SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier	:	Slack Wax
Other means of identification	:	-
Recommended use of the chemical and restrictions on use	:	These products are used as polishes and waxes, adhesive glue and sealants, lubricants and greases. This product is used in the following activities or processes in the workplace: mixed production with tabletting, compression, extrusion, pelletization and low energy manipulation of the material bonding of the product.
Manufacturer		ATDM CO Unit 3509 Burlington Tower Business Bay, Dubai-UAE
Emergency phone number	:	0097142369830

2. HAZARD IDENTIFICATION

Classification	:	Not classified
Signal word	:	Not classified
Hazard statement	:	Not classified
Precautionary statement	:	Not classified
Pictogram	:	-
Other hazards which do not result in classification	:	Not classified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration (%)
Paraffinic wax	8002-74-2	Min. 72
Highly-refined mineral oils	8042-47-5/ 8012-95-1	Max. 28

4. FIRST AID MEASURES

Necessary description

- **In case of eye contact** : Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
- **In case of skin contact** : Remove contaminated clothing and wash affected skin with soap and water. If persistent irritaion occurs, obtain medical attention. If high pressure injection injuries occur, obtain medical attention immediately.
- **If inhaled** : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give cardiopulmonary resuscitation. Get medical attention.
- **If swallowed** : Rinse mouth with water and obtain medical attention.

Most important symptoms/effects : Under normal conditions, it is not expected to cause acute danger during use.
Aspiration into the lungs may result in chemical

4. FIRST AID MEASURES

pneumonitis, it needs proper treatment.

Indication of Immediate medical attention and special treatment needed, if necessary : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide, dry chemical and foam

Unsuitable extinguishing media : Water jet

Specific hazards

- **Other explosion and fire hazards** : No data available

Flash point °C : Min. 145°C

Flammability value : No data available

Hazardous chemical composition : Carbon oxides (CO, CO_2), nitrogen and sulfur oxides (NO_X, SO_X), particulate, aromatic, VOC materials.

Special protective actions for fire fighters

a. Carbon dioxide (CO_2) : Spray it to the base of fire from upwind.

b. Dry chemical powder : Spray it to the base of fire from upwind.

c. Foam : When the fire is in a container, spray the foam into the inner wall of the container, not to the burning liquid, and from upwind. When the fire is caused by spill of liquid, spray it to the front fire until the spill is covered thoroughly, and from upwind.

Special protective equipment for fire-fighter : Fore fires in relatively closed areas, the fire fighters must be equipped with Self Contained Breathing Apparatus (SCBA).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures : Avoid breathing fume / gas / mist / vapor / spray from the product. Use appropriate personal protective equipment.

Environmental precautions : Prevent spill into drainage, sewage system, or its seepage into the soil.

Procedures : Notify the authority promptly about the occurrence of the spills, in accordance with the determined local authorization when the spills are suspected to contaminate the water channel.

Methods and materials for containment and cleaning up : Put away all conditions that can enable the occurrence of ignition. Adsorb the spill by using sorbent, sawdust mixed with clay and other fire inhibitor materials. Clean and dispose it at the determined place of disposal according to

6. ACCIDENTAL RELEASE MEASURES

the local regulation.

7. HANDLING AND STORAGE

Precautions for safe handling : Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Wash thoroughly after handling.

Conditions for safe storage (including any incompatibilities) : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
Use mild steel or high density polyethylene (HDPE) for containers or container linings.
Avoid PVC for containers or container linings.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

- **Exposure limit** : TWA 5 mg/m^3 (all forms of oil mist, mineral)
  STEL 10 mg/m^3 (all forms of oil mist, mineral)
- **Biological exposure indicator** : No data available

Appropriate engineering control

- **Ventilation** : Use adequate ventilation.

Individual protection measures

- **Eye and face protection** : Use chemical type goggles.
- **Skin protection** : Minimize all forms of skin contact. Wear overalls to minimize contamination of personal clothing.
- **Respiratory protection** : Use breathing apparatus when the polluted concentration in the air is higher than the permissible threshold limit value.
- **Hygiene practices** : Wash hands at rest and after work.
  Do not eat and drink while using the product.
  No smoking while using the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Characteristic		Test Result
Organoleptic (physical appearance, color, etc)	:	Solid at ambient temperature, yellowish white
Odor	:	Not aromatic
Odor threshold	:	No data available
pH	:	No data available
Melting/freezing point	:	47 – 53 °C
Boiling point/boiling range	:	No data available
Flammability	:	Not flammable
Flash point	:	Min. 145 °C
Evaporation rate	:	No data available
Lower/upper flammability limit and explosion limit	:	No data available
Vapor pressure	:	No data available
Vapor density	:	No data available
Relative density	:	0.77 - 0.83 g/cm³ at 70/70 °C
Solubility		
• **Water solubility**	:	No data available
• **Other solubility**	:	No data available
Partition coefficient (n-octanol/water)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	3.1 - 4.2 cSt at 100°C

10. STABILITY AND REACTIVITY

Reactivity	:	Polymerization of hazardous materials is not formed.
Chemical stability	:	Stable under normal temperatures and pressures.
Posibility of hazardous reactions	:	No posible hazardous reactions under normal temperatures and pressures.
Conditions to avoid	:	Heat, flame, ignition or conditions that can cause static electricity.
Incompatible materials	:	Reactive with oxidizing agents, acids, alkalis, nitrates, chlorites, peroxide.
Hazardous decomposition products	:	Carbon oxides (CO, CO2), nitrogen and sulfur oxides (NOX, SOX), particulate matter, aromatic, VOC's.

11. TOXICOLOGICAL INFORMATION

Comprehensive toxicological/health information

- **Acute toxicity** :

Route of exposure	Paraffin wax	Highly-refined mineral oils
Oral	No adverse effect observed on LD50 5000 mg / kg (rat)	No adverse effect observed on LD50 5000 mg / kg (rat)
Inhalation	Not considered as an inhalation hazard under	No adverse impact on LC50 (4 h) 5000 mg / m3 (rat)

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	normal use.	
Dermal	No adverse effect observed on LD50 2000 mg / kg (rat)	No adverse effect observed on LD50 2000 mg / kg (rabbit)

- **Skin corrosion/ irritation** : No data available. Suspected that it may not cause skin corrosion/irritation according to compound or product which has similar structure or composition.
- **Serious eye damage/irritation** : No data available. Suspected that it may not cause serious damage or irritation to the eye according to compound or product which has similar structure or composition.
- **Respiratory or skin sensitization** : No data available. Suspected that it may not cause respiratory or skin sensitization according to compound or product which has similar structure or composition.
- **Germ cell mutagenicity** : No data available. Suspected that it is not mutagen according to compound or product which has similar structure or composition.
- **Carcinogenicity** :

Route of exposure	Paraffin wax	Highly-refined mineral oils
Oral	No adverse effect observed on NOAEL 5700 mg / kg bw / day (chronic, rat)	No adverse effect observed on NOAEL 1200 mg / kg bw / day (chronic, mice)
Inhalation	-	-
Dermal	No adverse effect observed on NOAEL 128 mg / kg bw / day (subchronic, mice)	-

- **Reproductive toxicity** :

Route of exposure	Paraffin wax	Highly-refined mineral oils
Effects on fertility:		
Oral	No adverse effect observed on NOAEL 1000 mg / kg bw / day (subchronic, rat)	No adverse effect observed on NOAEL 1000 mg / kg bw / day (subchronic, rat)
Inhalation	-	-
Dermal	-	No adverse effect observed on NOAEL 2000 mg / kg bw / day (subchronic, rat)
Effects on fetal development:		

11. TOXICOLOGICAL INFORMATION

Oral	-	No adverse effect observed on NOAEL 5000 mg / kg bw / day (subchronic, rat)
Inhalation	-	No adverse effect observed on NOAEC 1000 mg / m3 (subacute, rat)
Dermal	-	No adverse effect observed on NOAEL 2000 mg / kg bw / day (subchronic, rat)

- **STOT-single exposure** : No data available. Suspected that it is not toxic to specific target organs after single exposure according to compound or product which has similar structure or composition.

- **STOT-repeated exposure** :

Route of exposre	Paraffin wax	Highly-refined mineral oils
Oral	No adverse effect observed on NOAEL 1500 mg / kg bw / day (chronic, rat)	No adverse effect observed on NOAEL 1200 mg / kg bw / day (chronic, rat)
Inhalation	-	No adverse effect observed on NOAEC 50 mg / m3 (subacute, rat)
Dermal	No adverse effect observed on NOAEL 2000 mg / kg bw / day (subchronic, rat)	No adverse effect observed on NOAEL 2000 mg / kg bw / day (subchronic, rat)

- **Aspiration hazards** : No data available. Suspected that it is not aspiration hazards according to compound or product which has similar structure or composition.

Information on the likely routes exposure : Ingested and skin contact.

Symptoms related to the physical, chemical, and toxicological characteristics : Under normal conditions, not expected to cause acute danger during use.

Delayed and immediate effects, and also chronic effects from both short or long term exposure : No ada data available. Further testing has not been done.

Numerical measure of : No ada data available. Further testing has not been done.

11. TOXICOLOGICAL INFORMATION

toxicity

Interative effects : No ada data available. Further testing has not been done.

Where specific chemical data are not available : No ada data available. Further testing has not been done.

Mixture : No ada data available. Further testing has not been done.

Mixture vs. Ingredient information : No ada data available. Further testing has not been done.

Other in formation : Prolonged and/or repeated contact with products containing mineral oils can result in defatting of the skin, particularly at elevated temperatures. This can lead to irritation and possibly dermatitis, especially under conditions of poor personal hygiene.

12. ECOLOGICAL INFORMATION

Ecotoxicity : Poorly soluble mixture. May cause physical fouling of aquatic organisms.

Route of exposure	Paraffin wax	Highly-refined mineral oils
Short-term toxicity in fish	LL50 (4 daysi) 100 mg/L	LL50 (4 days) 100 - 10000 mg/L
Long-term toxicity in fish	No data available	No data available
Short-term toxicity in aquatic invertebrates	LL50 (48hours) 10 g/L	LL50 (48hours) 100 mg/L
Longt-term toxicity in aquatic invertebrates	No data available	No data available
Toxcicity in Algae and cyanobacterials	No data available	No data available

Persistence and degradability : Not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

Bioaccumulative potential : No ada data available. Further testing has not been done.

Mobility in soil : Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Other adverse effects : No ada data available. Further testing has not been done.

13. DISPOSAL CONSIDERATION

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

14. TRANSPORT INFORMATION

USA DOT : Not arranged by USA DOT
RID / ADR : Not arranged by RID/ADR
IMO : Not arranged by IMO
ICAO / IATA : Not arranged by IATA

15. REGULATORY INFORMATION

Safety, health, and environmental regulation (specific for the product in question) :

- Peraturan Menteri Perindustrian Nomor 23/M-IND/PER/4/2013 tentang Perubahan Atas Peraturan Menteri Perindustrian Nomor 87/M-IND/PER/9/2009 Tentang Sistem Harmonisasi Global Klasifikasi dan Label pada Bahan Kimia
- Peraturan Pemerintah Republik Indonesia, Nomor 74 Tahun 2001 Tentang Pengelolaan Bahan Berbahaya dan Beracun Presiden Republik Indonesia
- Keputusan Menteri Tenaga Kerja No Kep-187/Men/1999 tentang Pengendalian Bahan Kimia Berbahaya
- ACGIH®. 2016. TLVs® and BEIs®

16. OTHER INFORMATION

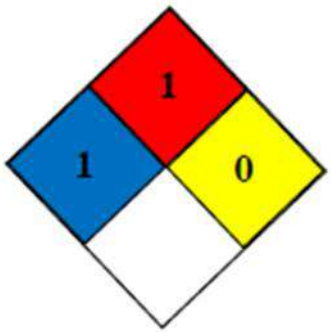
Revision date : 2017
Key/legend or acronym used in the SDS : ACGIH - American Conference on Governmental Industrial Hygienist
BEI - Biological Exposure Indices
CAS No. - Chemical Abstract Service Number
HDPE - High Density Polyethylene
IMO - International Maritime Organization
ICAO/IATA - International Civil Organization Aviation/ International Air Transport Association
PVC - Poly Vinyl Chlorida
RID/ADR - European Agreements Concerning the International Carriage of Dangerous Goods by Rail and by road
TLV - Threshold Limit Value
TWA - Time-Weighted Average
SCBA - Self Contained Breathing Apparatus

16. OTHER INFORMATION

STEL - Short Term Exposure Limit
USA DOT - United States Department of Transportation

Key literature references and sources for data used in the SDS : echa.europa.eu

NFPA :



Degrees	Red	Blue	Yellow
0	Will not burn	Live ordinary material	Normally stable
1	Must be preheated to burn	Slightly hazardous	Unstable if heated – use normal precautions
2	Ignites when moderately heated	Hazardous – use breathing apparatus	Violent chemical change possible – use hose streams from distance
3	Ignites at normal temperatures	Extremely dangerous – use full protective clothing	Strong shock or heat may detonate - use monitors from behind explosion resistant barriers
4	Extremely flammable	Too dangerous to enter vapor or liquid	May detonate – vacate area if materials are exposed to fire

White	
	Radioactive
	Never contact with water

Disclaimer

The information is composed based on current knowledge and intended to describe safety, health, and environment hazard of the product. Therefore, it should not be construed as guarantee any specific property of the product. All risks while using this product is the user's responsibility. It is not allowed to make change of this document, except there is legal consent.