (Canada)	
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Emergency response guidebook 2012	
IMO/IMDG - International Maritime Transport	
Classification	Not regulated
IATA - International Air Transport Association	
Classification	Not regulated

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Aluminum oxide	1344-28-1		X		X
Limestone	1317-65-3			X	
Zirconium Dioxide	1314-23-4		X		
Trisodium hexafluoroaluminate (cryolite)	13775-53-6		X		
Ethylene glycol	107-21-1	X	X		X
	14075-53-7		X		

Potassium tetrafluoroborate					

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA	CER CLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Prio.
Aluminum oxide	1344-28-1	X		X						
Limestone	1317-65-3	X								
Zirconium Dioxide	1314-23-4	X								
Trisodium hexafluoroaluminate (cryolite)	13775-53-6	X								
Ethylene glycol	107-21-1	X	X	X		X	X			
Potassium tetrafluoroborate	14075-53-7	X								

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

Common name	CAS	Cancer	Reproductive and Developmental Toxicity
Ethylene glycol	107-21-1		X

Other regulations	
	WHMIS 1988 

Non-WHMIS controlled

HMIS

NFPA

16. Other information

Date (YYYY-MM-DD)	Stanley Black & Decker Canada Corp. 2016-08-29
Version	01

Other information	REFERENCES: - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, http://hazmap.nlm.nih.gov/index.php - TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, http://toxnet.nlm.nih.gov/ - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), http://www.reptox.csst.qc.ca - NIOSH Pocket Guide to Chemical Hazards, Centers for Disease Control and Prevention, NIOSH Publications, 2007, http://www.cdc.gov/niosh/npg/npg.html ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System